





Bringing it  
all together



## About this Report

The NAGASE Group Slogan is “Bringing it all together.” This slogan inspires us to realize a sustainable world where people live with peace of mind, each of us embodies our value proposition, Identify, Develop and Expand through daily activities.

This integrated report is our opportunity to communicate to our stakeholders, providing financial and non-financial information related to the NAGASE Group as a business organization, our issues, and our mid- and long-term strategies in a single, integrated publication.

We intend to continue to evolve this annual report as an effective tool to communicate our activities for improving the NAGASE Group corporate value over the medium and long term.

In creating this report, we referred to version 1.0 of the International Integrated Reporting Framework issued in December 2013 by the International Integrated Reporting Council.

Speed to identify  
Speed to develop  
Speed to expand

### About the NAGASE Group

- 2 NAGASE by the Numbers
- 4 Management Philosophy and the NAGASE Vision
- 6 NAGASE Group Businesses
- 8 The NAGASE Group: Blending Tradition and Innovation
- 10 How We Create Corporate Value
- 12 Valuable Products and Services
- 14 13-Year Financial Highlights
- 16 Annual Topics

### Leading Us to the Future

- 18 Message from the President
- 24 Our Board
- 26 Corporate Governance

### Performance by Segment

- 32 At a Glance
- 34 Functional Materials
- 36 Advanced Materials & Processing
- 38 Electronics
- 40 Automotive & Energy
- 42 Life & Healthcare

### Unique Products

- 44 Global Network
- 46 Regional Overview
- 50 Main Manufacturing and Processing Functions
- 54 Major R&D Functions

### Critical Initiatives for Sustainable Growth

- 56 Human Rights, Employment Practices
- 59 Environment
- 61 Fair Business Practices
- 64 For Consumer Safety and Security
- 65 Community Involvement and Development

### Financial and Corporate Information

- 66 Financial Foundation Supporting Business Growth
- 69 Management’s Discussion and Analysis of Operations and Finances
- 76 Consolidated Financial Statements
- 102 Consolidated Subsidiaries, Affiliates and Offices
- 106 Corporate Information
- 107 Investor Information

### Forward-Looking Statements

Non-historic information contained in this integrated report related to NAGASE & CO., LTD. and NAGASE Group revenue and profit plans, strategies, presumptions, etc., includes forward-looking statements that entail elements of risk and uncertainty. Actual earnings may differ significantly from forecasts due to changes in these elements. Accordingly, the reader is cautioned to refrain from placing undue reliance on such future forecasts contained in this document. Elements that could impact earnings results are not necessarily limited to those explicitly noted in this document.

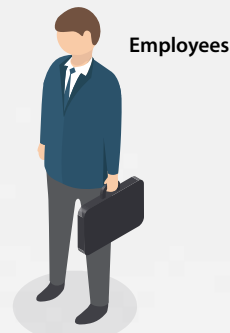


NAGASE trends and other useful information.

**2032**

Establishing the NAGASE brand heading toward 200 years in business.

See here for more. **P.4-5**



**¥30 billion or more**

We launched our *ACE-2020* mid-term management plan in 2016. By the fiscal year ending March 2021, we will normalize ¥30 billion or more in consolidated operating income.



**¥722.3 billion**

Consolidated net sales of ¥722.3 billion for the fiscal year ending March 2017. Strong financial underpinning; issuer rating of A.



**Manufacturing Companies**  
(as of March 31, 2017)

**11 Countries**  
**45 Companies**

Practical answers to customer needs through research and manufacturing functions.

**P.50-55**



**Consolidated Employees**  
(as of March 31, 2017)

**6,241**

A diverse employee base engaged in NAGASE business worldwide.



**48.9%**

Network spanning 22 countries and 99 companies; overseas sales account for 48.9% of consolidated net sales.

(FYE March 2017)

**P.44-49**



# Management Philosophy and the NAGASE Vision

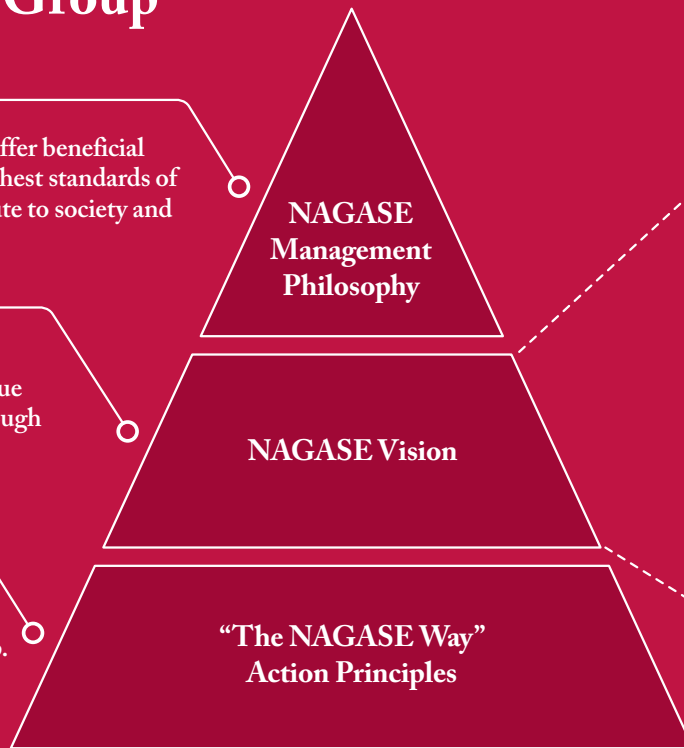
The NAGASE Group works toward sustainable growth and improving corporate value. We have defined the NAGASE Management Philosophy, NAGASE Vision, and The NAGASE Way (employee behavioral guidelines) as a set of common values for the Group in our project of developing a global brand. Our slogan of “Bringing it all together” represents our commitment to encompassing all aspects of our business as one, including our business domains, operating regions and countries, people, products, technologies, and services. This slogan inspires us to realize a sustainable world where people live with peace of mind, each of us embodies our value proposition, Identify, Develop and Expand, through our daily activities.

## A sense of values shared within the NAGASE Group

We recognize our responsibility to society and offer beneficial products and services while maintaining the highest standards of integrity. Through our growth, we will contribute to society and enrich the lives of our employees.

To realize a sustainable world where people live with peace of mind, each of us embodies our value proposition, Identify, Develop and Expand through daily activities.

- Always be customer-oriented.
- Always be a creative challenger.
- Always use the power of the NAGASE Group.
- Always think globally and act locally.
- Always think systematically and act speedily.



## The NAGASE Vision

### Strengths/ Characteristics

- Maintaining the highest standards of integrity for almost 200 years
- Working with partners to enable new businesses
- Driving new technologies with knowledge and experience
- Staying a step ahead of the market to actively offer solutions

### Value Proposition

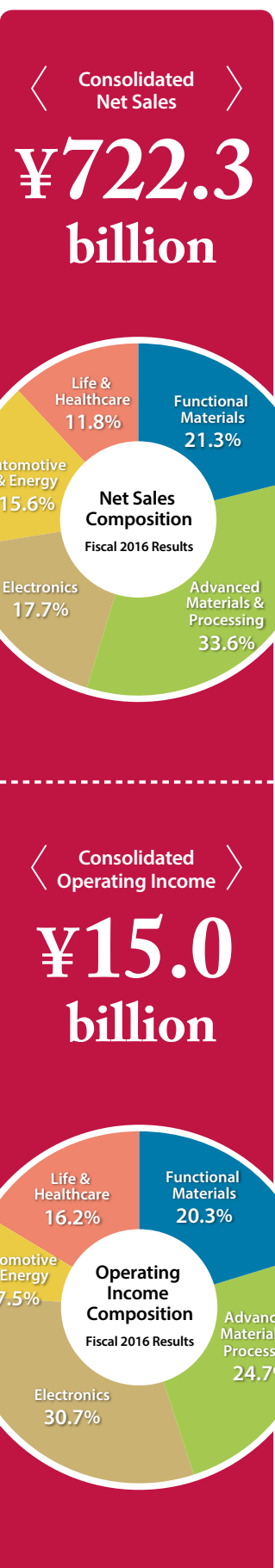
- We “Identify, Develop and Expand” new businesses
- 1. Identify : We discover untapped business opportunities
- 2. Develop: We convert opportunities into customer value
- 3. Expand : We deliver solutions to multiple fields and regions

### Vision for the Future

- We will contribute to a sustainable world where people live with peace of mind







### Functional Materials

#### Performance Chemicals Department

**<Department Overview>**  
The Performance Chemicals Department leverages Group manufacturing and R&D functions to provide a broad range of goods and services to the global market, from general-purpose petrochemical products to high-value-added products. The department consists of a raw materials business for the paints and inks industry and a raw materials business for the urethane industry, each of which is recognized as an established leader in its respective market.

**<Main Products and Services>**  
Resins, raw materials for resins, pigments, solvents, and additives for paints and inks, urethane materials, flame retardants, release agents

**<Customer Industries>**  
Paints and inks, urethane

#### Speciality Chemicals Department

**<Department Overview>**  
The Speciality Chemicals Department has a long and successful history, serving more than 2,000 customers in the plastic materials and additives, industrial oil materials, plating chemicals, water processing agents, photoresist materials, fluorochemicals, silicone, 3D, and other industries. Today, the department handles more than 10,000 different products. We are working to expand into new fields as we keep our eyes on the underlying technologies of our business partners.

**<Main Products and Services>**  
Petrochemical products, plastic materials and additives, chemicals for paper manufacturing, raw materials for industrial oil solutions, surfactants and surfactant raw materials, fluorochemicals, silicone materials, plating chemicals, electronics chemicals and polymer filters

**<Customer Industries>**  
Petrochemicals, plastics, electronic materials, semiconductors, industrial oil, surfactants, organic synthetics, etc.

### Advanced Materials & Processing

#### Colors & Advanced Processing Department

**<Department Overview>**  
This department traces its roots back to the dyeing business at the very founding of our company. The department consists of four main product groups: digital printing supply, colors & additives, functional film materials, and polymer products. We established a new Group Development Team to work with other departments and affiliated companies in order to cover a wider range of industries. This team promotes cross-organizational development activities, working to uncover new businesses opportunities, mainly in the trading sphere, in Japan and overseas.

**<Main Products and Services>**  
Pigments/additives, digital print processing materials, copolyester resins, functional sheets and films, organic transparent conductive materials, dyestuffs, fiber processing agents, auto body repair paint

**<Customer Industries>**  
Paper manufacturing/thermal paper, cosmetics and toiletries, electronic equipment, sheets and films, printing and print materials, fiber processing, auto body paint

#### Polymer Global Account Department

**<Department Overview>**  
The Polymer Global Account Department provides plastics, packaging materials, equipment and facilities to the domestic and international office automation (OA), electric and electronics, and consumer electronics industries. The greatest strength of this department is the sheer number of local staff who maintain networks in Asia, as well as their wealth of experience and knowledge. The department continues to create new plastics businesses through cooperative efforts, reflecting NAGASE Group growth strategies.

**<Main Products and Services>**  
Functional resins, general-purpose resins, auxiliaries, packaging materials, plastic-related equipment, devices and moldings

**<Customer Industries>**  
Office automation, electronics and consumer electronics, home appliances, housing and construction materials, packaging materials

### Electronics

#### Electronic Chemicals Department

**<Department Overview>**  
The Electronic Chemicals Department provides unique products and services for the electronics industry, including formulated epoxy resins, photolithography materials, chemical management equipment, semiconductor equipment, and other proprietary products and services. The department answers the needs of the Japanese and overseas markets, focusing on high-value-added products produced by Group manufacturing companies. The department strives for high profitability, integrating trading and Group manufacturing functions.

**<Main Products and Services>**  
Formulated epoxy resins and related products, photolithography materials for the production of semiconductors and liquid crystal displays, siloxane materials, chemical management equipment for liquid crystal display production processes, semiconductor manufacturing equipment and wafer bumping services

**<Customer Industries>**  
Electronic components, semiconductors, heavy electric machinery, displays, automotive, aircraft, environment and energy

#### Electronic Materials Department

**<Department Overview>**  
The Electronic Materials Department sells materials and components to smartphone, tablet, and wearables brand owners. The department also sells materials and components to display device, smartphone chassis, electronic substrate, and other suppliers. Over the past few years, we have been developing new businesses for the coming era of the Internet of Things. As a manufacturer, the department conducts businesses in glass processing, flame-resistant insulation/thermal conductive sheets.

**<Main Products and Services>**  
Flexible display materials, organic EL materials, touch panel components, optical film for LCDs, electronic paper materials, materials for smartphone and tablet cases, silicon/semiconductor processing materials, flame-resistant insulation/thermal conductive sheets, sensor and lens modules, LED chips, abrasives, glass processing

**<Customer Industries>**  
Smartphones, displays, touch panels, semiconductors, infotainment, lighting

### Automotive & Energy

#### Automotive Solutions Department

**<Department Overview>**  
The Automotive Solutions Department operates in the global automotive industry, which is experiencing increasingly rapid growth. Here, we make the most of our superior global network to expand sales of raw materials and products in global markets, particularly China, ASEAN, and North America. At the same time, we are working to improve Group manufacturing functions to offer greater levels of safety, security, comfort, and environmental friendliness demanded by society now and in the future. In doing so, we plan to contribute to the new automobile society and grow our business at the same time.

**<Main Products and Services>**  
Commodity plastics and engineering plastics for automotive interior/exterior components, automotive interior/exterior and functional components, lightweight materials and components, electronics components, auxiliaries, plastic-related equipment, devices and tools

**<Customer Industries>**  
Automotive and automotive parts industries

#### Energy Business Office

**<Department Overview>**  
The Energy Business Office deals in energy management systems (EMS) combining and networking lithium ion battery (LiB) systems and photovoltaic (PV) modules. In combination with related component materials, NAGASE devises marketing strategies that anticipate future needs, dealing in and sharing information covering all aspects of the business from upstream to downstream. Beginning fiscal 2016, the department will begin dealing in LED optical communications equipment for the safe, stable control of infrastructure related to the businesses referenced above.

**<Main Products and Services>**  
Raw materials for lithium ion battery (LiB), photovoltaic (PV) modules, LiB systems, PV materials, applied products in energy management systems, independently powered systems, LED optical communications equipment, wireless communications modules

**<Customer Industries>**  
Batteries, photovoltaics, automotive and automotive parts, construction, logistics, lighting, commercial facilities, public facilities, etc.

### Life & Healthcare

#### Life & Healthcare Products Department

**<Department Overview>**  
The Life & Healthcare Products Department sets its sights on contributing to food, beauty, and health as a member of the Life & Healthcare segment. This department is developing high-value-added products that help people live better and healthier lives, leveraging the Group's comprehensive strengths in trading, R&D, and manufacturing and processing in the global food materials, pharmaceutical/medical materials, fragrances and cosmetics materials, household products materials, and agriculture, fisheries, and livestock fields.

**<Main Products and Services>**  
Functional food ingredients (functional saccharides, enzymes, health food materials, and food additives), fragrances/cosmetics and household product materials (whitening agents, moisturizing agents, UV absorbers, activators, antibacterial agents, and chelates), pharmaceuticals (active pharmaceutical ingredients (APIs), clinical trial APIs, intermediates, raw materials, formulations, additives), in-vitro diagnostics, medical materials and equipment, materials for agriculture, fisheries, and livestock (agricultural chemicals and materials, fertilizers, feed and feed additives)

**<Customer Industries>**  
Foods, pharmaceuticals and medical, diagnostic drugs, fragrances and cosmetics, household products, agricultural, fisheries and livestock

#### Beauty Care Products Department

On April 1, 2017, the Beauty Care Products Department transferred to Nagase Beauty Care Co., Ltd. to generate greater efficiency.

For more, see the Nagase Beauty Care website.  
<http://nbc.jp/>



# Tradition and Innovation

NAGASE & CO., LTD. is a chemicals trading firm, founded in Kyoto, Japan in 1832. The NAGASE Group began as a specialized sales agent securing exclusive contracts to sell industry-leading products from around the world in Japan. Over the years, we have leveraged our technology and information gathering expertise—as well as our global network—to transform our business into a hybrid model offering superior manufacturing, processing, and R&D functions as well as trading company services. Looking forward to our 200th anniversary in the year 2032, we are creating a platform for sustainable growth.

## Supporting Japanese Industry

Founded as a dyestuffs wholesaler, we became an industrial raw materials supplier during Japan's high-growth period

Our **185th** year in business

### Established in 1832

- 1832 Nagase founded in Kyoto as a dyestuffs trading concern. Sales of dyestuffs, starches and funori seaweed
- 1898 Head office moved to Osaka



Founder: Denbei Nagase

Founding

## Overseas Network

In the 1900s, we signed sales representative agreements with Eastman Kodak and General Electric, building a foundation of trust lasting nearly two centuries

Overseas Sales to Net Sales **48.9%**  
As of fiscal 2016

One of the earliest companies to expand overseas

### 1900s

- 1900 Established business ties with Basel Chemical Co. of Switzerland (now Ciba Specialty Chemicals Ltd.)
- 1901 Opened office in Lyon
- 1911 Established Tokyo branch office
- 1913 Opened offices in London and New York
- 1917 Established Nagase Shoten Company (from sole proprietor to corporation)
- 1923 Established business ties with Eastman Kodak Co. of the United States
- 1930 Concluded an exclusive distributorship agreement with Union Carbide and Carbon Corp. of the United States
- 1938 Established Teikoku Chemical Industries Co., Ltd.



Left: Osaka head office at incorporation in December 1917  
Top: NAGASE partner Eastman Kodak in the early 20th century

Right: Nagase-CIBA Ltd. in 1971  
Bottom: Newly completed Tokyo branch office building (October 1969)



Accelerating growth in Asia and other markets overseas



Top: Hayashibara Co., Ltd. (functional saccharides manufacturing plant)  
Top Right: Nagase R&D Center

Expanding manufacturing bases, R&D centers



## Foundation for Cooperative Growth

Creating new businesses in cooperation with our customers and business partners around the world



### 1950s

- 1964 Listed Company shares on the Osaka Securities Exchange
- 1968 Concluded an exclusive distributorship agreement with General Electric Co. of the United States
- 1970 Established Nagase-CIBA Ltd. (now Nagase ChemteX Corporation) jointly with Ciba-Geigy Ltd. Listed Company shares on the Tokyo Stock Exchange
- 1971 Established Nagase (Hong Kong) Ltd. and Nagase America Corporation  
Established Engineering Plastics, Ltd. jointly with General Electric Co.
- 1972 Established Nagase Medicals Co., Ltd.
- 1975 Established Nagase Singapore (Pte) Ltd.
- 1977 Established Nagase Biochemicals, Ltd.
- 1980 Established Nagase Chemicals, Ltd.  
Established Nagase (Europa) GmbH
- 1981 Established Nagase (Malaysia) Sdn. Bhd.
- 1985 Established Seoul branch office
- 1988 Established Nagase (Taiwan) Co., Ltd.
- 1989 Established Nagase (Thailand) Co., Ltd.  
Established Nagase Science and Technology Foundation  
Tokyo branch office became a head office; adoption of Osaka/Tokyo two head office system
- 1990 Established Sofix Corporation, a U.S.-based color former production joint venture  
Set up the Nagase R&D Center in Kobe  
Established joint venture Nagase Wahlee Plastics Corporation (Taiwan)
- 1997 Established Nagase Philippines Corporation  
Established Shanghai Nagase Trading Co., Ltd.
- 1998 Established Nagase Engineering Service Korea Co., Ltd.  
Established PT. Nagase Impor-Ekspor Indonesia  
Established Shanghai Hua Chang Trading Co., Ltd.

## Unique Functions

A chemicals trading company building a strong reputation in manufacturing, processing, and research and development



### 2000s

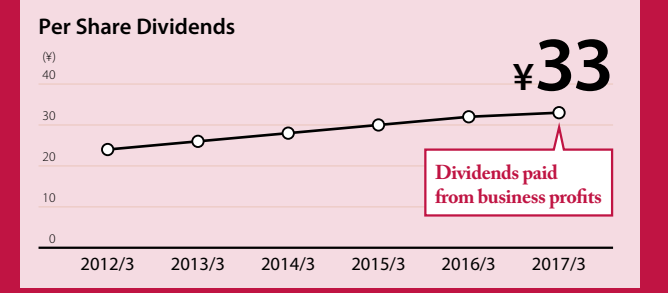
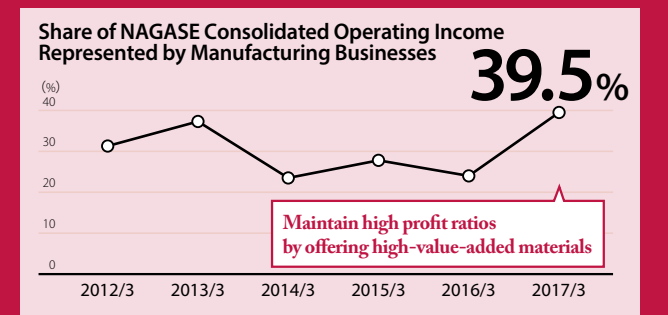
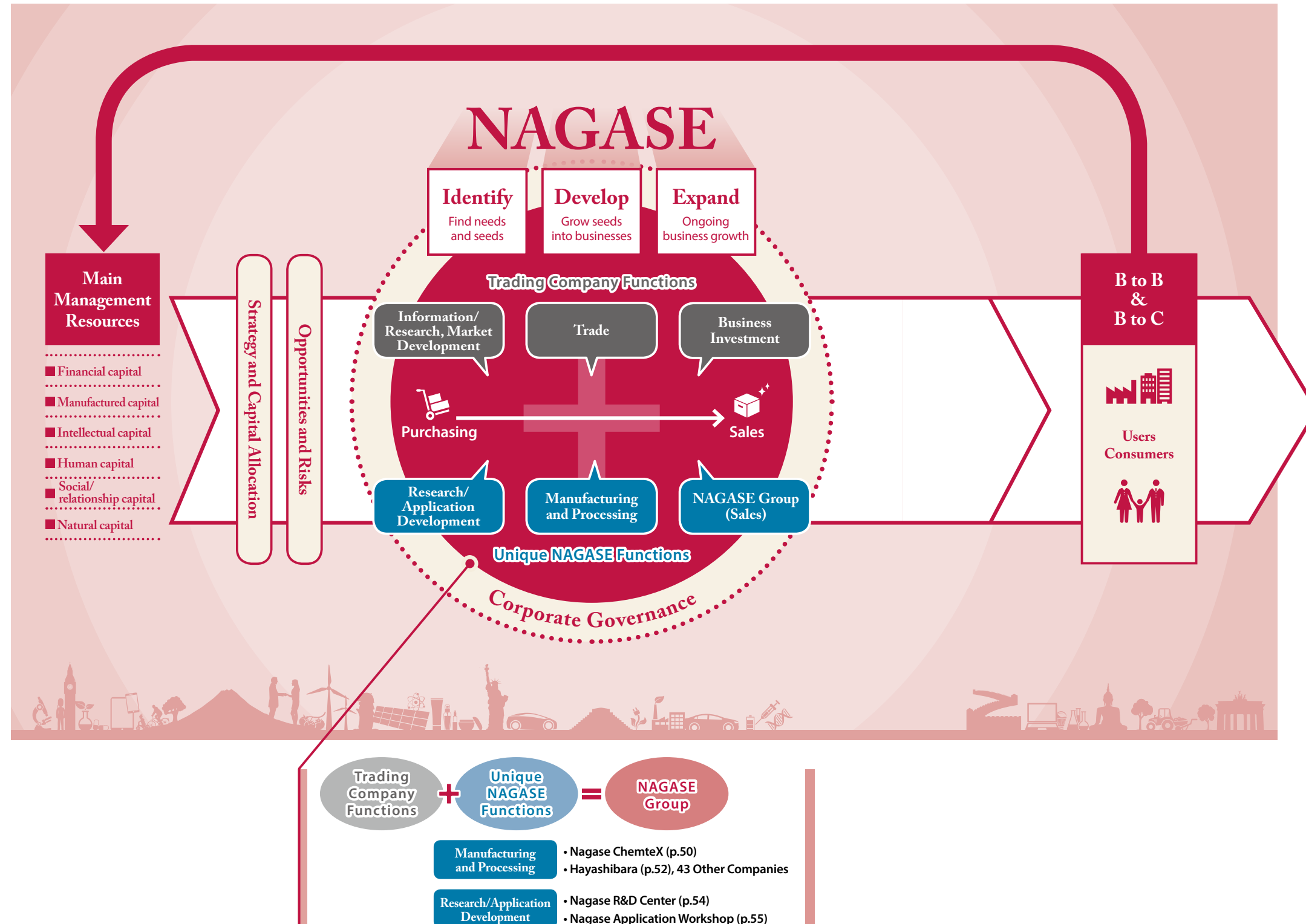
- 2000 Changed the name of Nagase-CIBA, Ltd. to Nagase ChemteX Corporation
- 2001 Nagase ChemteX, Nagase Chemicals, Teikoku Chemical Industries, and Nagase Biochemicals merged to Nagase ChemteX Corporation  
Closed the Seoul branch office and established Nagase Korea Corporation
- 2002 Established Guangzhou Nagase Trading Ltd.  
Established Nagase ChemteX (Wuxi) Corporation
- 2004 Established NWP International Trading (Shenzhen) Co., Ltd.
- 2005 Established Totaku Industries Suzhou Co., Ltd.  
Established Nagase Electronics Technology Co., Ltd.  
Established Nagase Philippines International Services Corporation
- 2006 Acquired stock of semiconductor manufacturing equipment maker Pac Tech-Packaging Technologies GmbH  
Established Nagase India Private Ltd.
- 2007 Established Nagase Application Workshop
- 2008 Established Sakai Sales Office  
Established Nagase Vietnam Co., Ltd.
- 2009 Established Dubai branch office
- 2012 Acquired stock of Engineered Materials Systems, Inc., U.S.-based maker of formulated epoxy resins  
Acquired stock of Hayashibara Co., Ltd. (Okayama, Japan)  
Established local entity in Brazil
- 2014 Completion of NAGASE Global HR Development Center
- 2015 Created NAGASE Long-Term Management Policy and updated Management Philosophy Structure

2016 Launched new mid-term management plan

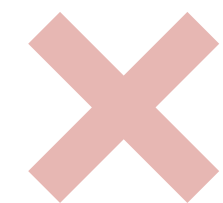
2032 Our 200th anniversary

## A Unique Business Model that Extends Beyond the Traditional Trading Firm Framework

The NAGASE Group has created a truly unique, highly valuable business model by integrating traditional trading firm functions with manufacturing, processing, and research and development functions.



We improve corporate value through our business and return profits to shareholders.



We contribute to creating a sustainable world where people live with peace of mind.





## Delivering Valuable Products and Services on the Global Stage

NAGASE delivers value that contributes to creating a sustainable world where people live with peace of mind. This value is represented in everything from raw materials for plastic materials and additives, functional polymers, and plastic products to functional food ingredients and pharmaceutical raw materials and intermediates. We will continue to grow as we work together closely with our customers in producing products and services of value.

**A Sustainable World Where  
People Live with Peace of Mind**

### Functional Materials



**Coating Raw Materials**  
Coating raw materials sold by NAGASE are used in automobile bodies and other applications.



**Urethane Materials**  
High-density, flexible urethane materials sold by NAGASE are used in car seat cushions.



**Denafilter™**  
Manufacture and sale of Denafilter™, a filtration system used in the manufacturing process of high-quality films for packaging and optical applications.

### Advanced Materials & Processing



**Color Formers**  
Manufacture and sale of color formers used in thermal paper applications, including cash register receipts and tickets.

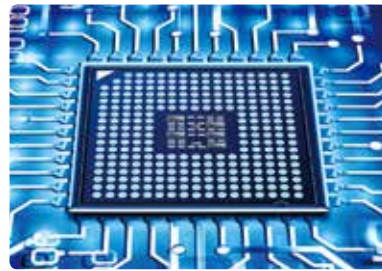


**Copolyester Resin (Tritan™)**  
A copolyester resin resistant to temperatures greater than 100°C. This material is widely used as a substitute to compensate for defects in tableware and other glass products.



**Engineering Plastics**  
Sales of plastics for use in office automation equipment and other applications.

### Electronics



**Semiconductor-Related Products**  
Sales of encapsulants for semiconductors, photolithography materials, manufacturing equipment, wafer bumping services.



**Epoxy Resins**  
Manufacture and sale of high-performance resins for use in electronic components, wind power generation, solar cells, aircraft, optical components, etc.



**Liquid Crystal, Flexible Display, Organic EL Materials**  
Sale of display device peripheral components, touch panel materials, chemicals, and equipment to the smartphone and tablet PC industry.

### Automotive & Energy



**Car Electronics**  
Solutions for new materials, components, and technologies for next-generation environmental applications.



**Next-Generation Products and Services**  
Technological support and sales of components and new materials required by car multimedia, sensors, and self-driving systems.



**Home Energy Management System**  
The affordable home energy management system (HEMS) is under development to realize easy access to zero energy houses (ZEH).

### Life & Healthcare



**Pharmaceutical and Medical Fields**  
Manufacture and sale of pharmaceutical raw materials and anti-cancer drugs.



**Fragrances/Cosmetics**  
Manufacture and sale of fragrances and cosmetics materials, products, and health foods.



**Foods**  
Manufacture and sale of functional saccharides, enzymes, and other food and health food materials.

About the NAGASE Group

Leading Us to the Future

Performance by Segment

Unique Products

Critical Initiatives for Sustainable Growth

Financial and Corporate Information



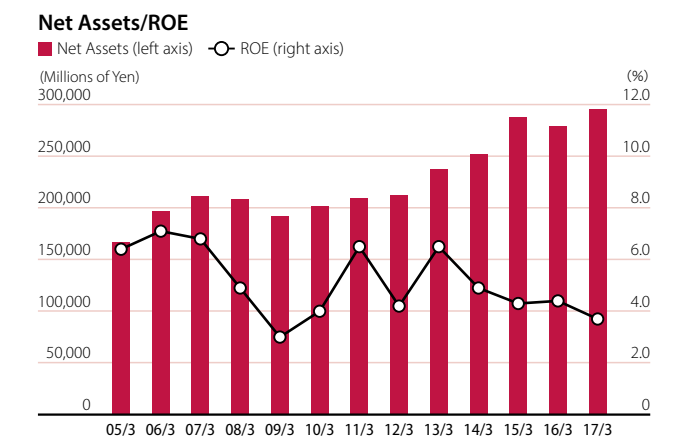
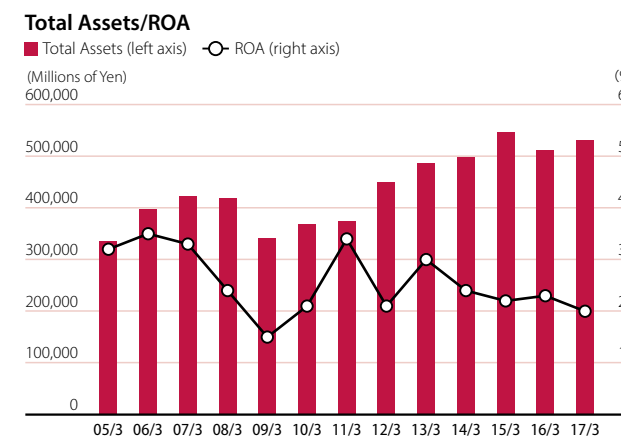
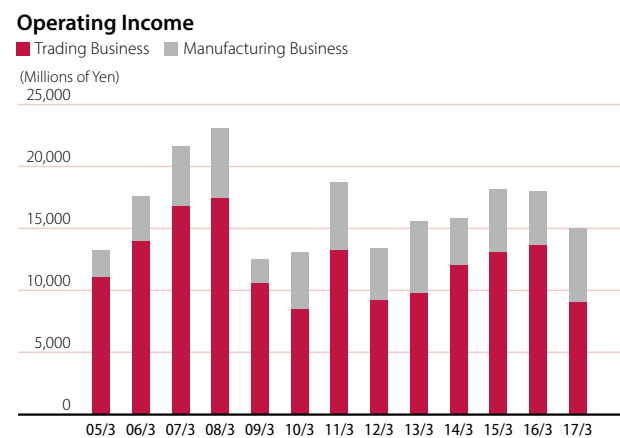
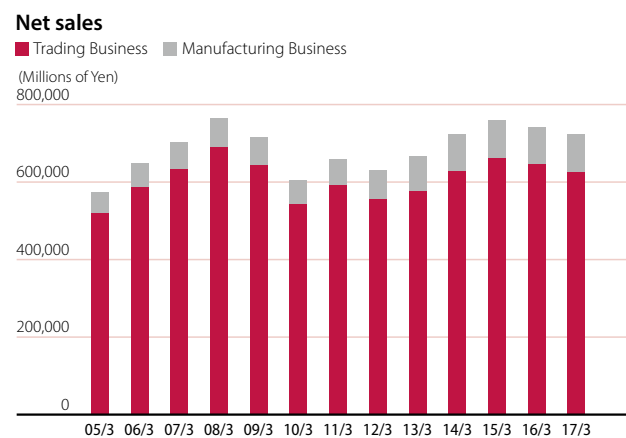
# 13-Year Financial Highlights

NAGASE & CO., LTD. and Consolidated Subsidiaries (Years Ended March 31)

(Millions of yen)							(Millions of yen)							
2005/3	2006/3	2007/3	2008/3	2009/3	2010/3	2011/3	2012/3	2013/3	2014/3	2015/3	2016/3	2017/3		
WIT21			WIT2008			"CHANGE"11			Change-S2014			ACE-2020		
Investment Amount: ¥23.7 billion			Investment Amount: ¥27.7 billion			Investment Amount: ¥107.4 billion			Investment Amount: ¥41.1 billion			Investment Amount: ¥13.7 billion	Investment Amount: ¥14.0 billion	
<b>Performance (Accounting Fiscal Year)</b>														
Net Sales														
	¥ 575,636	¥ 648,023	¥ 701,321	¥ 764,755	¥ 715,238	¥ 603,949	¥ 660,213	¥ 631,854	¥ 666,272	¥ 723,212	¥ 759,713	¥ 742,194	¥ 722,384	
Segments	Functional Materials (formerly Chemicals)	251,725	222,282	247,094	267,836	248,461	237,124	253,290	177,126	167,017	169,973	168,238	157,149	153,546
	Advanced Materials & Processing (formerly Plastics)	188,456	229,278	244,681	274,660	253,029	192,569	222,100	217,929	214,214	239,224	254,165	255,505	242,609
	Electronics	122,632	132,086	150,796	163,833	153,255	117,591	133,640	110,495	125,014	137,026	149,947	127,926	127,722
	Automotive & Energy	—	—	—	—	—	—	—	76,113	83,068	99,441	109,851	115,351	112,956
	Life & Healthcare (formerly Healthcare/Other)	12,821	56,404	53,556	56,489	58,905	55,542	50,247	49,170	76,116	76,810	76,609	85,571	84,904
	Other	—	7,972	5,191	1,934	1,585	1,121	934	1,018	841	737	900	689	644
Region	Domestic	363,708	388,470	410,789	432,813	394,874	360,382	389,379	366,369	361,971	372,939	374,208	363,038	369,365
	Overseas	211,928	259,553	290,532	331,942	320,364	243,567	270,833	265,484	304,301	350,272	385,505	379,155	353,019
Gross Profit														
	61,960	67,640	73,639	80,506	71,527	65,415	73,008	71,628	82,583	88,936	91,991	91,663	91,503	
Operating Income														
	13,256	17,596	21,669	23,063	12,522	13,128	18,732	13,427	15,578	15,789	18,153	18,024	15,030	
Profit Attributable to Owners of the Parent														
	10,384	12,892	13,567	10,005	5,808	7,537	12,823	8,570	14,182	11,663	11,318	12,316	10,331	
<b>Financial Condition:</b>														
Total Assets														
	¥ 335,290	¥ 396,773	¥ 422,859	¥ 419,869	¥ 340,968	¥ 368,088	¥ 375,336	¥ 450,842	¥ 486,747	¥ 498,141	¥ 546,525	¥ 512,081	¥ 530,775	
Equity Capital														
	167,092	196,620	205,083	200,554	184,599	195,344	201,516	204,706	228,505	246,723	281,398	273,963	290,217	
Interest-Bearing Debt														
	14,019	24,834	20,491	33,342	31,340	21,886	27,125	88,710	98,425	92,828	98,493	87,560	82,046	
(Yen)														
<b>Per Share Data:</b>														
Net Income (Basic)														
	¥ 81.00	¥ 100.32	¥ 105.84	¥ 77.86	¥ 45.17	¥ 58.64	¥ 99.76	¥ 66.69	¥ 111.31	¥ 91.86	¥ 89.10	¥ 96.96	¥ 81.65	
Net Assets														
	1,311.37	1,535.70	1,597.27	1,559.97	1,435.88	1,519.61	1,568.04	1,592.87	1,803.31	1,942.20	2,215.18	2,156.67	2,301.10	
Cash Dividends														
	10	15	18	17	16	16	22	24	26	28	30	32	33	
Payout Ratio (%)														
	12.3	14.9	17.0	21.8	35.4	27.3	22.1	36.0	23.4	30.5	33.7	33.0	40.4	
Shareholders' Equity Dividend Rate (%)														
	0.79	1.06	1.15	1.08	1.07	1.08	1.42	1.52	1.52	1.50	1.44	1.46	1.48	
(Yen)														
<b>Ratios:</b>														
Overseas Sales to Net Sales														
	36.8	40.1	41.4	43.4	44.8	40.3	41.0	42.0	45.7	48.4	50.7	51.1	48.9	
Manufacturing Ratio (Operating Income)														
	16.4	20.5	22.3	24.4	15.5	35.4	29.0	31.3	37.3	23.5	27.8	24.3	39.5	
Operating Margin (Operating Income/Net Sales)														
	2.3	2.7	3.1	3.0	1.8	2.2	2.8	2.1	2.3	2.2	2.4	2.4	2.1	
Return on Equity (ROE)														
	6.4	7.1	6.8	4.9	3.0	4.0	6.5	4.2	6.5	4.9	4.3	4.4	3.7	
Net Worth Ratio														
	49.8	49.6	48.5	47.8	54.1	53.1	53.7	45.4	46.9	49.5	51.5	53.5	54.7	
Debt Equity Ratio (Times)														
	0.08	0.13	0.10	0.17	0.17	0.11	0.13	0.43	0.43	0.38	0.35	0.32	0.28	

(Note 1) At the beginning of fiscal 2005, the Fine Chemicals Department (part of the Chemicals segment) was integrated with the Healthcare segment. The combined organization is now known as the Life Sciences segment.  
 (Note 2) At the beginning of fiscal 2009, the Company moved its information and functional materials businesses handling materials related to insulating materials and fluoroplastic-related materials from the Electronics segment to the Chemicals segment. Businesses handling surface detection machines for functional films and sheets have been moved under the Plastics segment.

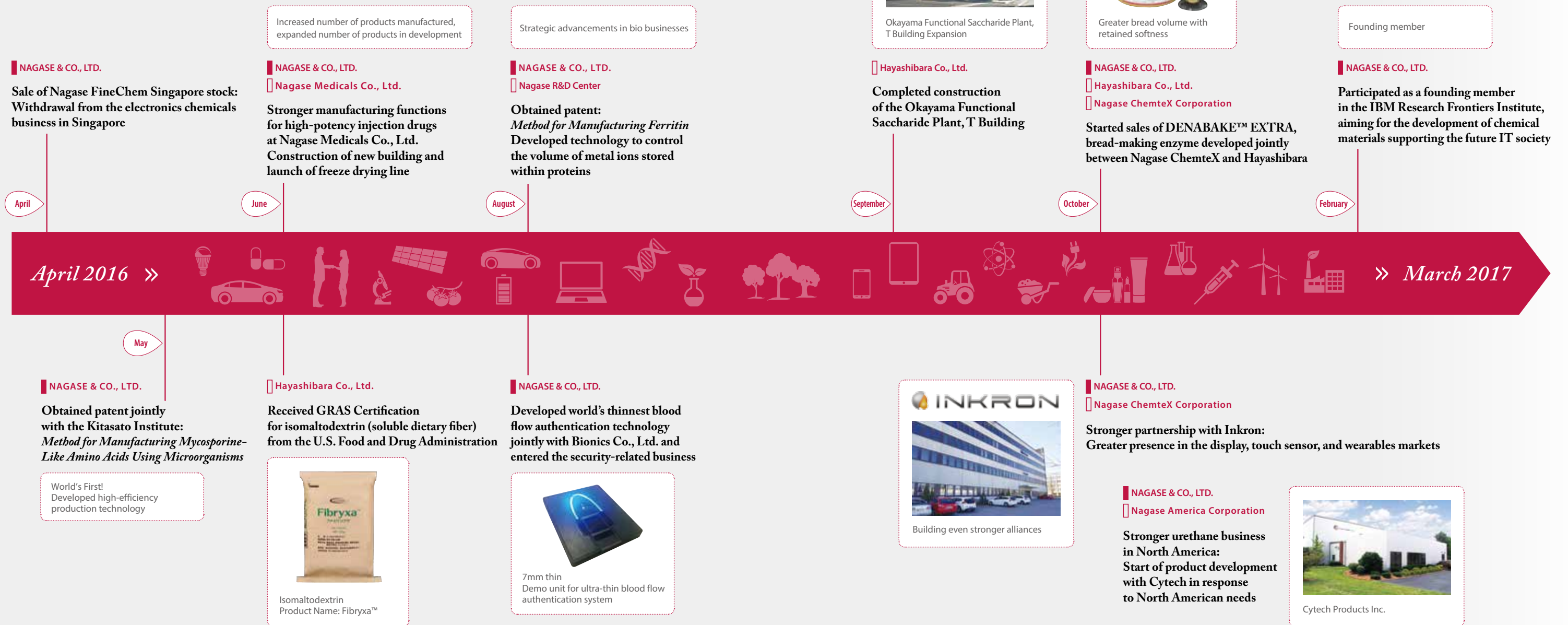
(Note 3) At the beginning of fiscal 2012, the NAGASE Group reorganized its four business segments into five business segments (Functional Materials, Advanced Materials & Processing, Electronics, Automotive & Energy, and Life & Healthcare) to more fully reflect the respective positions of each business in the value chain. For comparative purposes, fiscal 2011 figures have been calculated using the new business segments. The Colors & Imaging Department formerly under the Chemicals segment has been moved under the Advanced Materials & Processing segment. The Automotive & Energy segment was organized out of the Automotive Solutions Department (belonging to the Plastics segment) and the Energy Business Office, which was launched as an integrated entity from the Environment & Energy Office (under Other) and the Energy Device Office.  
 (Note 4) At the beginning of fiscal 2013, the Automotive & Energy segment was organized by combining the former Automotive Solutions Department (under the Plastics segment) and the former Energy Business Office, which was an integrated entity combining the Environment & Energy Office (under the Other segment) and the Energy Device Office.





# Highlights in FY2016

Major NAGASE Group highlights during fiscal 2016.







We are reforming our profit structure and corporate culture for sustainable growth.

Representative Director and President

朝倉 研二

Kenji Asakura

July 2017

**NAGASE has pushed for corporate value growth under the key concepts of full participation and front-line focus.**

**Looking Back on Fiscal 2016**

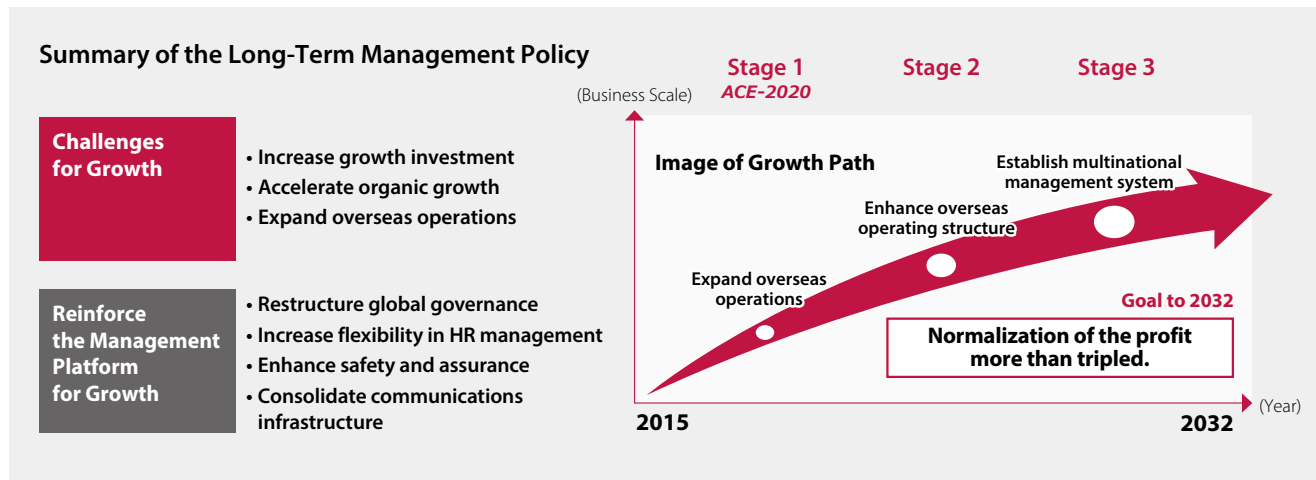
Global financial markets experienced turmoil during the first half of 2016 in response to the lack of clear direction in the Chinese economy and the British exit from the EU. While the first half of the fiscal year was one of decelerating momentum in the global economy, the second half brought with it a gradual recovery. This unstable environment during the first half of the year had a negative impact on NAGASE Group performance. However, general growth in Asia during the second half helped us achieve profits for the year (see P.69 for more about financial results).

During 2015, the NAGASE Group created medium-term policies and updated the structure of our corporate principles as we look forward to the year 2032 and our 200th anniversary. In 2016, we began operating under our new **ACE-2020** mid-term management plan, which covers fiscal years 2016 through 2020. The ACE in this plan is an acronym for **A**ccountability, **C**ommitment, and **E**fficiency. We are engaged in two major reforms under this plan: *Reform Profit Structure* and *Reform Corporate Culture*. We took our first steps toward these goals in the initial year of the plan.

To become a company known for sustainable growth in our 200th year, it is important that we not only grow our existing businesses, but also create new businesses. Conditions have changed significantly both geopolitically and in business since we adopted our new policies in 2015. However, we are making progress in creating new businesses through the policies that we have already implemented.

At the beginning of this year, I proclaimed the phrase *Speed Up*. It should go without saying that we must increase the speed of our engagement.

<p><b>NAGASE Vision</b></p> <p>To realize a sustainable world where people live with peace of mind, each of us embodies our value proposition, Identify, Develop and Expand through daily activities.</p>	<p><b>NAGASE Group Slogan</b></p> <p><b>Bringing it all together</b></p>
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About the NAGASE Group  
Leading Us to the Future  
Performance by Segment  
Unique Products  
Critical Initiatives for Sustainable Growth  
Financial and Corporate Information



## Four Key Policies Under ACE-2020

### Reform Profit Structure

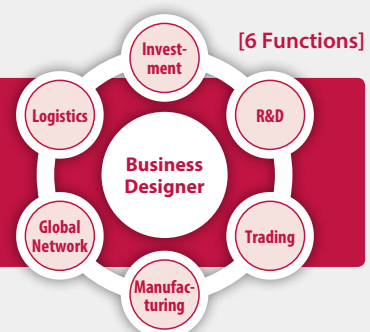
**1) Portfolio optimization:** We will categorize businesses into Growth/Emerging, Focus, Base, and Improvement; and execute strategies under each. At present, we have not altered our policy of allocating resources to Focus sectors such as Life & Healthcare and Electronics. In our Life & Healthcare segment, we expanded the Hayashibara production facilities manufacturing TREHA™. We also made the decision to build an additional manufacturing building for high-potency injection drugs at Nagase Medicals Co., Ltd. In October 2016, we began sales of DENABAKE™ EXTRA, a bread-making enzyme developed jointly between Nagase ChemteX and Hayashibara. At present, we conduct research and development at three different locations. These types of successful joint projects will be something we point to as part of our proven track record in the future. In our Electronics segment, we strengthened our relationship with Inkron Oy of Finland, making the company a subsidiary during fiscal 2017 and bolstering our presence in the display, touch panel, and wearables businesses. In the second year of ACE-2020, we hope to focus more deeply in the liquid crystal and semiconductor markets in China in addition to growing sales of our own products. As measures to replace assets and reallocate resources, we sold stock in certain affiliated companies and consolidated others.

**2) Expand and strengthen revenue base:** To accelerate our global expansion, we acquired 35% of Cytech Products Inc. to bolster our urethane business in North America. We are making progress toward strengthening our management base, including investing in new businesses. We also introduced a number of policies to improve profitability at our manufacturing companies, demonstrating significant improvement over the course of fiscal 2016. We will continue to focus on raising profitability to new levels.

### ACE-2020 Basic Policy

#### NAGASE Transforms from "Shosha/Trading" to "Business Designer."

NAGASE strings all the groups together to create and provide new value to the world through 6 key functions.



Leverage Group functions to achieve the quantitative and qualitative targets.

#### Reform Profit Structure

##### Portfolio Optimization

- Categorization of business and execution of strategy that matches with the area
- Replacement of asset and reallocation of resources
- Acceleration in investment that creates core business of group

##### Expand and Strengthen Revenue Base

- Accelerate globalization "G6000"
- Improve manufacturing profitability

#### Reform Corporate Culture

##### Mindset

- Breed independence and responsibility
- Share the management's message
- Thorough monitoring and PDCA

##### Strengthen Management Platform

- Pursue efficiency
- HR development

### Reform Corporate Culture

**3) Mindset:** With accountability, which is the A in ACE, we must Identify, Develop, and Expand the seeds of businesses that represent the NAGASE Vision. To foster greater accountability, we are delegating authority to the heads of our various organizations. Those employees who resonate with our principles and have the capacity to develop new businesses at the front lines of our company will be the ones who lead us forward.

**4) Strengthen management platform:** To create greater management efficiencies, we inventoried our processes and performed a review of our functions, consolidating some of our back office organizations. We will conduct more reviews of our back office systems in the future.

#### KGI (Key Goal Indicator)

KGI	FY2016	FY2017 (planned)	FY2020
Consolidated Sales	722.3 Billion Yen	732.0 Billion Yen	1.0 Trillion Yen or more
Consolidated Operating Income	15 Billion Yen	19.1 Billion Yen	30 Billion Yen or more
ROE	3.7%	4.2%	6% or more

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

Reform/Strategy	Measures	KPI (Index)	FY2016	FY2017 (planned)	FY2020
Profit Structure Reform Indicator	Increase Focused Business (Portfolio Optimization)	Operating Income in Focus Area*	11.9 B Yen	11.5 B Yen	16.9 B Yen
		Growing Investment Distribution Ratio in Focus Area	46%	40%	35% <
	Accelerate Globalization (Expand and Strengthen Profit Structure)	Overseas Group Sales*	350.2 B Yen	350.2 B Yen	600 B Yen
		Sales Growth Rate in the Americas	90%	92%	170%
Increase Manufacturing Profitability (Expand and Strengthen Profit Structure)	Operating Income from Manufacturing*	9.0 B Yen	10.1 B Yen	14.4 B Yen	
	Break-Even Point Sales Ratio*	76%	78%	73%	
Corporate Culture Reform Indicator	Pursue Efficiency (Strengthen Management Platform)	Consolidated Selling, General and Administrative Ratio	10.6%	10.4%	9.4%
Financial Strategy Indicator	Investment	Growth Investment	8.2 B Yen	** 25.4 B Yen	** 100 B Yen
	Financial Structure	Rating (R&I)	[A]	[A]	[A] or more

\* The figures in this document are all management accounting data (simple sums). It is different from the figures disclosed on the consolidated financial statement.  
\*\* Total numbers in 5 years

## Use of AI Technology in Research and Development

The NAGASE Group conducts research and development through the Nagase R&D Center, Nagase Application Workshop, and our manufacturing subsidiaries.

As one part of our research and development activities, in 2016 we joined the IBM Research Frontiers Institute, founded by IBM. We started a chemical materials development project, which uses cognitive systems and advanced data analytics. Working mainly with Japanese chemical manufacturers and NAGASE Group companies, we are developing materials and applications. Inputting chemical development data and thesis papers should lead to new insights based on the automatic generation of chemical formulas. This method of development should also reduce time and costs compared to traditional trial-and-error experimentation.

We have also established the New Value Creation Office as an internal organization. It is clear that the evolution of technologies such as the Internet of Things, Big Data, and Artificial Intelligence will change by order of magnitude. We believe the needs for new materials will be a major business opportunity. In the course of major trends in technology innovation, the NAGASE Group will identify areas of focus where we can provide value to the world.

## Toward Greater Growth

Under **ACE-2020**, we have set aside ¥100 billion for growth investment. During fiscal 2016, we investigated an unprecedented number of potential investments, leading to a deeper pool of expertise in business investment. While I cannot say for sure what will happen in fiscal 2017, we have a number of potential investments in the pipeline and we are highly interested in making investments.

Risk management becomes even more important as we hasten our global expansion and increase the number of businesses with manufacturing functions. In addition to hiring experts and taking other steps to strengthen our risk management at the front lines, we are also delegating more authority.

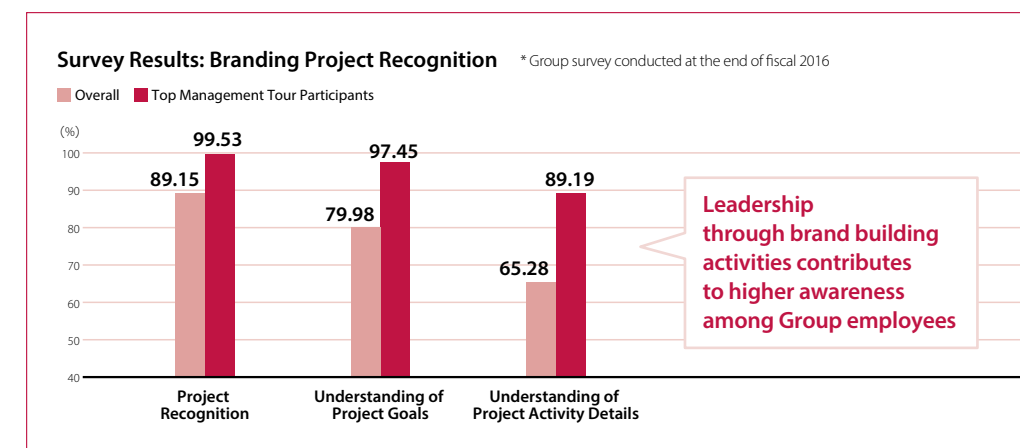
We are also upgrading our Group enterprise systems to facilitate rapid decision-making and better monitoring through more advanced internal controls.

## ESG and Branding Initiatives

Having achieved compliance with the Corporate Governance Code to the letter, now it is time for us to comply by the spirit of the code. To instill branding internally and reform our corporate culture as stated in **ACE-2020**, we must communicate messages from top management to all employees.

We are hiring more mid-career employees than ever before. Now, more than 6,000 people from a diverse range of backgrounds work at NAGASE companies in Japan and throughout the world. To create a sense of shared Group values among all employees, we began Top Management Tours by our chairman, president, and vice president in January 2016. To date, more than 127 Top Management Tours have taken place, with approximately 26% of employees participating. These meetings, consisting of 10 or so participants, have been well received as a means to raise understanding and help employees resonate with our principles and the NAGASE Vision. We plan to continue this practice to help create

sustainable growth and improved corporate value. Personally, I plan to maintain a close relationship with the front lines of our businesses. I will strive to continue to create video messages, write blog posts, and interact directly with our younger employees.



## To Our Shareholders and Investors

Since being named president of NAGASE & CO., LTD., I have had the opportunity to meet with a number of stakeholders in Japan and across the world. I believe in the importance of open communication, disclosing our progress and circumstances through such meetings and in the media. Our positive attitude and active investor relations campaigns have resulted in quite an increase in the number of shareholders owning NAGASE stock. I hope to take even more opportunities to interact with you in the future, hearing your feedback about our company. We hope to take your feedback and incorporate it into future discussions, building stronger relationships with our stakeholders via this type of two-way communication. I ask for your continued support as we pursue our vision for NAGASE.



**We will continue to reinvent ourselves as a Business Designer, creating new societal value through means beyond the framework of our traditional trading company roots.**

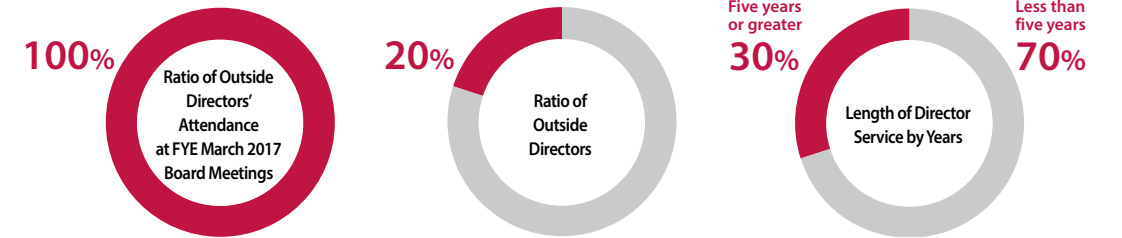




# Our Board

(as of June 29, 2017)

## Sustainable corporate value through management and disclosure accountability



### Directors



<p><b>Outside Director</b></p> <p><b>Nobumasa Kemori</b></p> <p>1980 Joined Sumitomo Metal Mining Co., Ltd. 2006 Managing Executive Officer and Director, Sumitomo Metal Mining Co., Ltd. 2007 Representative Director and President, Sumitomo Metal Mining Co., Ltd. 2013 Representative Director and Chairman, Sumitomo Metal Mining Co., Ltd. 2016 Director and Chairman, Sumitomo Metal Mining Co., Ltd. 2017 Executive Adviser, Sumitomo Metal Mining Co., Ltd.</p>	<p><b>Director and Executive Officer</b></p> <p><b>Takanori Yamauchi</b></p> <p>GM, Human Resources &amp; General Affairs Division GM, BPR &amp; Administration Division Administration</p>	<p><b>Director and Executive Officer</b></p> <p><b>Kohei Sato</b></p> <p>Overseas Operations</p>	<p><b>Representative Director and Senior Managing Executive Officer</b></p> <p><b>Mitsuro Naba</b></p> <p>Corporate Administration and Osaka Region</p>	<p><b>Representative Director and Chairman</b></p> <p><b>Hiroshi Nagase</b></p>	<p><b>Representative Director, President and CEO</b></p> <p><b>Kenji Asakura</b></p>	<p><b>Director and Vice Chairman</b></p> <p><b>Reiji Nagase</b></p>	<p><b>Director and Managing Executive Officer</b></p> <p><b>Osamu Morishita</b></p> <p>Hayashibara Co., Ltd. Nagase R&amp;D Center Manufacturing</p>	<p><b>Director and Executive Officer</b></p> <p><b>Ichiro Wakabayashi</b></p> <p>Sales &amp; Marketing</p>	<p><b>Outside Director</b></p> <p><b>Hidenori Nishi</b></p> <p>1975 Joined KAGOME CO., LTD. 2000 Director, KAGOME CO., LTD. 2003 Director and Executive Officer, KAGOME CO., LTD. 2005 Director and Managing Executive Officer, KAGOME CO., LTD. 2008 Director and Senior Managing Executive Officer, KAGOME CO., LTD. 2009 Representative Director and President, KAGOME CO., LTD. 2014 Representative Director and Chairman, KAGOME CO., LTD. 2014 Director, NAGASE &amp; CO., LTD. 2016 Chairman of the Board, KAGOME CO., LTD.</p>
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### Corporate Auditors



<p><b>Audit &amp; Supervisory Board Member</b></p> <p><b>Kenichi Matsuki</b></p>	<p><b>External Audit &amp; Supervisory Board Member</b></p> <p><b>Nobuyuki Shirafuji</b></p> <p>1984 Joined the Sumitomo Bank, Ltd. (currently Sumitomo Mitsui Banking Corporation) 2003 General Manager of the London Group of Global Corporate Investment Dept. of Sumitomo Mitsui Banking Corporation and Sumitomo Mitsui Banking Corporation Europe Limited 2006 General Manager of Credit Dept., Europe, Middle East and Africa Division (London) of Sumitomo Mitsui Banking Corporation and Sumitomo Mitsui Banking Corporation Europe Limited 2013 General Manager of Credit Review Dept. of Sumitomo Mitsui Banking Corporation 2016 Retired from the Sumitomo Mitsui Banking Corporation Corporate Auditor, NAGASE &amp; CO., LTD.</p>	<p><b>Audit &amp; Supervisory Board Member</b></p> <p><b>Masanori Furukawa</b></p>	<p><b>External Audit &amp; Supervisory Board Member (part-time)</b></p> <p><b>Toshio Takano</b></p> <p>1987 Deputy General Manager of the Special Investigation Department of the Tokyo District Public Prosecutors Office 2001 Superintendent Public Prosecutor of the Sendai High Public Prosecutors Office 2004 Superintendent Public Prosecutor of the Nagoya High Public Prosecutors Office 2006 Takano Law Firm 2008 Corporate Auditor, NAGASE &amp; CO., LTD.</p>
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### Executive Officers

<p><b>Akihiko Isono</b></p> <p>Managing Executive Officer Nagase ChemteX Corporation</p>	<p><b>Katsuhisa Yamaguchi</b></p> <p>Executive Officer Greater China CEO Nagase Business Management &amp; Planning (Shanghai) Co., Ltd. COO</p>	<p><b>Mitsuru Kanno</b></p> <p>Executive Officer Nagase (Europa) GmbH CEO</p>	<p><b>Masatoshi Kamada</b></p> <p>Executive Officer GM, Electronic Materials Department</p>	<p><b>Satoru Morita</b></p> <p>Executive Officer GM, Legal Division The Operational Support of Manufacturing Subsidiaries</p>
<p><b>Naoki Yasuba</b></p> <p>Executive Officer Hayashibara Co., Ltd. General Executive, Life &amp; Healthcare Segment GM, Life &amp; Healthcare Products Department</p>	<p><b>Masaya Ikemoto</b></p> <p>Executive Officer General Executive, Automotive &amp; Energy Segment GM, Automotive Solutions Department Nagoya Branch</p>	<p><b>Yasuhiro Mihara</b></p> <p>Executive Officer General Executive, Functional Materials Segment GM, Speciality Chemicals Department</p>	<p><b>Takahiro Okumura</b></p> <p>Executive Officer General Executive, Electronics Segment GM, Electronic Chemicals Department</p>	<p><b>Kusuo Ota</b></p> <p>Executive Officer General Executive, Advanced Materials &amp; Processing Segment GM, Colors &amp; Advanced Processing Department Nagase Application Workshop</p>
<p><b>Hiroyuki Ueshima</b></p> <p>Executive Officer GM, Corporate Planning Division</p>	<p><b>Koichi Sagawa</b></p> <p>Executive Officer GM, Polymer Global Account Department</p>			

<b>Director Term of Service</b> <b>One Year</b> <small>(same for outside directors)</small>	<b>Number of Independent Directors</b> <b>4</b> <small>(all outside directors)</small>	<b>Institutional Format</b> <b>Corporation with Board of Directors and Audit &amp; Supervisory Board Members (Audit &amp; Supervisory Board)</b>	<b>Total Number of Directors</b> <b>10</b>
<b>Number of Outside Directors</b> <b>2</b>	<b>Executive Officer System Adopted</b> <b>Yes</b>	<b>Total Number of Audit &amp; Supervisory Board Members</b> <b>4</b>	<b>Number of Outside Auditor</b> <b>2</b>
<b>Number of Board of Directors Meetings</b> <b>16</b> <small>(Attendance by Outside Directors) Mr. Hidenori Nishi, 100% Mr. Nobumasa Kemori, 100%* (Attendance by Outside Corporate Auditors) Mr. Nobuyuki Shirafuji, 100%** Mr. Toshio Takano, 100%</small>	<b>Compensation Committee</b> <b>Yes</b>	<b>Number of Audit &amp; Supervisory Board Meetings</b> <b>16</b>	<b>Independent Auditor</b> <b>Ernst &amp; Young ShinNihon LLC</b>

\* Mr. Kemori was appointed an outside director in June 2016 and activities refer to Board of Directors meetings subsequent to the date of appointment.  
\*\* Mr. Shirafuji was appointed an outside corporate auditor in June 2016 and activities refer to Board of Directors meetings subsequent to the date of appointment.

**Compliance with the Corporate Governance Code** (as of July 1, 2017)

As of June 2016, there was one item of explanation. However, having conducted an effectiveness evaluation of the Board of Directors in March 2017, we determined that we were in compliance with all aspects of the Corporate Governance Code.

To improve corporate value over the medium and long term, we believe that it is important to continuously assess and verify our status, beyond simply creating the systems and structures. We are committed to continuing the improvement of our corporate governance.

**[Principle 4-11(3)]**

**Evaluation of the Effectiveness of the Board of Directors**

During fiscal 2016, we conducted a survey to evaluate the effectiveness of our Board of Directors. This survey asked all directors and corporate auditors to respond to questions about board structure, operations, deliberations, and more. The results of this survey were compiled and analyzed by the Office of Evaluations. Based on these results, the board conducted an evaluation of board effectiveness. As a result, the NAGASE Board of Directors confirmed that it operates under a proper composition of personnel, and that deliberations and decision-making are conducted in a timely and proper manner. At the same time, the board confirmed the need to further look into meeting preparation and the discussion process to engender deeper deliberations. The Board of Directors will continue to seek ways to improve board effectiveness.

Please refer to our corporate governance report for more information.

**Basic Approach**

The NAGASE Group is a member of the world society. As such, it is our duty to maintain good and fair business practices and, through continued growth and development, provide society with the goods and services needed while improving the welfare of our employees.

Under our management philosophy, we have established the NAGASE Vision as our promise to our stakeholders: To realize a sustainable world where people live with peace of mind, each of us embodies our value proposition, Identify, Develop and Expand through daily activities.

To put these principles and vision into practice, we established a framework for sustainable growth in any business climate. This framework of our long-term management policy includes Challenges for Growth and Reinforce the Management Platform for Growth. We are improving our corporate value over the medium and long term guided by this framework.

We believe that rapid decision-making, execution, and transparency are essential for us to accomplish these initiatives as we engage in strengthening our corporate governance.

**Initiatives to Strengthen Corporate Governance**

	~2000	2001	2002	2003	2004	2005	2007	2008	2009	2010	2012	2015	2016	2017		
<b>President</b>	Hiroshi Nagase												Kenji Asakura			
<b>Chairman of the Board of Directors</b>	Chairman								President		Chairman					
<b>Separation of Management and Business Execution</b>	20 directors	Reduced board to 11 directors		10	8	10				9	10				9	10
	Adopted executive officer system (for faster decisions and stronger business execution)															
<b>Advisory Board</b>						2 Individuals	1 Individual									
<b>Outside Directors</b>						1 Individual	2 Individuals									
<b>Outside Corporate Auditors</b>	1994~ 1 Individual, 1998~ 2 Individuals															
	Compliance Committee							Risk Management & Compliance Committee								
	Established Basic Compliance Policy															
<b>Compliance</b>	Established NAGASE Group Compliance Behavior Standards							Revised								
	Established Compliance Call Center Rules															
								Internal Controls Promotion Committee		Internal Control Committee						
<b>Director Compensation</b>													Compensation Committee			
<b>Management Philosophy</b>																



**Executive Structure**

Under a corporate system that adopts an Audit & Supervisory Board, NAGASE introduced the executive officer system in June 2001. The Company's current management framework consists of 10 directors (including 2 outside directors), 18 executive officers (6 of whom concurrently serve as directors), and 4 corporate auditors (including 2 outside corporate auditors). NAGASE has also established the following committees to reinforce its corporate governance function.

Under the executive officer system, the NAGASE corporate governance system collaborates various internal committees to appoint outside directors and members to the Audit & Supervisory Board as well as to reinforce its corporate governance system. Having secured supervision and auditing functions that operate from diversified perspectives, including from outside the Company, NAGASE believes the current corporate governance system is more rational than ever. We will increase our efforts to further reinforce our corporate governance system to secure the trust of our stakeholders.

**NAGASE's Corporate Governance System**

**1 Board of Directors**

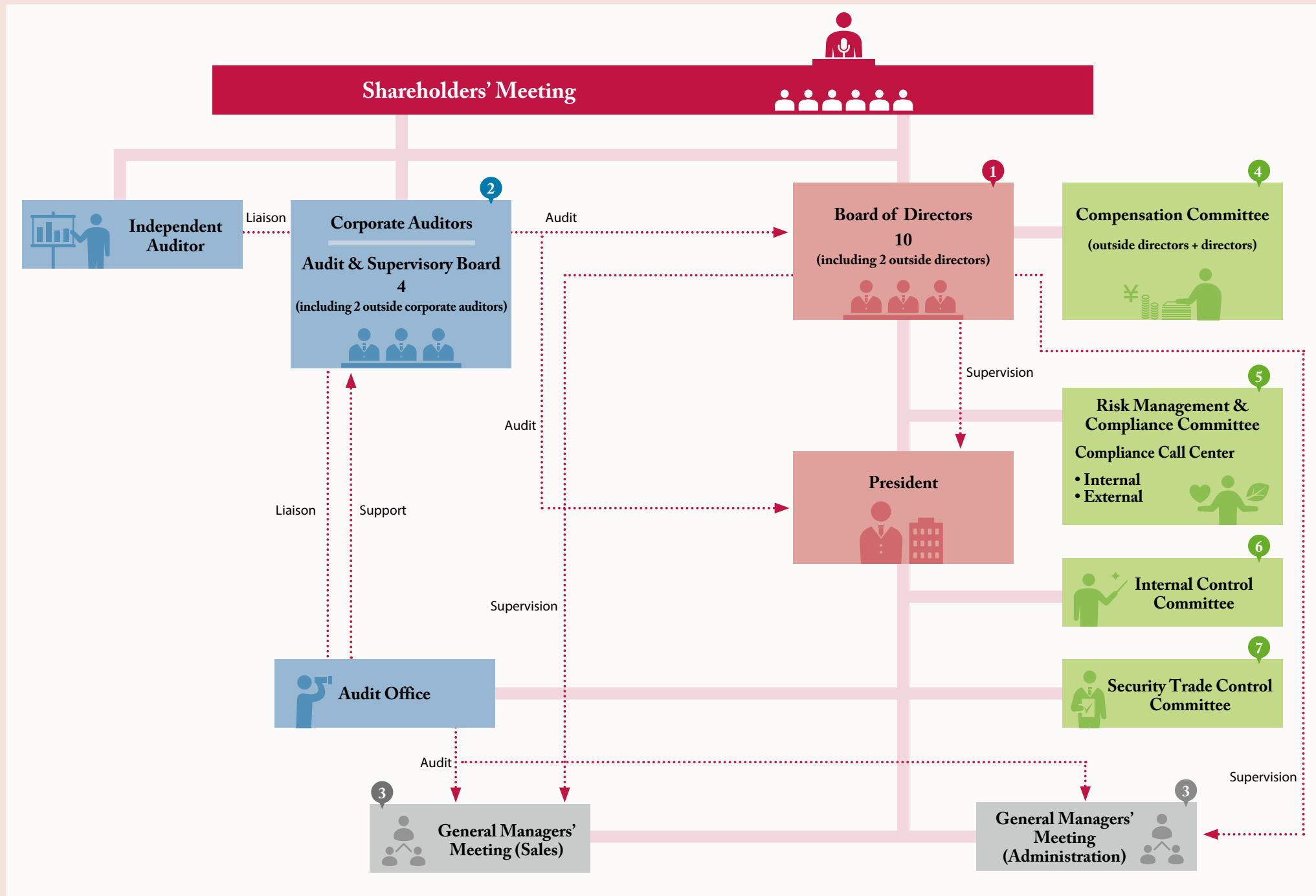
The Board of Directors is clearly positioned as the body in charge of making decisions on management policies and strategies, and it supervises the execution of operations. Holding a regular monthly meeting, the Board of Directors reviews and formulates measures regarding important decisions and tracks business performance.

**2 Corporate Auditors/ Audit & Supervisory Board Members**

In accordance with audit policy and standards for responsible work set at Audit & Supervisory Board meetings, corporate auditors attend important meetings, such as Board of Directors meetings, and conduct audits of the execution of duties of directors and executive officers based on reports solicited from subsidiaries on an as-needed basis.

**3 Executive Officers**

Executive officers attend the General Managers' Meeting (Sales) and General Managers' Meeting (Administration) related to their sales and managerial responsibilities. Each department provides a status report, which is discussed by meeting attendees before an action plan is formulated.



**4 Compensation Committee**

With the majority of its members made up of outside directors, the Compensation Committee ensures the objectivity and transparency of the Company's directors and executive officers in the decision-making process regarding compensation by screening the appropriateness of every compensation level and the compensation system to report and make recommendations to the Board of Directors.

**5 Risk Management & Compliance Committee**

As a consultative body for the Board of Directors, the Risk Management & Compliance Committee establishes and strengthens risk management and compliance systems that cover not only legal compliance but also corporate ethics. The committee also maintains ISO environmental management standards and promotes energy conservation initiatives.

**6 Internal Control Committee**

The Internal Control Committee documents the Company-wide internal control conditions and financial statement preparation process to further enhance its financial reporting credibility, while maintaining and strengthening a structure to carry out evaluation and improvements.

**7 Security Trade Control Committee**

The Security Trade Control Committee thoroughly complies with export related laws and regulations in relation to foreign currency exchange and foreign trade for its trading of cargos and technologies covered by such laws and regulations.

## Director Compensation

Director compensation (excluding outside directors and corporate auditors) consists of basic salary and performance incentives (bonuses). The Company calculates compensation based on director compensation rules, contingent on approval by the Board of Directors. Performance incentive (bonus) amounts are determined according to a basic payment amount based on Company earnings for the period in question. The Company considers individual performance based on the Goal Management System when determining basic salary and director bonuses.

The Compensation Committee, with the majority of its members outside directors, assesses the validity of compensation standards and systems, reporting to and advising the Board of Directors. This ensures improved objectivity and transparency in the director compensation decision-making process.

### Total Director Compensation by Title/Total Compensation by Type/Number of Eligible Directors

(Millions of yen)

Title	Total Compensation	Total Compensation by Type		Number of Eligible Directors
		Basic Compensation	Bonus	
Directors (excluding Outside Directors)	334	222	112	8
Corporate Auditors (excluding Outside Corporate Auditors)	44	44	—	2
Outside Officers	48	48	—	6

### Important Matters regarding Employee Bonuses for Employees Also Serving as Directors

(Millions of yen)

Total Compensation	Number of Eligible Directors	Comments
31	3	Paid in an amount equivalent to employee bonus.

## Internal Audit System

The Audit Office is in charge of internal audits, including audits to assess the appropriateness and efficiency of the Company's business activities including affiliated companies. The Audit Office is staffed by 13 employees, including certified internal auditors (CIA), qualified internal auditors (QIA), and other individuals who possess specialized knowledge in internal audits. The Audit & Supervisory Board consists of four corporate auditors (including two outside corporate auditors) who have a considerable amount of knowledge about finance and accounting.

The Company established the Audit Office to also ensure corporate auditors' auditing effectiveness, supplying staff upon request to

support the corporate auditors' work. The Audit Office and the Audit & Supervisory Board exchange information regarding internal audits and audits of domestic and overseas subsidiaries as necessary, while holding meetings twice a year with affiliate companies' auditors. In addition, they perform wide-ranging liaison activities, including receiving regular reports from Ernst & Young ShinNihon LLC, NAGASE's independent auditor, regarding accounting matters and associated internal controls; maintaining a presence during accounting audits; and cooperating as needed with audits conducted at affiliated companies, including those located overseas. In addition to discussing individual matters with corporate auditors on a routine basis, the independent auditor also holds meetings quarterly with the Audit & Supervisory Board.

Further, the Audit Office, as an independent internal auditor, compiles evaluations of internal controls in response to our internal controls reporting system as it relates to our financial reporting, reporting to the Internal Control Committee as appropriate. The Internal Control Committee reports regularly to the Audit & Supervisory Board and independent auditor regarding the implementation status of the internal controls system.

Audits by certified public accountants are performed in a fair and unbiased manner by a staff of 36, which includes the following specified limited-liability partners and accountant trainees.

Certified Public Accountants		Auditing Firm
Specified limited liability partners Managing partners	Mikio Konishi	Ernst & Young ShinNihon LLC
	Hideo Yamamoto	
	Yasuhiro Takada	

## Independence Standards and Policies for Outside Directors and Corporate Auditors

NAGASE & CO., LTD. selects candidates for outside directors in accordance with the standards of independence stipulated by the Financial Instruments Exchange, and who have the ability to identify issues from a perspective representing the interests of stakeholders and society at large. The Company selects candidates for outside corporate auditor who have a wealth of knowledge and experience in a variety of fields, and who have the ability to conduct audits from a standpoint of neutrality and objectivity.

The Company has designated a total of four outside directors and corporate auditors as independent: Mr. Hidenori Nishi and Mr. Nobumasa Kemori as outside directors, and Mr. Nobuyuki Shirafuji and Mr. Toshio Takano as outside corporate auditors.

Category	Name	Reason for Appointment	Attendance at FYE March 2017 Board Meetings	Concurrent Titles/Responsibilities
Outside Directors	Hidenori Nishi	Hidenori Nishi has been involved in the management of KAGOME CO., LTD. for many years and possesses advanced knowledge and extensive experience regarding corporate management. He will use this knowledge and experience to make proposals concerning the Company's overall management from a perspective of familiarity with industry and is expected to enhance the Company's corporate governance.	16/16	Chairman of the Board, KAGOME CO., LTD. Outside Director, Dynapac Co., Ltd. Chairman, Japan Cannery Association
	Nobumasa Kemori	Nobumasa Kemori has been involved in the management of Sumitomo Metal Mining Co., Ltd. for many years and possesses advanced knowledge and extensive experience regarding corporate management. He will use this knowledge and experience to make proposals concerning the Company's overall management from a perspective of familiarity with industry and is expected to enhance the Company's corporate governance.	12/12 Named outside director in June 2016	Executive Adviser, Sumitomo Metal Mining Co., Ltd.
Outside Corporate Auditors	Nobuyuki Shirafuji	Nobuyuki Shirafuji does not have direct managerial experience, but he possesses wide-ranging knowledge based on his many years of overseas experience in financial institutions. He also has many years of experience concerning audits and audit divisions and possesses considerable knowledge regarding finance and accounting, and consequently, we determined that he will properly perform his duties as an External Audit & Supervisory Board Member.	12/12 Named outside corporate auditor in June 2016	N/A
	Toshio Takano	Toshio Takano does not have direct managerial experience, but he has many years of experience in legal circles and possesses considerable knowledge regarding compliance and corporate governance. Consequently, we determined that he will properly perform his duties as an External Audit & Supervisory Board Member.	16/16	Outside Corporate Auditor, Kakaku.com, Inc. Outside Corporate Auditor, Daicel Corporation Outside Corporate Auditor, FANCL CORPORATION

(Note) The number of Board of Directors meetings noted above does not include resolutions made in writing.

## Policies Related to Company Information Disclosure

Pursuant to the NAGASE Group Compliance Behavior Standards, we engage in ongoing communications with society and our stakeholders through timely disclosure of truly important information over appropriate channels. We are mindful that all corporate activities remain within the bounds of socially accepted norms.

This basic philosophy guides us as we conduct timely, appropriate, and fair disclosure of information through investor relations activities, public relations programs, and websites for our shareholders and investors to improve management transparency and accountability.

See "Timely Disclosure System" on our corporate website for more.

### Major Investor Relations Activities during Fiscal 2016

Activity	No. of Events	Comments
Conferences/briefings for institutional investors and analysts	2	Financial results disclosure, forecasts, special topics (year-end, interim)
Individual investor conferences/meetings	10	Conducted at branches of securities companies (Osaka 3 times; Kanagawa 2 times; and Aichi, Iwate, Hiroshima, Miyagi and Yamaguchi 1 time)
Overseas roadshows	1	President and CFO traveled overseas to meet directly, have discussions with institutional investors
Overseas conferences	Various times	Participation in conferences sponsored by securities companies

## Business Continuity Planning

### Fiscal 2016 Results

During 2016, the Group conducted initial response training at the Tokyo head office (October) and the Osaka Headquarters and Nagoya branch office (November). The training tested the response of the Fire Prevention head office, Self-Defense Squad, Facilities Confirmation Team, Information Systems Team, and Logistics Confirmation Team during a simulated emergency. Further, in March, based on the business continuity plan created by the division, we held a training in the Model Division to determine whether ordering operations could be taken over by the Nagoya branch office in the event of a disaster in Tokyo.

In the event of a large-scale disaster making the continued use of our Tokyo Head Office unfeasible, we have the option of using the NAGASE Global HR Development Center (opened May 2014 in Sendagaya, Tokyo) as a backup office. During December 2016, we implemented disaster prevention BCP response training.

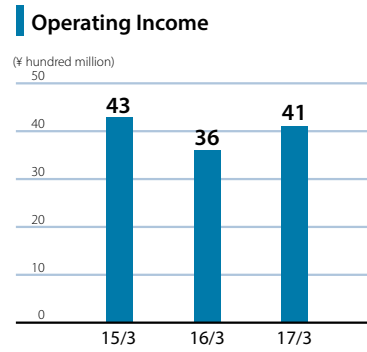
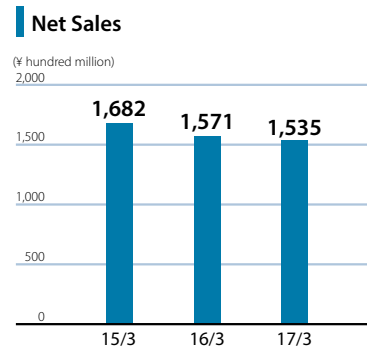
### Fiscal 2017 Initiatives

As in fiscal 2016, we will continue to conduct emergency response training to improve initial response quality and speed. We will conduct disaster prevention BCP training for the NAGASE Global HR Development Center (backup office location) to improve our disaster preparedness and response.



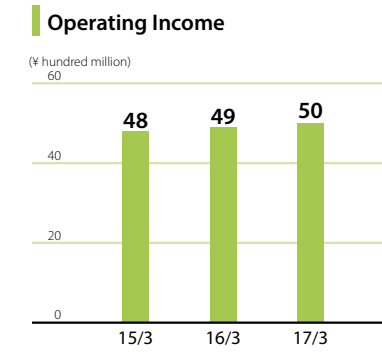
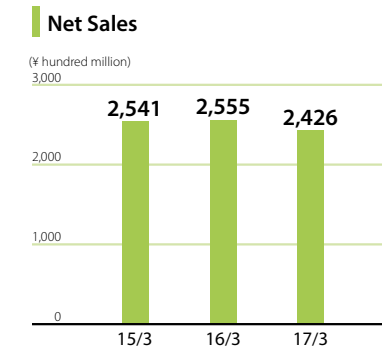
### Functional Materials

- Performance Chemicals Department
- Speciality Chemicals Department



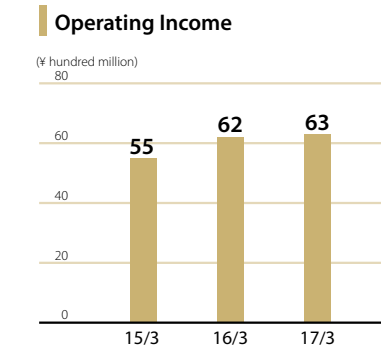
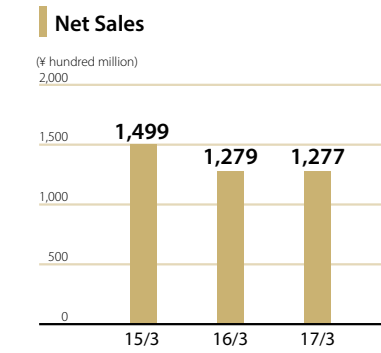
### Advanced Materials & Processing

- Colors & Advanced Processing Department
- Polymer Global Account Department



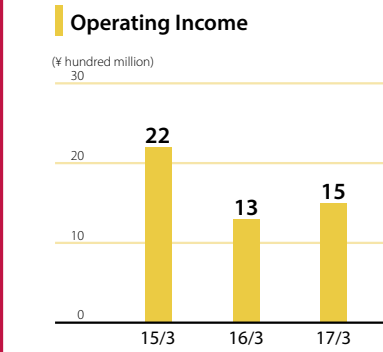
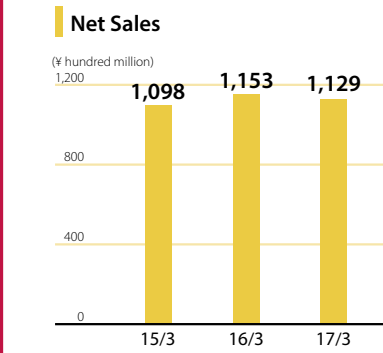
### Electronics

- Electronic Chemicals Department
- Electronic Materials Department



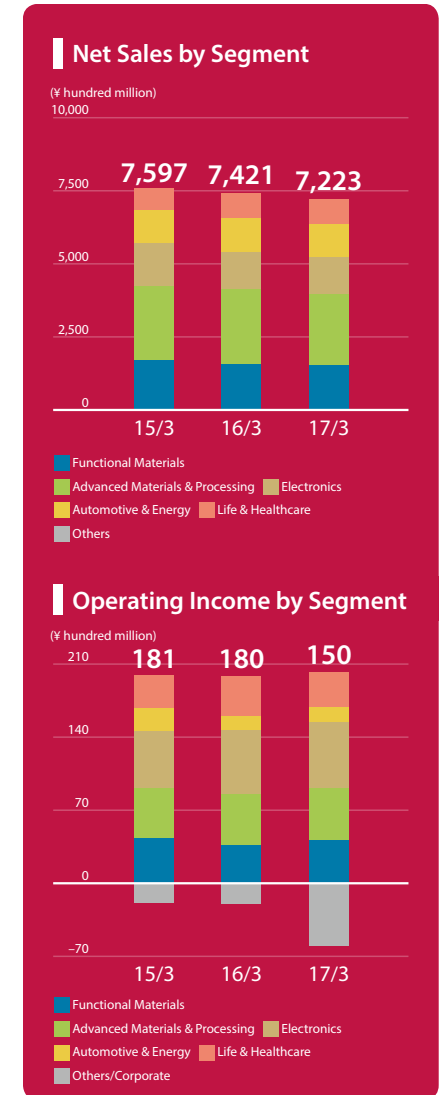
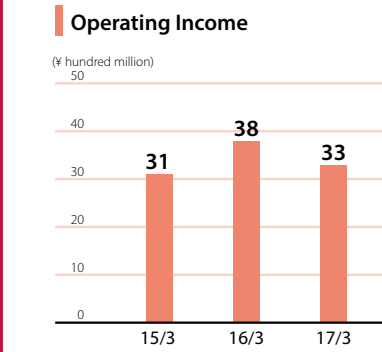
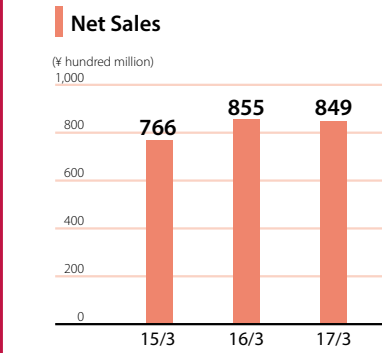
### Automotive & Energy

- Automotive Solutions Department
- Energy Business Office



### Life & Healthcare

- Life & Healthcare Products Department
- Beauty Care Products Department



## Performance Chemicals Department

- Major Manufacturers**
- Toyo Quality One Ningbo Co., Ltd.
  - Guangzhou Kurabo Chemicals Co., Ltd.
  - Toyo Quality One (Guangzhou) Co., Ltd.
  - PT. Toyo Quality One Indonesia
  - TQ-1 de MEXICO S.A. de C.V.
  - Light Chemical (Changzhou) Co., Ltd.
  - Cytech Products Inc.



GM, Performance Chemicals Department  
**Tamotsu Isobe**

### NAGASE Market Strengths and the Business Environment

	Strengths	Business Environment
Paints and Inks Industry	<ul style="list-style-type: none"> <li>Organization and personnel specializing in the domestic and overseas paints and inks industry</li> <li>Domestic and overseas sales channels</li> <li>Unique solutions as a trading company with R&amp;D, manufacturing, and processing functions</li> </ul>	<ul style="list-style-type: none"> <li>Growing demand for paints and inks in overseas markets</li> <li>Business growth with local (non-Japanese) customers overseas</li> </ul>
Urethane Industry	<ul style="list-style-type: none"> <li>Strong customer pipeline supported by consultative sales</li> <li>Packaged sales of various urethane materials</li> <li>Overseas sales network</li> </ul>	<ul style="list-style-type: none"> <li>Growing demand for urethane in emerging countries</li> <li>Accelerating customer (Japanese companies) entry in overseas markets</li> <li>Higher awareness of energy conservation, the environment, and bio-based chemistry</li> </ul>

## Speciality Chemicals Department

- Major Manufacturers**
- Nagase ChemteX Corporation
  - Nagase Filter Co., Ltd.



Executive Officer  
General Executive, Functional Materials Segment  
GM, Speciality Chemicals Department  
**Yasuhiro Mihara**

### NAGASE Market Strengths and the Business Environment

Strengths	Business Environment
<ul style="list-style-type: none"> <li>Strong relationships of trust with customers</li> <li>Manufacturing companies within the Group</li> <li>Uniquely creative solutions utilizing information from the value chain</li> <li>Experience in a variety of diverse chemical products, from general purpose to specialty</li> <li>Expert, experienced personnel</li> </ul>	<ul style="list-style-type: none"> <li>AI technology research in the chemical industry</li> <li>Restructuring in the petrochemical industry (including biochemicals)</li> <li>Increasing need for high-function, high value-added products</li> <li>Increasing awareness of environmental issues</li> </ul>

### Fiscal 2016 Strategies and Results

During fiscal 2016, the Performance Chemicals Department engaged in measures to achieve goals in three main areas: (1) Build a stronger domestic business foundation; (2) Strengthen overseas business; and (3) Cultivate new businesses.

A continued decline in oil and naphtha prices contributed to a challenging environment for building a stronger domestic business foundation. However, we focused our efforts on overseas product sourcing and selling customer products, making significant strides in sourcing products from China and other regions.

Overseas, our coating business contract manufacturing subsidiary in China recorded solid results. In India, we used our coatings laboratory to expand our lineup of high-value-added products. These factors helped strengthen our overseas business. While our urethane business struggled against local competitors in the Chinese market, we saw growth for automobile-related applications in Indonesia.

Toward cultivating new businesses, we focused on projects to commercialize products and services for VOC\* reduction, energy efficiency, and other aspects of corporate social value.

In terms of financial results, we recorded lower revenues and profits for the year, mainly due to declining naphtha prices, the negative impact of the strong yen on our export business through November 2016, and the hiring of additional staff in preparation for launching new businesses.

\* VOC: Volatile Organic Compounds

### Fiscal 2017 Strategies

During the second year of our **ACE-2020** mid-term management plan, we plan to continue to accelerate toward our three key goals, leveraging the value chain and network within the NAGASE Group.

To build a stronger domestic business foundation, we will focus on sourcing from both China and India. We will strive to improve sales of customer products, aiming for notable results in sales to overseas customers.

We intend to make more effective use of the NAGASE Group network to strengthen our overseas business. We will expand our business selling to multinational paints and inks customers, while seeking more joint business and investment opportunities with local partners. One such example is Cytech of the U.S., a company in which we made an equity investment during 2016. Here, we plan to focus on environmental compatibility in the development and expanded sales of release agents for urethane.

One way in which we will reform our profit structure is by cultivating new businesses. Our plans include conducting research for market penetration and overseas expansion of our new Pat!naLock™ reactive paint, establishing our carbon hybrid™ coating system, and developing applications for new urethane materials.

#### TOPICS New Pat!naLock™ Reactive Paint

Using *rust prevention by rust* is a new concept not found in current anti-rust paint. Based on this concept, we developed a reactive paint that brings a new dimension in maintenance management. We have discovered that we can inhibit the progression of common rust by creating a dense protective rust layer Patina with anticorrosion properties on a surface to be coated.

\* In 2015, this technology was awarded the Special Prize in the 6th Annual *Monozukuri* Grand Award, sponsored by the Ministry of Economy, Trade and Industry.



### Fiscal 2016 Strategies and Results

Fiscal 2016 was the first year of our new mid-term management plan **ACE-2020**. During the year, we worked to add high-value features to our traditional functions, emphasizing value to our business partners. As a result, we achieved targets and delivered higher profits in our core businesses, including compounding technologies, organic synthesis technologies, and polymer technologies.

To reform our profit structure, we recommitted to working with our business partners, holding a biweekly reform council meeting to uncover and create new business. We also brought in lecturers and conducted other training, which led to a change in value perception and attitude among our employees. These efforts have helped us ingrain a culture of volunteering ideas for new business models.

#### TOPICS New Denafilter™ Plant Contributes to High-Quality Film Manufacturing and Business Growth

Nagase Filter Co., Ltd. manufactures Denafilter™, a stainless steel polymer filter that removes foreign particles during the manufacture of film for LCD panels and other products. Looking toward the company's 10th anniversary—and representing a significant step forward for growth—construction was completed for a new plant in Japan's Fukui Prefecture in 2016.

Nagase Filter will expand its service offerings to answer the rising demands for quality as it aims to expand its polymer filter business.

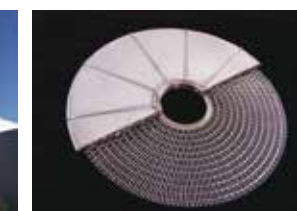
### Fiscal 2017 Strategies

We will build our existing businesses to new levels, continuing to execute new strategies which include working with partners in business alliances and investments. As we develop new collaborations with customers based on their elemental technologies, we will strive to bring these new businesses to the market as quickly as possible. Our participation in the IBM consortium will be a step forward in using cognitive systems for building a platform strategy.

We will also set up a new Nagase ChemteX product market development team in our department, leading to deeper collaborative efforts between our organizations.



New Nagase Filter Co., Ltd. Fukui Plant



Leaf Disk Filter (Denafilter™)



## Colors & Advanced Processing Department

- Major Manufacturers**
- Fukui Yamada Chemical Co., Ltd.
  - Sofix Corporation
  - Nagase ChemteX Corporation
  - Hayashibara Co., Ltd.
  - Totaku Industries, Inc.
  - Kotobuki Kasei Corporation
  - ON Textile Chemicals (Shanghai) Co., LTD.



Executive Officer  
General Executive, Advanced Materials & Processing Segment  
GM, Colors & Advanced Processing Department  
Nagase Application Workshop

**Kuso Ota**

### NAGASE Market Strengths and the Business Environment

	Strengths	Business Environment
Digital Printing Supply Industry	<ul style="list-style-type: none"> <li>■ Manufacturing bases</li> <li>■ Highly specialized global network</li> </ul>	<ul style="list-style-type: none"> <li>■ Materials and systems development in response to overseas expansion and new round of industry digitalization</li> </ul>
Colors & Additives Industry	<ul style="list-style-type: none"> <li>■ Relationships with top manufacturers, customers</li> <li>■ Expertise in colors and dispersion processing</li> <li>■ Ability to distribute a wide variety of products, small-batch sales</li> </ul>	<ul style="list-style-type: none"> <li>■ Growing demand for dispersion processing and decoration overseas</li> <li>■ Accelerating customer (Japanese companies) entry in overseas markets</li> </ul>
Polymer Products Industry	<ul style="list-style-type: none"> <li>■ Personnel with international experience and expertise in films, resins, molding, and masterbatches industries</li> <li>■ Relationships with suppliers that have strong product lineups</li> <li>■ Information resources at numerous top-class business partners</li> </ul>	<ul style="list-style-type: none"> <li>■ Diversification and polarization of needs</li> <li>■ Increasing awareness of safety and environmentally conscious products</li> <li>■ Growth of medical, diagnostics, and nursing care markets</li> </ul>

## Polymer Global Account Department

- Major Manufacturers**
- Setsunan Kasei Co., Ltd.
  - Dainichi Color Vietnam Co., Ltd.



Executive Officer  
GM, Polymer Global Account Department

**Koichi Sagawa**

### NAGASE Market Strengths and the Business Environment

	Strengths	Business Environment
Resin Sales Business	<ul style="list-style-type: none"> <li>■ Expanding sales network in Asia and other regions (personnel, offices, logistics bases)</li> <li>■ Wealth of experienced, knowledgeable national staff</li> <li>■ Direct approach to the end user (spec business functions)</li> <li>■ Size and number of transactions with Japanese and non-Japanese affiliated customers</li> <li>■ Strong partnerships with leading manufacturers in Japan and around the world</li> </ul>	<ul style="list-style-type: none"> <li>■ Growing business opportunities in inland China and newly emerging countries in Southeast Asia</li> <li>■ Increasing local spec business</li> <li>■ Business reorganization among suppliers</li> </ul>

### Fiscal 2016 Strategies and Results

Our functional film materials, dyes, and copolyester resins businesses recorded solid results for fiscal 2016. However, intensified competition in the thermal paper market had a negative impact on profitability among our manufacturing subsidiaries, while sales of functional dyes struggled. As a result, our consolidated earnings failed to achieve our targets.

Our inspection equipment business, which contributed to sales during fiscal 2015, was transferred to a different segment to optimize the structure of our total portfolio. We bolstered the PDCA cycle for a number of development projects that had fallen behind schedule, clearly defining the path toward commercialization.

### Fiscal 2017 Strategies

The Colors & Advanced Processing Department exists mid-stream in the value chain as a part of the Advanced Materials & Processing segment. From our position, we are able to match upstream seeds and downstream needs for markets, industries, and our clients.

During fiscal 2017, we plan to execute on the Identify and Develop concepts of the NAGASE Vision, focusing on business matching activities to find new business opportunities.

We intend to conduct fundamental trading company activities to delve deeper into the core businesses within the digital printing supply, colors & additives, functional film materials, and resin processing businesses in our department.

We will also seek potential opportunities to expand market supremacy for strategic products (pigments, additives, and resins) outside the borders of Japan.

At the same time, we will strive to improve our abilities as a vendor to provide trading + α (basic and added value) functions that offer solutions to a variety of issues with which our customers struggle.

Further, we intend to strengthen cooperative business activities for cross-organization projects involving our department and NAGASE affiliates across a wide range of industries.

We believe that personal, cross-department networks promote communication and perspectives based on different business experiences. We will leverage these networks to bring the power of our integrated business to bear and to strengthen our capacity to design businesses. These advancements will be an important link in training future business leaders in our department.

### TOPICS Copolyester Resin Tritan™

We expect to grow sales of copolyester resins as these products are embraced throughout the world as part of a trend to avoid environmental issues. We will engage in a number of measures to raise the profile of our copolyester resins among our customers and end users in the Japanese market.



Copolyester Resin Tritan™

### Fiscal 2016 Strategies and Results

Despite the negative impact of foreign exchange on earnings, fiscal 2016 operating income rose compared to the prior fiscal year.

Sales of plastics within Japan for the office equipment, appliance, and video game device markets were higher, while sales of high-performance films for use in tablets also grew. These factors and profit improvements at manufacturing subsidiaries contributed to earnings in a major way.

In China, Shanghai Hua Chang Trading Co., Ltd. contributed significantly to higher sales of high-performance resins in East China and continued business growth in our inland business.

In Southeast Asia, our local entities reported strong sales to non-Japanese customers, outperforming targets.

As a whole, our department saw solid results in dealings with major suppliers, and we expect even further sales growth for fiscal 2017. As the first year of our new mid-term management plan, fiscal 2016 was a year of building a foundation to reach our goals in the next five years.

### Fiscal 2017 Strategies

Fiscal 2017 marks the second year of our **ACE-2020** mid-term management plan. We see this year as a year of execution.

We intend to continue establishing market superiority for our core resin sales business by leveraging the NAGASE Group network.

In our compound business, we plan to deliver even greater levels of profits for existing businesses, while growing sales of our own high-value-added Denapolymer™ product.

Our approach to our packaging materials business in Asia is to grow by working much more closely with new customers and processing partners.

As a department, we plan to look outside Asia for new business, seeking new investment opportunities and reforming our profit structure.

### TOPICS Proprietary Denapolymer™ Compound

Wholly owned subsidiary Setsunan Kasei Co., Ltd. launched its own Denapolymer™ brand of products. Denapolymer™ is a result of the company's strengths in resin processing technologies. This new product line features recycled resins that offer unique features in an environmentally friendly format. Currently, we are looking more closely at high sliding polyethylene. We expect that we will be able to differentiate our high sliding polyethylene products from those of our competitors.

#### Denapolymer™



Profile extrusion molded product from high sliding polyethylene HS80

Sheet/film product from high sliding polyethylene HS80

## Electronic Chemicals Department

### Major Manufacturers

- Nagase ChemteX Corporation
- Nagase ChemteX (Wuxi) Corporation
- Engineered Materials Systems, Inc.
- Wuxi Chenghong Electronic Chemicals Co., LTD. \* Group member as of April 2017
- Nagase Techno-Engineering Co., Ltd.
- Pac Tech-Packaging Technologies GmbH
- Nagase Engineering Service Korea Co., Ltd.
- Inkron Oy\*



Executive Officer  
General Executive, Electronics Segment  
GM, Electronic Chemicals Department  
**Takahiro Okumura**

### NAGASE Market Strengths and the Business Environment

	Strengths	Business Environment
<b>Electronic Components (Communication Devices)</b>	<ul style="list-style-type: none"> <li>Epoxy sheet encapsulant materials maintain a large market share among communication device applications; these materials are based on unique Nagase ChemteX advanced formulation technologies</li> </ul>	<ul style="list-style-type: none"> <li>Growth in the communication device markets of China and emerging economies</li> <li>Expanding next-generation high-speed communications networks</li> </ul>
<b>Semiconductor Industry</b>	<ul style="list-style-type: none"> <li>Total solutions provided through Nagase ChemteX high-value-added materials and Pac Tech Group subcontracting services and equipment</li> </ul>	<ul style="list-style-type: none"> <li>Rising demand related to Internet of Things, Artificial Intelligence, automotive, and medical devices markets</li> </ul>
<b>Display Industry</b>	<ul style="list-style-type: none"> <li>Advanced technological capabilities and leading position in high-grade chemicals and supply and management equipment</li> </ul>	<ul style="list-style-type: none"> <li>Growing market for liquid crystal displays/OLEDs* in China</li> </ul>
<b>Heavy Electric Machinery Industry (Electricity/Railways)</b>	<ul style="list-style-type: none"> <li>Fifty years of strong market share in high-performance, highly reliable materials markets in Japan</li> </ul>	<ul style="list-style-type: none"> <li>Rising global demand for infrastructure, particularly among the emerging economies</li> </ul>
<b>Energy &amp; Environment Industry</b>	<ul style="list-style-type: none"> <li>Group network capable of building upon a history of successes in automobiles, aircraft, rail cars, and wind power generation to overseas markets</li> </ul>	<ul style="list-style-type: none"> <li>Growing demand for lightweight composite materials</li> </ul>

\* OLEDs: Organic Light-Emitting Diodes

## Electronic Materials Department

### Major Manufacturers

- Nagase Electronics Technology Co., Ltd.
- Nagase Electronics Technology (Xiamen) Co., Ltd.
- Sun Delta Corporation



Executive Officer  
GM, Electronic Materials Department  
**Masatoshi Kamada**

### NAGASE Market Strengths and the Business Environment

	Strengths	Business Environment
<b>Smartphone and Tablet Businesses</b>	<ul style="list-style-type: none"> <li>Core customer communication capabilities through global bases</li> <li>Brand owner ~EMS~ Components~ Business relationships with material manufacturers</li> <li>Professionals with highly specialized skills</li> </ul>	<ul style="list-style-type: none"> <li>While the market is growing, the focus of growth has shifted away from the advanced nations toward the developing nations</li> <li>As VR* becomes more popular, augmented reality is also expected to be embraced as a standard technology in the future. Smartphones to become more specialized for particular uses</li> <li>IoT<sup>2</sup> is becoming more entrenched in industry; smartphones to become more important as both control devices and sensors (with added information processing/AI<sup>3</sup>)</li> </ul>
<b>Touch Panel Industry</b>	<ul style="list-style-type: none"> <li>NAGASE network capabilities focused on East Asia</li> <li>General handling of main materials</li> </ul>	<ul style="list-style-type: none"> <li>Intensified competition, expectations for developing new fields</li> <li>Advancements in the development of elemental technologies, including products for flexible displays, pressure sensors, and haptics</li> </ul>
<b>Display Industry</b>	<ul style="list-style-type: none"> <li>Ability to handle many products; high barriers to entry</li> <li>Professionals with highly specialized skills</li> </ul>	<ul style="list-style-type: none"> <li>China, Korea and Taiwan have become the global center for LCD panels</li> <li>Full engagement in organic EL, particularly development and investment related to flexible displays</li> </ul>

\*1 Virtual Reality \*2 Internet of Things \*3 Artificial Intelligence

### Fiscal 2016 Strategies and Results

In our epoxy business, we recorded sales growth for smartphone communication device sheet materials, liquid resins that have become the de facto standard in semiconductor packaging, and heavy electrical materials for use in Japanese infrastructure. Our photolithography business experienced the smooth launch of a chemical manufacturing company in China, while our chemical management equipment business recorded strong results in the Japanese, Chinese, Taiwanese, and Korean markets. Our Pac Tech business contributed to earnings through its wafer bumping services in Europe.

### Fiscal 2017 Strategies

The goal of the Electronic Chemicals Department for the final year of the NAGASE Group mid-term management plan is to integrate and optimally allocate technologies among our locations to supply high-value-added products through proprietary NAGASE technologies, contributing to the success of our local communities and customers.

We have determined five target markets to pursue as defined under **ACE-2020** for Nagase ChemteX and our core epoxy business: heavy electrical, light electrical, car electronics, microelectronics, and environment and energy. At present, we are generating concrete results in each of these areas. Towards further global expansion, we intend to construct new manufacturing bases in Europe, following our projects in China and North America.

In our photolithography business, we intend to expand Nagase ChemteX production bases for high-valued-added products in the Chinese market, expanding our presence in the

market for displays and the market for semiconductors, which is expected to grow over the long term.

We will strengthen the research and development functions in the United States for our Pac Tech business to create new technologies for semiconductor packaging, focusing on wafer bumping. As well, we intend to begin new development for electronic device packaging applications in connection with semiconductor manufacturing equipment.

The Electronic Chemicals Department will engage in a worldwide rollout of total solutions based on proprietary NAGASE Group technologies, stepping up the creation of businesses that provide special value to our customers.

### TOPICS Equity Investment in INKRON LIMITED Leads to Strengthen Materials Development for Next-Generation Applications

With development and manufacturing bases in Finland, Inkron Oy is a technology leader in next-generation siloxane materials for displays, semiconductors, and printed electronics. Inkron is set for global expansion with the help of high-value-added products integrating Nagase ChemteX synthesis, compounding, and mass-production technologies.



Force Sensors Incorporating Inkron Materials | Clean Room Facilities | Inkron Products

### Fiscal 2016 Strategies and Results

Sales of silicon wafer production-related materials were strong throughout fiscal 2016. However, demand for materials used in displays and smartphones did not grow as we would have liked. At the same time, the strong yen had a significant negative impact on performance, which also contributed to lower revenues and profits for the department.

As competition intensifies in existing LCD markets, we have changed our department structure to accelerate development of products for new displays and nurture new businesses. Our glass processing business has nearly completed the shift in production from Taiwan to China.

We also launched a processing business for flexible display products in Taiwan. In Japan, we made advances in development for modules combining lenses and sensors incorporated into the Internet of Things.

### Fiscal 2017 Strategies

We have three defined goals under the **ACE-2020** mid-term management plan: shift to growth businesses, create business through investment, and exercise true global management.

To shift to growth businesses, we bolstered our marketing of organic EL and flexible display materials. We also made gains in growing sales of silicon wafer production-related materials to the Chinese semiconductor market. During 2016, we developed a sensor module for lens-related applications. In fiscal 2017, we plan to make strides in adding value through this product and our distinctive super wide-angle lens, among other products.

We plan to create business through investments by looking

into funding flexible display-related products and new businesses. We have also started to participate in professional staff exchanges with other companies that possess elemental technologies in glass processing. This interchange is one way in which we hope to expand our presence in the glass processing field.

To exercise true global management, we plan to appoint leaders by project regardless of region, operating from a global perspective and training a new generation of leaders.

### TOPICS Anti-Reflective/Anti-Glare Covers for Infotainment Displays

We have introduced a new anti-reflective product for the infotainment display market. Based on anti-reflective plastic sheets, this product can be used on flat surfaces or wrapped around curved surfaces to cover the display entirely. We market this product mainly for use in automobile displays. This business was moved to the Electronic Materials Department from another NAGASE department beginning fiscal 2015. Together with the anti-reflective glass developed by our department, we can now take orders for both plastic and glass versions.

### TOPICS Polyimide Film Glass Lamination Processing

Our industry has high expectations for the use of polyimide in organic EL and flexible displays. While polyimide is a challenging material to work with, we can make the job easier in each current stage of processing by bonding film temporarily to a glass substrate. We have started an alliance with several companies in Taiwan for this temporary bonding process. We plan to look into this field further with an eye toward future expansion.



## Automotive Solutions Department

### Major Manufacturers

- Sanko Gosei Technology (Thailand) Ltd.
- KN Plotech America Corporation
- Automotive Mold Technology Co., Ltd.
- Tokai Spring Mfg. (Foshan) Co., Ltd.



Executive Officer  
General Executive, Automotive & Energy Segment  
GM, Automotive Solutions Department, Nagoya Branch

**Masaya Ikemoto**

### NAGASE Market Strengths and the Business Environment

	Strengths	Business Environment
Automotive Interior Industry	<ul style="list-style-type: none"> <li>Understanding design needs based on global partnerships with leading manufacturers</li> </ul>	<ul style="list-style-type: none"> <li>Growing business opportunities in North America and Mexico</li> <li>Introduction of new technologies</li> </ul>
Components Industry	<ul style="list-style-type: none"> <li>Close, long-standing relationships with customers</li> </ul>	<ul style="list-style-type: none"> <li>New initiatives for bringing safety, security, comfort, and eco-friendliness to the next-generation car society</li> </ul>
Global Resin Industry	<ul style="list-style-type: none"> <li>Strong global network, including expatriate assignees and local staff. Long-standing relationships with Japanese and non-Japanese suppliers; strong customer base</li> </ul>	<ul style="list-style-type: none"> <li>Growing opportunities in emerging economies (Mexico, inland China, India), global expansion, growing Out-Out business</li> </ul>

## Energy Business Office

### Major Manufacturers

- CAPTEX Co., Ltd.



GM, Energy Business Office

**Kiyoshi Sato**

### NAGASE Market Strengths and the Business Environment

	Strengths	Business Environment
Battery Industry	<ul style="list-style-type: none"> <li>Ability to handle both batteries/PV and systems/materials</li> <li>The NAGASE network</li> </ul>	<ul style="list-style-type: none"> <li>Promotional policies for renewable energy; electric power deregulation; new emerging markets overseas; future government subsidies</li> </ul>
PV Industry	<ul style="list-style-type: none"> <li>Ability to handle both batteries/PV and systems/materials</li> <li>Fabless</li> </ul>	<ul style="list-style-type: none"> <li>Promotional policies for renewable energy; electric power deregulation; new emerging markets overseas</li> </ul>
Automotive/Components Materials Industry	<ul style="list-style-type: none"> <li>NAGASE Group sales channels</li> </ul>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> reduction regulations; ZEV (zero emissions vehicle) regulations in the U.S.</li> </ul>
Commercial Facilities Logistics Industry	<ul style="list-style-type: none"> <li>Historically strong connections with the logistics industry from our background in lighting equipment sales</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of the My Number (social security number) system</li> <li>Personal Information Protection Act</li> </ul>

### Fiscal 2016 Strategies and Results

Fiscal 2016 was the first year of our **ACE-2020** mid-term management plan. The year began with numerous challenges, including the Kumamoto earthquakes, fuel consumption manipulations, naphtha price decreases, the strong yen, and more. We also saw escalating costs in our interior components business. However, new initiatives in other components businesses and engineering plastic\* products for car electronics led to growing sales and a stronger business infrastructure. At the same time, we recorded continuing strong sales in China and North America. While sales were steady in Southeast Asia, we moved forward in closing unprofitable businesses in Indonesia. As a result of these factors, the department recorded lower revenues and higher profits.

\* Engineering plastics: Thermoplastic resins

### Fiscal 2017 Strategies

Fiscal 2017 represents the second year of our **ACE-2020** business plan. In Japan, we intend to move forward with new development of high-function materials for car electronics in our core resins business. At the same time, we will focus on securing new major contracts for interior components, strengthening our relationships with car electronics component manufacturing partners, and searching for new avenues of development for car multimedia products.

Overseas, we intend to do more to develop a non-Japanese customer base in Europe, the U.S. and China. We look forward to expanding sales of interior components, car multimedia components, and high-function materials, while advancing joint ventures with component manufacturing partners overseas.

#### TOPICS New Car Multimedia Business with Major Tier 1 Firms in Europe

The European automobile market is expected to see greater adoption of heads-up display technologies in response to regulations and favorable insurance treatment designed to promote safe driving systems. Here, we are working to answer needs related to polarization and heat management, starting business with major Tier 1 companies in Europe. We will continue developing car multimedia components for the European market.



### Fiscal 2016 Strategies and Results

Our battery materials business includes the sales of electrolytic solutions/additives and the newly launched cathode and anode active material/current collector foil business. We successfully expanded the range of products we offer, achieving plan targets for sales. Several projects we conceived during fiscal 2016 should translate into specific profit contribution for fiscal 2017.

The storage battery business reported strong sales of NAGASE Group company CAPTEX industrial-size storage battery systems and other products. In fact, fiscal 2016 sales outperformed the prior year by a significant margin. We plan to integrate our storage battery system business and Green Energy business, introducing new products to the growing home energy management system device market in Japan.

The Green Energy business experienced weak performance in sales of PV modules made by overseas manufacturers, mainly due to the contraction in the industrial solar power market. We expect that our activities focused on development of home-use devices in response to changes in the market environment will contribute to sales in fiscal 2017.

### Fiscal 2017 Strategies

#### Helping to Build a Smart Society Infrastructure Bringing Innovation to Housing, Industry, Traffic, IT, and Communications Infrastructure

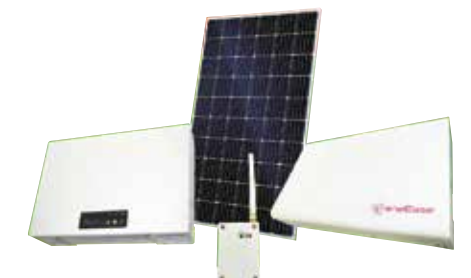
One of our main focuses for fiscal 2017 will be to produce innovations in home infrastructure. The Japanese government has called for 50 percent of new residential construction to be zero-energy houses in 2020. By 2030, that number will rise to 80 percent. Last year, the Energy Business Office codeveloped

the eneEase™ home energy management device with a major device manufacturer. We began selling this product in April 2017.

We plan to build up our own sales and after-sales network, creating and proposing new energy businesses.

#### TOPICS Introducing the eneEase™ Home Energy Management Device

In April 2017, the Energy Business Office began selling the eneEase™ home energy management device. This product incorporates a lithium ion battery system developed by CAPTEX Co., Ltd.



## Life & Healthcare Products Department

**Major Manufacturers**  
 • Hayashibara Co., Ltd.  
 • Nagase ChemteX Corporation  
 • Nagase Medicals Co., Ltd.  
 • Kawai Hiryo Corporation  
 • Uma Yasai Farm Corporation



Executive Officer  
 Hayashibara Co., Ltd.  
 General Executive, Life & Healthcare Segment  
 GM, Life & Healthcare Products Department

**Naoki Yasuba**

### NAGASE Market Strengths and the Business Environment

	Strengths	Business Environment
<b>Fragrances/ Cosmetics</b>	■ Wide range of activities (from fragrances and cosmetics to household items)	■ Major Japanese cosmetics firms expanding overseas
<b>Pharmaceuticals/ Medical</b>	■ Manufacture of highly active injections of formulation developments function	■ Policies encouraging use of generic drugs
<b>Foods</b>	■ Global network of NAGASE Group	■ Trust in the “Made in Japan” label
<b>Regulation</b>	■ Organization to comply with global & domestic regulations	■ Policies promoting Japanese food ingredients and industry of medical materials

## Beauty Care Products Department

**Major Manufacturers**  
 • Nagase Medicals Co., Ltd.  
 • Toyo Beauty Supply Corporation



Representative Director and President  
 Nagase Beauty Care Co., Ltd.

**Masahiro Yoshino**

### News

On April 1, 2017, the Beauty Care Products Department transferred to Nagase Beauty Care Co., Ltd. to generate greater efficiency.

▶ See the Nagase Beauty Care website for more information:  
<http://nbc.jp/>

### Fiscal 2016 Strategies and Results

The Life & Healthcare Products Department successfully achieved the fiscal 2016 target set under the **ACE-2020** mid-term management plan by continuously focusing on foods and beverages, fragrances, cosmetics and toiletries, and pharmaceuticals and medical materials.

In the food materials area, competitors gaining in power in Northeast Asia negatively impacted on our sales, and as a result, the division was unable to achieve its target. For fragrances and cosmetics, even though the number of inbound tourists in Japan decreased, our ingenious strategy and global big sales of Hayashibara's AA2G™ (Stable version of Vitamin C) contributed to this achievement. The pharmaceuticals division also surpassed our sales target by promoting our business in the generic drug market which has been growing year after year. Additionally, in order for us to comply with global and domestic regulations in our business area, our regulatory organization became bigger by placing experts inside and outside of Japan.

### Fiscal 2017 Strategies

Our commitment is to establish a reputation for NAGASE as a bio leading company following 3 core strategies: 1) global shift, 2) innovation, and 3) sustainability to achieve the target set under the mid-term management plan. We will take effective & specific actions for global growth.

In our food materials business, to differentiate ourselves from competitors, we will develop more local friendly applications while introducing new materials and products to market.

In fragrances and cosmetics, we are making greater progress as a “global distributor” to meet our customers’ needs by

supporting them in the global market using IT promotion tools.

In pharmaceuticals, we will focus on growing domestic market for generics, while opening the door to the European and American markets for anti-cancer drugs. Further, we are investing in nucleic acids and antibody drugs, aiming to create a long-term business model.

### TOPICS NAGASE Personal Care Website

This website introduces Hayashibara raw materials and other products from a global perspective. E-mail news letters and digital marketing tools are coming soon.



### Fiscal 2016 Strategies and Results

Observing the 50th anniversary of our direct sales business, we introduced a number of special promotions and added training for sales agents. During the first half of the year, we introduced the White Program Bright Lotion whitening cosmetics (quasi drug), which contain Hayashibara's AA2G™. We also reformulated the Viomate health food product. During the second half of the year, we unveiled a 50th Anniversary Facial Coffret and the reformulated Belmash, a core health food product, to a wide and popular reception. Unfortunately, sales for the department fell compared to the prior fiscal year, owing in part to a decline in sales of our high-end Rosemarist cream, reformulated during the prior fiscal year.

### Fiscal 2017 Strategies

Despite reaching our 50th anniversary in fiscal 2016, we are dealing with a number of business issues, including slowing sales due to the advancing average age of our sales agents. We must find ways to hand leadership over to the next generation of sales agents while also improving our approach and ability to create businesses in wider markets. In the past, NAGASE & CO., LTD. had performed product manufacturing while Nagase Beauty Care handled product sales. Beginning fiscal 2017, all business functions, from manufacturing to sales, will be handled under Nagase Beauty Care. This organizational change should allow for stronger branding, marketing, and planning. We plan to introduce two new products to appeal to general consumers. The first, QACT, is a perspiration skin care product for younger consumers. The second, WIZ D, is a new makeup line.

We will continue to set our sights on enhancing beauty inside and out, offering safe, quality products and services that help build a society of abundant beauty and health.

Nagase Beauty Care offers *Activity, Beauty, Youth, and Health* to those who have dreams of staying active, enjoying life, living young, and being healthy.



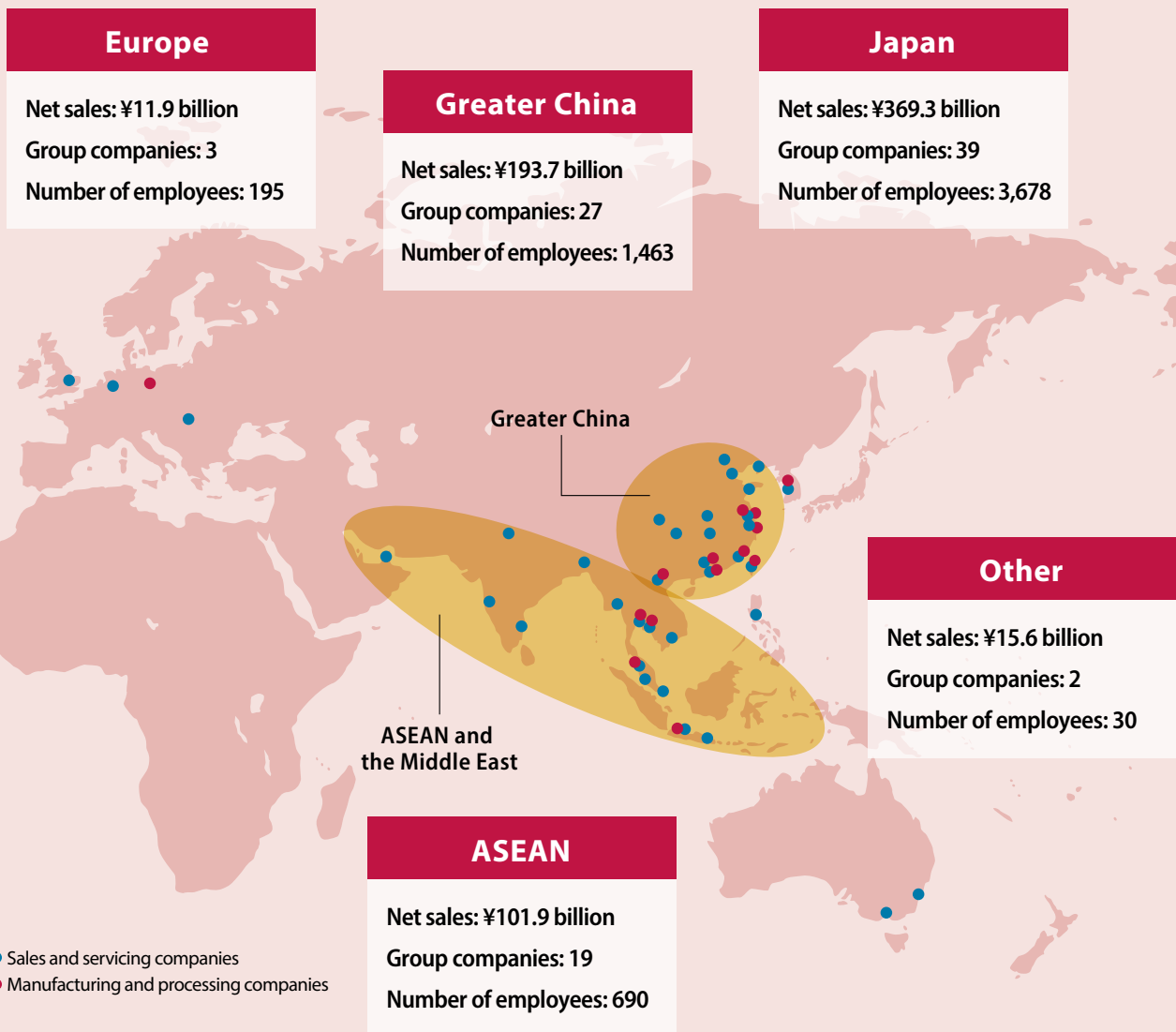
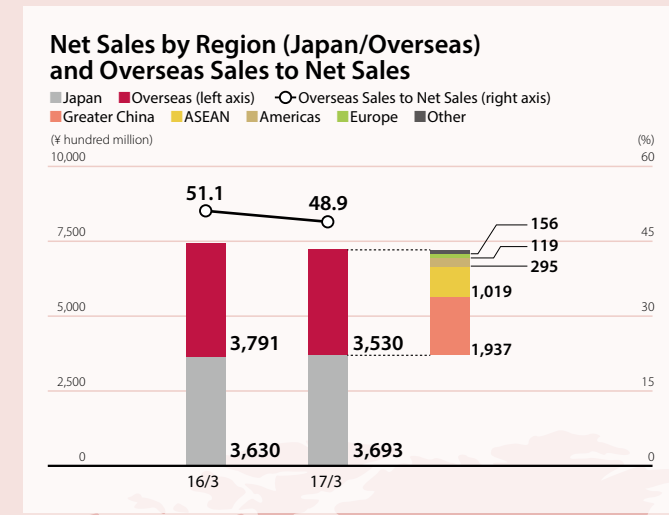
50th Anniversary Facial Coffret



▶ <http://nbc.jp/>



Built on a foundation of chemistry, the NAGASE Group is engaged in activities around the world that rely on the use of chemicals across a wide spectrum of products and services through our Functional Materials, Advanced Materials & Processing, Electronics, Automotive & Energy, and Life & Healthcare segments. These products and services include dyes/pigments, coating materials/inks, surfactants, office automation (OA), electrical equipment, home electronics, automobiles, LCDs, semiconductors, pharmaceutical/medical applications, cosmetics and functional food ingredients. We have grown to become a global technology and information network with 99 companies in 22 countries and 6,241 employees worldwide as of the fiscal year ended March 2017. Today, overseas revenues represent 48.9% of our total business.



## Overseas Strategy Under Our Mid-Term Management Plan

Launched in 2016, our **ACE-2020** mid-term management plan defines two pillars for growing and expanding revenues:

- 1 Accelerate Globalization
- 2 Improve Manufacturing Profitability

### 1 Accelerate Globalization

Aim for ¥600 billion\* in total overseas Group sales through 2020. Search and execute growth investment (M&A) that matches with the market strategy of the designated area and accelerate the business development to expand business (especially focused in North America).

\* Figures represent total sales (simple sum) for overseas local entities rather than sales by region.

### 2 Improve Manufacturing Profitability

Creating a scenario and human resources development which focuses on overseas market expansion (overseas marketing and production).

# Drive Global Business

# Forward

Greater China



Executive Officer  
Greater China CEO  
Nagase Business Management & Planning (Shanghai) Co., Ltd. COO

**Katsuhisa Yamaguchi**

Including sales companies, manufacturing companies, and services companies, the NAGASE Group has more than 40 locations throughout Greater China (Mainland China, Hong Kong, and Taiwan). Our basic approach to business is to contribute to Group profit growth by delving deeper for domestic demand and creating locally originated businesses. At the same time, we work with prominent companies and leverage the comprehensive power of the NAGASE Group to create global business between and among our worldwide locations.

Major Market Trends

The automobile industry is experiencing stable growth, owing in part to government tax incentives. The electronics industry is undergoing a rapid change in technology trends, while the office equipment and home appliance industries are undergoing a dramatic evolution in manufacturing. The energy, environment, food, medical, and other lifestyle-related industries should see strong growth in domestic demand in China, while the Chinese markets for semiconductors and displays are also growing.

Fiscal 2016 Results

While business grew for plastics and other products for automobiles, semiconductor-related products, and display-related products in fiscal 2016, sales of smartphone and tablet components were affected by downturns in certain markets.

Our business dealing with Nagase ChemteX products included strong sales of formulated epoxy resins. In 2015, NAGASE invested in Wuxi Chenghong Electronic Chemicals Co., LTD. As a factory for this company came online, first-year sales of chemicals for liquid crystals progressed in line with our expectations.

In addition to sales of Hayashibara products (TREHA™, etc.), our food business saw progress in the development of functional materials made by other companies. At the same time, our new business dealing in environment and infrastructure products (including volatile organic compounds/soil contamination) began making specific inroads with Japanese companies.

Fiscal 2017 Strategies

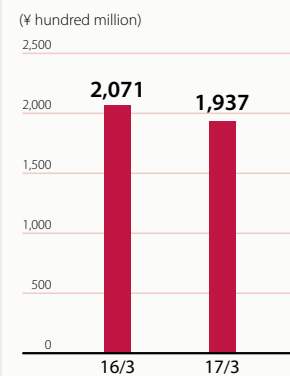
We plan to bolster initiatives with our main suppliers in our resin sales business, continuing to expand sales in the Chinese inland market. We are also developing decorative/functional materials to sell to non-Japanese customers in the automobile industry.

In electronics, we intend to use our local manufacturing functions to develop new applications and expand sales. At the same time, we will concentrate on developing products for OLEDs\*, LCDs, and car electronics. In semiconductors, we plan to speed up marketing of functional materials, mainly focusing on NAGASE Group products and materials developed by our partners.

In our food business, we will work to grow sales of TREHA™, using this sales network to grow the market for functional foods in our region. Our environment and infrastructure business is defined as a Growth business. Here, we intend to continue pushing Japanese technologies and functional materials for their security and safety.

\* OLEDs: Organic Light-Emitting Diodes

Net sales



TOPICS Products for Displays and Semiconductors

During 2015, NAGASE & CO., LTD. and Nagase ChemteX invested in Wuxi Chenghong Electronic Chemicals Co., LTD. to boost research and development, manufacturing, and sales of electronic chemicals for the semiconductor, flat panel display, and other electronics fields. The Wuxi Chenghong Electronic Chemicals plant began operations, producing favorable results in the first year in dealing with chemicals for liquid crystals. We intend to make further inroads and expand across the Chinese continent in the future.



ASEAN and the Middle East



ASEAN and India CEO

**Takayuki Masuda**

While the death of the king of Thailand was a major event during the year, economic confusion was not as great as some had feared, and economic activity in the country remained relatively calm in fiscal 2016. The region also experienced other significant political developments during the year, including the inauguration of a democratic government in Myanmar and the administration of the new president of the Philippines. Even in the face of these and other events, ASEAN held to its cooperative structure and the economy of the region grew. At the same time, the new U.S. administration has created dark clouds over the TPP and its anticipated effect on economic expansion. Meanwhile, greater direct investment into the region by China, steady growth in the Indian economy, and other locally-originated businesses contributed to make 2016 a year of major business opportunities.

Major Market Trends

Manufacturing and sales in India, the center of the regional automobile industry, have grown. However, the economies of Thailand and Indonesia have not quite recovered. Even so, we have boosted our functions as a hub, anticipating even higher levels of automobile production in the region in the future. Other market trends in the region include the growth in domestic production in Malaysia, the start of automobile manufacturing in the Philippines, and an increase in the sales of cars in Vietnam, Myanmar, and other emerging economies. At the same time, these regions are building stronger domestic production infrastructures. Meanwhile, the large population of this region is becoming wealthier. Interest is rising in luxury goods, including lifestyle-related products and food materials. Local prominent corporations are also becoming much more active. In other trends, active investment in this region by Korean and Chinese companies has helped expand our business with non-Japanese customers in the area.

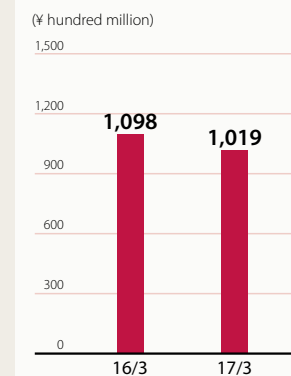
Fiscal 2016 Results

Both sales and profits outperformed the prior year on a local currency basis, making for a quick start out of the box in the first year of the ACE-2020 plan. Our businesses are on growth paths in nearly every area of this region, and we are moving to a new stage in growth as we proceed to expand both our customer base and our sourcing infrastructure. The launch of business in Myanmar and restructuring in the UAE and Australia have set the stage for further regional expansion.

Fiscal 2017 Strategies

We expect continued significant growth in this region as we bolster our traditional trading business, while engaging with more speed to uncover and execute investment projects. We intend to invest in business infrastructure and train our employees to provide perfectly consistent, high-quality service to our existing business partners. Moving forward in cooperative business with prominent local companies and investing in businesses will be another key to our success during the year.

Net sales



TOPICS Fostering Human Resources

In fiscal 2016, we began a human resource development program for mid-level staff at our local entities. As part of fostering human resources, those teaching in this program, those being taught, and our management will continue discussions throughout the year, considering the future of our businesses in the region. In promoting a company-wide branding project, we have started to create an organic network of ONE NAGASE relationships that spans international borders.



PT. Nagase Impor-Ekspor Indonesia Branding Roadshow



## Europe



Executive Officer  
Nagase (Europa) GmbH CEO  
**Mitsuru Kanno**

Global corporations in Europe are dealing with a number of issues, including Brexit, immigration, and more. Despite these issues, business growth in Europe is strong. Universities and research institutes here are ambitiously developing new technologies and products in electronics, energy, the environment, and other fields. These entities represent potentially important partners for Japanese companies.

### Major Market Trends

The automobile industry drives activity in the European economy. As energy conservation and electrification in this industry accelerates, there is an impetus to shift production to the former eastern European region. We must act with haste in response to these developments, while minimizing risk to the greatest extent possible. In the life and healthcare field, we see an ongoing parade of mergers, acquisitions, and business tie-ups. We must leverage the NAGASE network to provide a global response to these developments.

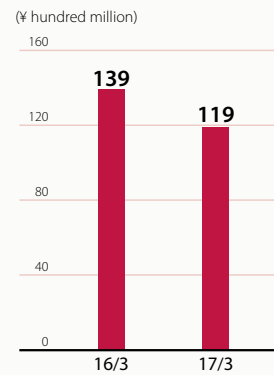
### Fiscal 2016 Results

Sales of our mainstay electronics and cosmetics products achieved targets for fiscal 2016 performance. We recorded growth for existing products, while also benefiting from the contribution of new businesses. Our core chemical products business continues to struggle in the face of competing Chinese products. Shifting to growth businesses is an urgent need for our business.

### Fiscal 2017 Strategies

With the conclusion of the first year of the **ACE-2020** mid-term management plan, we see that our profit structure has changed in a significant way. Looking forward to the second year of this plan, we intend to review our mid-term strategy in Europe, reallocating resources as appropriate. We will make more efficient use of resources in fields where growing product sales may be difficult. In fields likely to provide growth, we will strengthen our infrastructure to support the creation of a model for businesses developed originally within Europe. Further, we will engage with more speed in the automobile-related products that have been in development for the past several years. We will also work to rapidly market new applications for these products.

### Net sales



### TOPICS Application Development in the Electronics Field

Based on good collaboration and co-development on particular cases, Nagase (Europa) GmbH and European leading Automotive Industries provide outstanding solutions for new challenges in our future automobile mobility.



Car Multimedia ©Continental Automotive

## Americas



Nagase America Corporation CEO and COO  
Nagase do Brasil Comercio de Produtos Quimicos Ltda. CEO  
Nagase Enterprise Mexico S.A. de C.V. CEO  
**Ryuichi Uchida**

The NAGASE Group has three local entities (six locations) and six Group manufacturing companies operating in the Americas. We expect stable growth to continue in the United States, with Mexico garnering more attention as a manufacturing center, and South America holding potential for future business. During 2016, we made new investments in manufacturing companies, expanding our manufacturing functions within the regional group.

### Major Market Trends

While the U.S. automotive industry continued on a path of steady growth, we must keep an eye on any changes in regulatory trends introduced by the new administration. At the same time, we will continue to focus on eco-friendly products. We have also turned our attention toward food materials in response to ever-increasing trends in healthy lifestyle changes. In this area, we are strengthening our marketing activities in both North and South America.

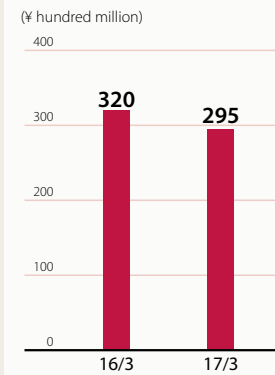
### Fiscal 2016 Results

Our mainstay automotive solutions business continued to perform well. Our newly established 3D printing business expanded throughout the year, while we sought out new applications for our products in coordination with local Group manufacturing subsidiaries. Looking toward the core businesses of our future, we invested in a capital venture fund and also made equity investments in companies that own unique manufacturing functions.

### Fiscal 2017 Strategies

Our business portfolio strategy will consist of replacing assets, while concentrating resources on businesses deemed to be Focus businesses. In Central and South America, our plans call for expanding business in emerging markets and handling a wider range of NAGASE Group products. We will transition some products to local production and otherwise find ways to work more closely with our customers. Effective use of investments will help us not only uncover new technologies, but also acquire a strong customer base and sales network, accelerating our expansion in the region. One focus of our efforts will be to strengthen our management infrastructure to support these activities.

### Net sales



### TOPICS Establishment of a Management Organization in the Americas

With our growing businesses in the Americas, our region is now home to more than 600 employees of the NAGASE Group and affiliated companies. As we grow and deepen our local roots, we must look to our management structure and ability to sustain growth. In April 2016, we established the Nagase Americas Management Office, a step toward building a stronger foundation for our business management.

## Korea



Nagase Korea Corporation CEO and COO  
**Takeshi Takada**

Korea represents an important market internationally. An export-based economy, the country's top corporations are achieving remarkable growth through investment and globally oriented, speed-based management. Korea is positioned with superior access to the EU, the U.S., China, and ASEAN through free trade agreements, and the country has had a history of success in entering emerging markets.

### Major Market Trends

Mass production of ultra-high speed memory has begun in the semiconductor industry. 3D memory technology has led to the foundation of a new stage for growth, while the expanding adoption of OLEDs\* in smartphones has grown the market for displays. Korea holds a near-monopolistic share of the global market for small- and medium-format OLEDs, and the country is making strides in the development of flexible screens. The automobile industry is globalizing further, extending out from the U.S. and Chinese markets.

\* OLEDs: Organic Light-Emitting Diodes

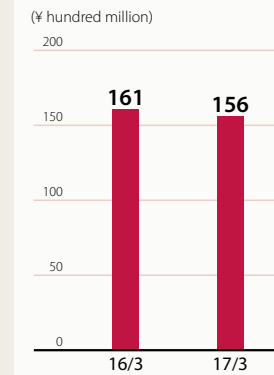
### Fiscal 2016 Results

The automobile industry of North America demonstrated strength during the period, and sales of Korean-made automobile decorative components and plastic materials continued to grow. Furthermore, sales of NAGASE Group products related to semiconductors, electronic components, displays, and food contributed to profits in a major way.

### Fiscal 2017 Strategies

Our goal is to contribute to the profits of the NAGASE Group by creating and growing Korean-led businesses. In addition to our businesses in automobiles and electronics, sales of Life & Healthcare segment products (particularly Hayashibara products) are expanding. At the same time, we are building a foundation from which to sell our Korean-made resins. Focusing on these products, we plan to strengthen ties with NAGASE local entities in every region, seeing a future where we introduce Korean-led businesses to worldwide markets. In particular, we have focused on North America and the emerging market of Vietnam for greater development. We will be moving forward with promising projects in these regions.

### Net Sales



### TOPICS Growing Korean-Led Businesses

In Korea, our aim is to transition from spec-in activities to global expansion, handling more NAGASE Group products and other products related to businesses in which Korean companies have a special affinity (OLED-related materials, semiconductor processing materials, cosmetics raw materials, etc.).



## Nagase ChemteX Corporation



Nagase ChemteX Corporation  
Representative Director and President

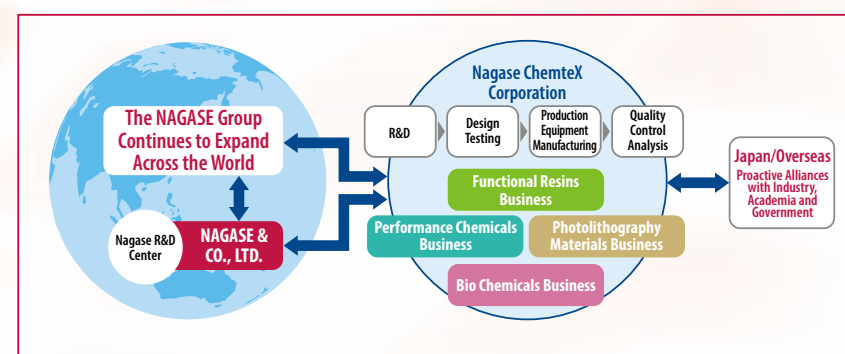
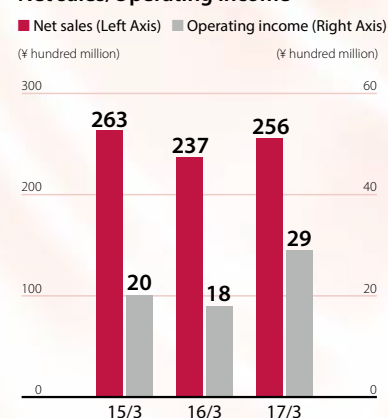
**Akihiko Isono**

Nagase ChemteX Corporation plays the central role in NAGASE Group manufacturing, leveraging our long-accumulated proprietary technologies in synthesis, compounding, biotechnology and evaluation. Our company is a chemicals manufacturer offering a unique line of products and posting a high share of the market in niche categories. By creating deeper expertise and integrating core technologies, we are able to develop products that meet the needs of our customers. As we build on our foundational technologies, we continue to add high functionality and differentiation to our products in niche markets, building stronger relationships of trust with our customers. This trust drives us to continue to create much more highly-function, highly-value-added products and services for our customers in the electronics, environment, energy, and biotechnology fields. In addition, Nagase ChemteX plays a lead role in production technologies, safety, environmental compliance, quality assurance, and regulatory compliance for the NAGASE Group.

### Major Market Trends

Despite slowing growth in the smartphone market, our businesses in the electronics field for small- and medium-sized high-definition displays and electronic components recorded stable sales. However, our large-format TV business continued to fight headwinds in the Japanese domestic market due to the emergence of Chinese, Korean, and Taiwanese manufacturers. For automobiles and other transport-related equipment, our response to demands for weight-savings and environmental considerations will likely lead to an increase in plastic materials usage, for which we can expect future growth. We expect to see greater demand for enzyme production in our food business in response to the rapid growth of the functional foods labeling market.

### Net sales/Operating income



### Fiscal 2016 Results

Net sales for fiscal 2016 amounted to ¥25.61 billion (8% year-on-year increase), while operating income came in at ¥2.96 billion (62% increase). In electronics, we recorded strong sales of epoxy resins, including liquid sealants for semiconductors and sheet encapsulation

for hollow packages for high-frequency devices. Profits were higher, mainly due to higher net sales, production rationalization, and operating efficiencies designed to improve and strengthen our fundamentals.

### Production Systems

Nagase ChemteX is striving to strengthen our production system, improving production planning accuracy and production efficiencies. With the goal of improving the safety awareness of all employees, we began an official safety awareness training program during fiscal 2015. This program offers practical training for all employees at our Harima facility, as well as for employees of neighboring companies. During fiscal 2016, we installed new sludge reduction equipment to lower disposal costs related to factory waste water.



Sludge Reduction Equipment

### Research and Development Organization

One of the key policies of mid-term management plan **ACE-2020** is Portfolio Optimization. One means to accomplish this objective is to create new businesses, and we are currently engaged in building businesses in promising new markets. Specific examples of next-generation manufacturing out of our Research and Development Head Office in fiscal 2016 included resin ink (stable performance in the additive manufacturing process) and ink for wiring. We are currently building up our supply structure for these products. We have started sample work for products under development in our life sciences business. These include biomaterials using precision organic synthesis technology and removal agents related to materials refining. We are working together with Hayashibara and other Group companies to leverage the wide NAGASE Group information network. At the same time, we are looking outside our own company, actively pursuing joint research and development with universities, research institutes, and other companies.



### Fiscal 2016 Operations

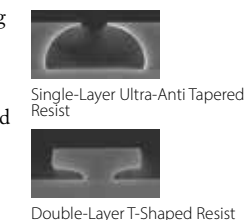
#### Functional Resins Business

The Functional Resins Business is engaged in product development and production based on advanced formulated epoxy technologies. We recorded higher sales of resins for use in hydrogen fuel cell tanks in fuel cell vehicles, sealants for car electronics (used in eco-friendly cars), and coating materials for low-power chip components. This growth is mainly in response to rising needs for environmentally friendly, energy-saving materials. We recorded significant growth in molding compound for semiconductors, where we introduced new applications in all types of fan-out wafer level-packaging uses. Sales were also strong for sheet encapsulation for hollow packages for high-frequency devices, as well as sealants for displays. We have also conducted our own new materials development and pioneered new applications, expanding our business through exhibitions and other marketing channels.



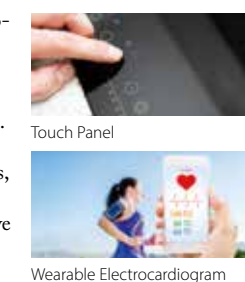
#### Photolithography Materials Business

The Photolithography Materials Business is engaged in product development and manufacturing activities based on the technology and know-how developed in the chemical business for liquid crystals and front-end processing for semiconductors. Sales of stripping agents for displays were strong during fiscal 2016, coupled with growth in photoresist sales. During the year, we began development of new resists in cooperation with universities. The project has been moving forward at a satisfactory pace. We have completed the work for our manufacturing bases in Taiwan and China, which are now engaged in stable operations. We will improve the speed of evaluations by establishing a laboratory in Taiwan, and we are also looking into locating a new manufacturing base capable of handling new flat panel factory construction plans in China.



#### Performance Chemicals Business

Our Performance Chemicals Business is engaged in development and manufacturing activities for functional materials based on unique organic synthesis technologies, polymerization technologies, and compounding technologies. In our epichlorohydrin derivatives business, we used proprietary synthesis technology to successfully develop new polyfunctional/fully water-soluble epoxy and low-chlorine epoxy. We have also made strides in developing new products using the characteristics of these materials, including film coatings, fiber processing, and other applications. We are moving forward in product development for a multi-function Denatron, a product that will add secondary characteristics of stretchiness, slipperiness, and water repellency, among others, to the anti-static version of our transparent conductive coating Denatron product for display applications. We are also developing touch panel and bio sensor features for our highly conductive version of the product, delivering on concepts of simplicity and flexibility.



#### Bio Chemicals Business

The Bio Chemicals Business manufactures and sells our proprietary enzyme products, mainly to customers in the food industry. During fiscal 2016, we developed food enzymes for use in bread making, confectionery, and meat tenderizing. These were just some of our activities in proposing value-added products and applications to our customers. In particular, we began sales of DENABAKE™ EXTRA in October 2016. This product was the result of joint development between Nagase ChemteX and NAGASE Group company Hayashibara. Ongoing productivity improvements allowed us to achieve higher levels of profitability for our main products.



### Fiscal 2017 Strategies

Fiscal 2017 is the second year of our **ACE-2020** plan. We will continue to strive to improve under the four key policies of this plan: (1) Portfolio Optimization; (2) Expand and Strengthen revenue base; (3) Mindset; and (4) Strengthen Management platform. We plan to use the business unit structure to streamline our businesses by clearly defining our profit structure, reducing costs, and consolidating products. At the same time, we will aim to create new businesses through active investment and accelerated development activities.

The NAGASE equity investment in Finnish development and manufacturing company Inkron (next-generation products for displays, semiconductors, and printed electronics) will allow for more access to that company's technologies, as well as more opportunities for joint development. We intend to leverage this partnership to strengthen our businesses in the display, touch sensor, and wearables markets. We also intend to strengthen our manufacturing infrastructure in terms of operating safety, manufacturing technology, and quality assurance.



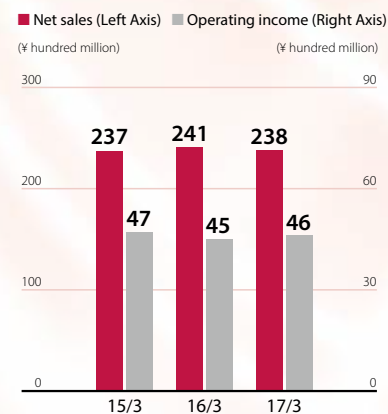
# Hayashibara Co., Ltd.



Hayashibara Co., Ltd.  
Representative Director and President

**Osamu Morishita**

### Net sales/Operating income



Our business is divided mainly into two categories. Our Saccharides Business leverages biotechnology to manufacture and sell food materials (TREHA™, Hayashibara Hesperidin S, and Fibryxa™ (isomaltodextrin)), cosmetics materials (AA2G™ (stabilized vitamin C)), and pharmaceutical materials (maltose). Our Fine & Wellness Business utilizes organic synthesis technologies to offer products in commercial photography and display, as well as pharmaceuticals (LUMIN™-A), in-vitro diagnostics, and other products in the life sciences field. To be more global, we intend to strengthen new materials development and application development in parallel. At the same time, we will establish a reliable global supply system for high-quality products, promoting food safety and quality assurance in line with global standards.

### Major Market Trends

Our B to B customers give our products high marks not only for their physical properties, but also for their functionality. Our product line extends widely from the food and cosmetics markets to the medical and industrial fields. In our food business, we have been proactive in creating a systematic review process necessary for compliance with the rules for Food for Specified Uses and the rules for Food with Function Claims. This is just one of the ways in which we are building a support structure for customer product development. Japanese products have a reputation for reliable quality in overseas markets. In addition to this reputation, we offer added value to our customers through stable supply, protected intellectual property, and expertise in our products. We will continue to work together with academia and our clients to conduct advanced research and development in applications for our saccharide products in the pharmaceutical and medical fields.



Line of Functional Saccharide Products



Soluble Dietary Fiber Fibryxa™

### Fiscal 2016 Results

Net sales for fiscal 2016 amounted to ¥23.85 billion, which was a 1% decrease compared to the prior year. This decrease was mainly due to the impact of intensified competition overseas. On the other hand,

operating income rose 3% to ¥4.63 billion, mainly due to controlled manufacturing costs arising from lower main raw materials and energy costs.

### Production Systems

We began operations of two new plants to replace the former Okayama Plant I, establishing systems to supply products reliably and safely through state-of-the-art manufacturing facilities. We added to our capacity to manufacture TREHA™ at our Okayama Functional Saccharide Plant, T Building. This new addition began operations in September 2016.

In addition to making advances in manufacturing process improvements and energy efficiencies through our own engineering methods, we have also adopted quality control systems based on FSSC 22000, ISO 9001, and GMP. To answer customer requests from overseas, we are making progress toward Kosher and Halal certification.



Okayama Functional Saccharide Plant, T Building



ISO 9001 Certificate

### Research and Development Organization

Microorganism screening derived from years of expertise and new research efforts has put us on the course to developing purpose-driven research into new enzymes and the development of new saccharides using enzymes. We collect evidence about market needs through our own survey system, working closely with our customers to bring new products and applications to the market quickly. Meanwhile, we are active in registering our intellectual assets, building a structure that allows our customers to use our products with confidence. At the same time, we are conducting research and development in cooperation with Nagase ChemteX and the Nagase R&D Center, leveraging the strengths of these entities. In October 2016, we developed a new enzyme for bread making with Nagase ChemteX. Called DENABAKE™ EXTRA, this new product is sold by NAGASE & CO., LTD.



Press Conference Launching DENABAKE™ EXTRA



Research and Development Center

### Fiscal 2016 Operations

#### Saccharides Business

The Japanese food industry is our core market in our Saccharides Business. Here, demand has been very strong for our mainstay TREHA™, SUNMALT™, and HALLODEX™ products. Meanwhile, the market has recognized the antioxidant effects of high-performance Ascofresh™, as well as the neutral lipid reduction and improved blood circulation effects of Hayashibara Hesperidin S. We are gratified to see more cases of adoption of these products in their respective markets. We are seeing a steady increase in the number of customers using the new soluble dietary fiber Fibryxa™ (isomaltodextrin). Fibryxa™ was first introduced to the market last year by Hayashibara, their first new product since reorganizing the company.

The market for overseas food businesses is expanding, attracting the entry of several Chinese manufacturers.

In the perfume and cosmetics field, the decline in inbound tourist demand led to somewhat lower domestic results. However, our efforts in intellectual asset and pricing strategies have worked synergistically to increase business overseas.

In the medical and pharmaceutical field, we are in the process of acquiring certifications and registrations to respond to highly pure trehalose development projects overseas.



Hayashibara Hesperidin S



Food Product Development Exhibition

#### Fine & Wellness Business

While sales of photography and printing plates and other dyes for commercial use decreased for the year in the Fine & Wellness Business, sales of in-vitro diagnostics and other life science products were strong. We expect future growth in sales of dyes for use in polarizers and displays. Here, we are increasing production in good order, even though we have yet to complete the mass production development stage. Meanwhile, sales of Class III pharmaceutical LUMIN™-A recovered, outperforming the prior year. This was the result of creating a stronger working relationship with our sales agents.



LUMIN™-A Promotion (Interior Bus Ad)



LUMIN™-A Website

### Fiscal 2017 Strategies

Under the ACE-2020 mid-term management plan, we are executing a basic strategy of pursuing clear growth markets and regions globally. More specifically, we are moving forward with new application development worldwide for TREHA™ in response to increased production capacity for this product. In addition, we are expanding our product lineup overseas, where the markets are growing. We are also making advancements in developing applications and validating functions for our core functional products, including Fibryxa™, Hayashibara Hesperidin S, and Ascofresh™, preparing to introduce

them to appropriate markets.

On the production front, we are shoring up our technology development and production centers in Okayama, while researching the potential for overseas production from the standpoint of consistent raw materials procurement and competitiveness.

Our highly original materials research is the DNA of our company. Based on our capabilities here, we plan to further deliver added value combining our own materials, utilizing government-academic-industry projects, and contributing to a healthier and happier society.



# Major R&D Functions

## Nagase R&D Center



GM, Nagase R&D Center  
**Xiaoli Liu**

The Nagase R&D Center serves to provide biotechnology research and development functions for the NAGASE Group as a whole, bridging the NAGASE Group trading company and manufacturing hybrid business model. Our mission is to develop proprietary actinomycetes technologies to bring *safe, secure, eco-friendly* chemicals and materials to fruition through biotechnology process innovation. In doing so, the center will continue to create the seeds of new businesses not yet conceived of in our current operations. The watchwords of the Nagase R&D Center are “*unique, independent, and innovative.*” Guided by this motto, we pursue research and development activities that provide value to both NAGASE Group affiliated companies and our customers. This type of value is distinctive of the research and development function within the traditional trading company model.

### ◎ Main Functions

- Proprietary biotechnology development functions integrating advanced technologies and academic knowledge across a wide range of fields (N-StePP™: Nagase Streptomyces Technology for Precious Products)
- Planning and development functions leading to new businesses that make possible the use of biotechnologies for efficient production of valuable materials with low environmental impact (Field: Biochemicals, functional materials)
- External Biotechnology assessment and adoption functions

### ◎ Technologies

- Fundamental Technologies: Genetic engineering, metabolic engineering, fermentation engineering, bioprocess engineering, bioinformatics
- Core Technologies: Materials production technologies using actinomycetes, strain improvement technologies utilizing metabolic engineering

### Achievements in Fiscal 2016

- Discovery of a method to improve substance productivity by new microorganisms (patented)
- Development of a manufacturing method for functional material ferritin (patented)
- Production method for new cosmetic material using actinomycetes
- Academic presentation about the efficient production of UV-absorbing substance Shinorine via actinomycete streptomyces lividans
- Academic presentation about a method to improve substance productivity focusing on tRNA activity rates (Winner of the Hot Topic Award at the 2017 Annual Meeting of the Japan Society for Bioscience, Biotechnology and Agrochemistry)



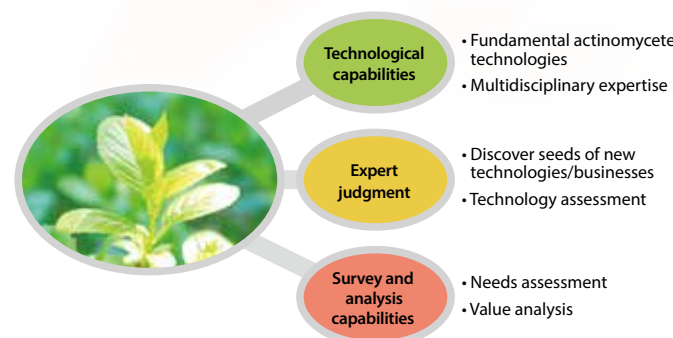
Nagase R&D Center

Hot Topics Award at the 2017 Annual Meeting of the Japan Society for Bioscience, Biotechnology and Agrochemistry



### Fiscal 2017 Strategies

The Nagase R&D Center is dedicated to creating a sustainable world where people live with peace of mind. To this end, we develop value-added materials utilizing proprietary microorganisms, based on multidisciplinary fields in synthetic biology. At the same time, we continue to propose new ideas to commercialize these technologies, planting seeds that we hope will one day become new businesses. In fiscal 2017, we plan to strengthen ties with universities and outside research institutes in order to be able to take the lead in discovering seeds of new business, quickly conducting validation and feasibility studies of new concepts guided by surveys of customer needs. This will lead to the creation of even more new development concepts for our department to pursue. Further, we are aiming for the early achievement of technological milestones in functional material and components under development, working with development partners both in Japan and overseas.



### Intellectual Property Administration and Usage

The intellectual property team within the Nagase R&D Center secures the outcomes of research and technological development activities in the center as intellectual property. At the same time, the team proposes patent strategies for use in future businesses, conducting research and development as business strategy. The team will work with the Intellectual Property Office (currently Legal Division) to manage and utilize NAGASE Group property, securing patent rights and coordinating strategically with departments at our affiliates.

	Fiscal 2016		Cumulative (through fiscal 2016)	
	In Japan	Overseas*2	In Japan	Overseas*2
Patent applications*1	10	7	885	440
Patents*1	6	0	206	208

\*1 The number of patents under the name of the Nagase R&D Center. Licenses and other intellectual property rights are not included.

\*2 Figures include applications for international patents.

## Nagase Application Workshop



GM, Nagase Application Workshop  
**Tetsuya Asakawa**

The Nagase Application Workshop (NAW) is home to specialized equipment and expert staff capable of conducting raw materials analysis, application development, and final product formulation for *plastics and coating materials*. This organization is responsible for *technological development, incubation, and technological training*. The NAW continues to pursue surface decoration and functional properties in the fields of plastics and coatings.

### ◎ Main Functions

#### 1. Plastics



Formula design by expert technicians, test production of compounds (mainly via twin-screw extruder), test production of molded plastic products (via injection molding), physical property assessment using various evaluation equipment (Equipment) Twin-screw extruders (15mm/18mm/26mm), Henschel mixers, injection molding machines (80t and 110t), T die extruder, press molder, analytical equipment (thermal analysis, FT-IR, etc.), physical property measurement equipment (tensile strength, bending, shock testing equipment, HDT testers, etc.), computer color matching system (CCM)

#### 2. Coating materials

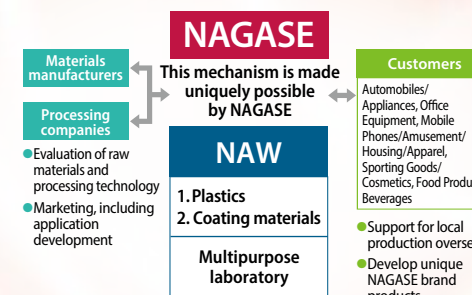


Coating and ink formulation by expert technicians, test production of coatings and inks using various processing equipment, physical property assessment using various evaluation equipment (Equipment) Dry type paint booths, disperser (paint conditioner, horizontal/vertical bead mill), UV curing system drying oven, environment testing equipment (xenon WOM, SUV weathering test equipment, salt spray test equipment, constant temperature/humidity oven, etc.)

#### 3. Multipurpose laboratory



The NAW serves as an incubator for new business development within the NAGASE Group, receiving expert staff from divisions and affiliated companies on a temporary basis. This increases the speed of business development through the effective use of technical support available through NAW facilities and staff.



### Development History

Throughout fiscal 2016, we received inquiries and requests from customers, materials manufacturers, and processing companies based on our reputation for conducting applied technology development that meets true market needs. We received representatives from more than 200 companies, in addition to more than 300 requests for testing and development. Intellectual property activities included five patent applications\* and four acquisitions of rights. In addition, we actively pursued collaboration with companies inside and outside the NAGASE Group, universities, and other external research institutes.

\* Number of projects during fiscal 2016. Projects listed under the Nagase Application Workshop name do not include licenses or other intellectual properties.

### Fiscal 2017 Policies

The NAW works with customers and suppliers as development partners in the plastics and coatings fields. Through these activities, we add new levels of support for technical sales, contributing to the real and perceived value of the NAGASE name.

During fiscal 2017, we plan to speed up our cooperative business development with other divisions and affiliated companies in Japan and overseas. In particular, we are targeting the commercialization of a

### Plastics

- Develop plastic materials for molding with automotive industry parts makers (Tier 1, Tier 2). Weight savings, high-grade treatment, improvement in scratch resistance, etc.
- Development of high sliding polyethylene featuring superior processing characteristics
- Development of transparent, highly rigid plastics for use in cosmetics, medical products, and food applications

### Coatings

Development of PatnaLock™ (new-concept antirust paint using rust prevention by rust\*) and a carbon hybrid™ coating system that significantly reduces solvent-based coating VOC

carbon hybrid™ coating system and a high sliding polyethylene, among other projects.

Our goal is to uncover new elemental technologies and functional materials earlier than any other company in the world, contributing to growth in our markets. We will develop useful formulations and create proprietary NAGASE technologies that we can suggest as effective solutions to our customers.

### TOPICS Development of a Carbon Hybrid™ Coating System

As the world moves to limit emissions of VOCs, pollutants and threats to human health, the NAW is developing a carbon hybrid™ coating system that will reduce paint and paint thinner VOCs by 50 percent. This coating system replaces paint thinner with liquid carbon dioxide as a solvent-based coating (Fig. 1, 2) to reduce VOCs by a significant amount. In contrast to water- and powder-based coatings, this method is expected to reduce VOCs while also increasing coating efficiency. The use of liquid carbon dioxide offers a number of advantages to paint thinner: (1) Not harmful to human health; (2) Low environmental footprint; (3) High solubility, viscosity reduction, and volatility; and (4) Cost savings. As such, this method does not contribute to the production of new carbon dioxide, which is known to be a greenhouse gas.

The carbon hybrid™ coating system can be installed in existing solvent-based coating booths, serving as a promising, environmentally friendly coating system that can be adopted at lower costs than water- or powder-based systems. The NAW is applying for a number of patents as part of an intellectual property strategy to commercialize this carbon hybrid™ coating system.



Figure 1 Solvent Coating (Traditional)

Figure 2 Carbon Hybrid™ Coating System



# Human Rights, Employment Practices

See P.22 for more about NAGASE Group branding activities.

## Respect for Human Rights

The NAGASE Group has a Code of Conduct which defines our respect for human rights and our refusal to discriminate against individuals or groups in any manner. As a corporate group doing business around the globe, the NAGASE Group respects the history, culture, and customs of every region, and we do not engage in harassment or discrimination based on race, creed, gender, religion, nationality, language, physical characteristics, wealth, or place of birth. This Code of Conduct

is available in Japanese, English, Chinese, and German, distributed as a booklet and available through our corporate intranet for the reference of all Group employees. We require every NAGASE Group employee to comply with this Code of Conduct. In the event of an incident of discrimination, the Group will take immediate steps to investigate the situation, acting to help the affected individual(s) and to prevent any recurrence.

## Diversity

### Basic Stance on Diversity

The NAGASE Group believes that diversity is an important part of its overall corporate strategy. The NAGASE Group currently employs a diverse range of personnel who differ in terms of gender, nationality, age, values and lifestyles. Respect for the ideas and views of a diverse range of employees encourages more dynamic internal discussions and leads to new ideas that become the source of competitive advantage in the market. This in turn leads to the growth of both the NAGASE Group and each individual employee.

### Diversity Initiatives

Our diversity initiatives began in earnest in fiscal 2008 with the launch of the Diversity Promotion Committee. We conducted a second survey during fiscal 2011, and will continue to monitor our progress over a three-year span as we introduced new activities in fiscal 2012.

During fiscal 2016, we formed a subcommittee consisting of members from a variety of backgrounds to discuss "Diversity Management." More specifically, members discussed the influence of diversity in the future of the NAGASE Group and how we can be more receptive to diversity (Diversity and Inclusion). Based on these discussions, the subcommittee proposed goals and the direction of future policies for embracing diversity within the NAGASE Group.

#### Themes for Diversity Promotion

##### 1. Internal education

- ① Periodic messages from top management and broadcasts of related information
- ② Instill the NAGASE Management Philosophy, NAGASE Vision, and The NAGASE Way deeply into NAGASE Group employees

##### 2. Diversity in organizations and individuals

- ③ Improve global communications
- ④ Support employees' career development
- ⑤ Continue employing non-Japanese people and women as main career track staff and improve our corporate culture

##### 3. Develop good places to work

- ⑥ Instill awareness and activate initiatives for continuity and productivity improvements
- ⑦ Support employees who are dealing with home care or other challenges



## Work-Life Balance

### Basic Stance on Work-Life Balance

We believe that work-life balance is a critical part of respecting diversity. Establishing a workplace environment in which it is easy for employees from a wide variety of backgrounds to work enables achieving a working style that has a balance between professional and private lives, connects to fulfilled work and living, and we take this to be beneficial for both the company and employees. Thus, we are reforming mindsets and establishing systems to accomplish this.

### Work-Life Balance Initiatives

The monthly meeting of the Health Committee includes discussions related to flexible work schedules, encouraging paid time off, and reducing overtime. The committee uses results of workplace surveys as a basis for labor-management talks regarding creating a workplace environment that is more amenable to work-life balance.

We expect to see more women excelling in the workplace, as well as increasing employees who also provide in-home care for family members. Accordingly, our aim is to develop a practical system allowing employees more choices about work arrangements as they go through different stages in their lives.

**TOPICS Flex-Time for Parents of Young Children and Caregivers**

As one measure encouraging flexible work arrangements for employees, beginning April 2017 NAGASE & CO., LTD. has expanded eligibility for the flex-time system to parents of young children and caregivers in addition to those employees who have been engaged in research at the Nagase R&D Center.

## Human Resource Development

### The NAGASE Group HR Development Policy

#### • The NAGASE Group Approach to HR Development

NAGASE Group HR development programs consist of an organized combination of on-the-job and off-the-job training. On-the-job training lets employees experience real-world work in a variety of roles to gain new knowledge and skills. Off-the-job training also involves training and gaining skills through both formal lectures and self-directed learning.

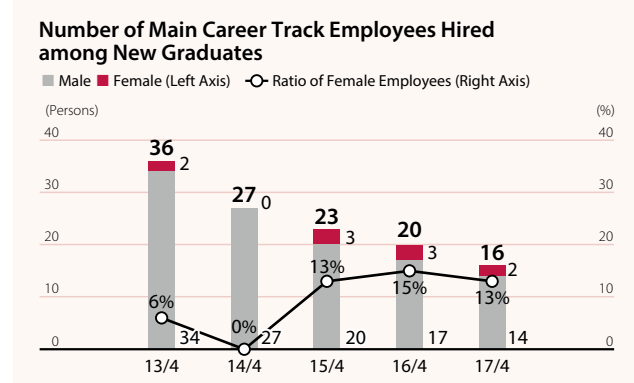
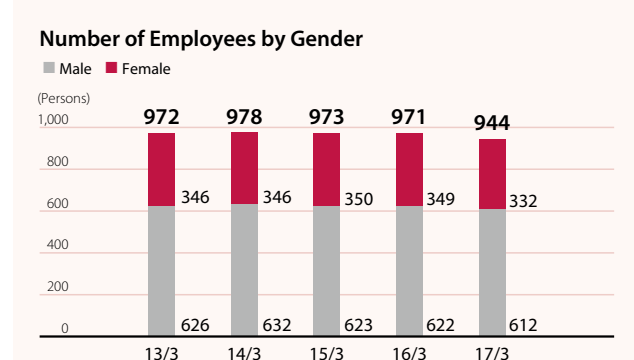
The NAGASE Group promotes on-the-job training, while at the same time ensuring employees are able to learn knowledge and skills for their continued growth. These programs include rank-specific training for young staff, training for managers, and position-specific training to ensure staff have the necessary knowledge and skills to perform their work.

#### • Organization-Wide HR Development to Promote Group Function

We offer Group-wide HR development programs based on rank, as well as improved head office-based training for overseas national staff designed to more fully deliver the NAGASE Group functions.

**TOPICS The President's Award**

In fiscal 2016, we introduced the President's Award as another means to foster job satisfaction and motivation among our employees. We believe this program will help us build a better company, encouraging employees and management to come together in finding satisfaction in their work and committing to full participation. We have rolled out this program to the entire Group to motivate and create greater solidarity among our employees.



Major Policies

Strengthening Management Capabilities and Operating Skills and Fostering Globally Proficient Personnel

We have emphasized the following three points among our various development policies. We will continue to revise Group education and training programs according to changes in the external business environment and NAGASE Group strategy.

1 Promote globalization	<ul style="list-style-type: none"> <li>Assign employees to overseas entities</li> <li>Send employees to business school</li> <li>Provide cultural training</li> <li>Offer English language training support</li> </ul>
2 Train managers	<p>Programs to sharpen our competitive ability (send employees to business school or MBA basic training, etc.)</p>
3 Instill shared values	<ul style="list-style-type: none"> <li>Provide shared value workshops in rank-specific training</li> <li>Offer shared value workshops for managers</li> <li>Conduct surveys</li> </ul> <p>As the external business environment changes, we will continue to revise and improve our training programs.</p>

Number of Participants in Main Training Programs

Training Program	Fiscal 2014	Fiscal 2015	Fiscal 2016
Rank-Specific Training	873	796	699
Overseas Training	17	19	11
Selective Training	21	8	20
Business Leadership Program for Overseas National Staff	39	37	36

Using the NAGASE Global HR Development Center



In May 2014, we opened the NAGASE Global HR Development Center in Sendagaya, Tokyo. The center serves as our base for developing human resources that will lead us toward sustained growth. During fiscal 2016, we used the facility for a number of different purposes. We held major meetings (joint division council meetings, global meetings, mid-term plan council meetings), training (HR training, Group company training, intern training, etc.), and more. A total of 4,261 people used the facility during fiscal 2016, including 1,286 room nights and 142 training meetings.

Staff Development Program

	For Main Career Track Staff, Specialized Position Staff, R&D Position Staff			For National Staff	For Clerical Position Staff	
	Skills	Mindset	Practical			
General Manager	Overseas Business School Enrollment					
Division Manager	NMP (NAGASE Management Program)					
Section Manager	Domestic Business School Enrollment					
	Manager Training		Appraiser Training	GMP (General Management Program)		
Section Staff	Manager Candidate Training					
	MBA Basic Education Program		Management Skills Seminar		BIP (Business Improvement Program)	
		Overseas Business On-the-Job Training				SA Training (Promotion)
		Leadership Training	Practical Skills Seminar	BMP (Basic Management Program)	Business Skills Training	
	Core/Skill Training		Office Systems Training		Office Systems Training	
Introductory Training		Basic Practical Skills Seminar		Introductory Training		

Environment

Environmental Management

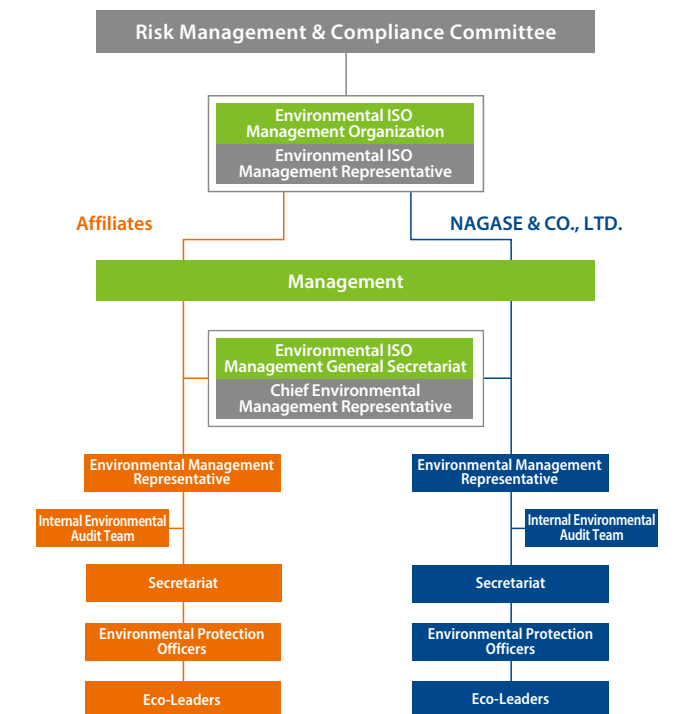
NAGASE Group Environmental Management Structure

NAGASE began building an environmental management structure in May 1999 by establishing an Environmental Protection Committee, a role currently assumed by the Risk Management & Compliance Committee. Earlier than other trading companies in Japan, NAGASE & CO., LTD. obtained ISO 14001 certification for its environmental management system in April 2000 in response to societal demands. Since then, the Environmental Protection Committee has offered affiliated companies advice and support for obtaining ISO certifications and thereby expanded the scope of certification. We conduct activities together with six sales companies, Nagase Chemical, Nagase Plastics, Nagase Abrasive Materials, Nishinohon Nagase, Nagase Elex and Nagase-OG Colors & Chemicals under the Environmental ISO Management Organization.

Many of our domestic manufacturing, processing, services, sales, and other Group companies are working independently to acquire certifications and are engaged in environmental activities. These firms include Nagase ChemteX Corporation, Nagase Medicals Co., Ltd., Totaku Industries, Inc., Nagase Techno-Engineering Co., Ltd., Nagase Techno Service Co., Ltd. and Fukui Yamada Chemical Co., Ltd.

We will continue with activities to improve the environmental management systems among certified Group companies.

Environmental Management Structure



Environmental Management Activities

NAGASE & CO., LTD. bases its environmental management activities on daily operations. Specific activities include the promotion of environmental businesses and energy conservation activities, as well as the enhancement of operational efficiency. Our environmental businesses encompass renewable energy, energy storage, energy/resource conservation, regulated materials replacements, recycling/reuse, and measures to combat global warming. One Company-wide initiative is to create and expand businesses utilizing environmental and energy technologies. We will continue to share information and functions among and between Group companies to become an organization that rapidly develops and deploys products and services that lead to a more sustainable and low-carbon society.

Another way we believe we can shrink our environmental footprint through our business is to be more efficient in our

logistics. Reflecting our beliefs, in August 2008, we developed and implemented the Nagase Energy Calculation Online System. This system uses logistics voucher data from our sales management system to calculate domestic cargo transport volumes.

This system makes it possible not only to calculate our annual cargo transport volume and CO<sub>2</sub> emissions but to analyze transport routes for optimization, which also helps reduce our CO<sub>2</sub> emissions. In such ways, the NAGASE Group is striving to reduce energy consumption in its logistics operations, thereby contributing to the prevention of global warming.

Beginning in fiscal 2012, we have held regular Safety Patrols and Energy Conservation and Recycling Patrols in buildings owned by the Company. These patrols ensure safety in the workplace and promote energy-saving awareness within the Company.



**Environmental Policy**

**1 Comply with all environmental laws, regulations and other rules**

We will observe all environmental laws, municipal bylaws, environmental regulations and other rules as we conduct our business activities.

**2 Develop businesses that give full consideration to environmental issues**

We will conduct our business activities in full awareness of the need to preserve the ecosystem and protect the environment, and we will make every possible effort to give full consideration to the environment within the limits of technological and economic feasibility.

**3 Fulfill our responsibilities as a good corporate citizen**

As a good corporate citizen, we will work together with public institutions, industries, and local communities to promote environmental conservation measures that are suitable for the NAGASE Group.

**4 Environmental management systems and continuous improvement**

The NAGASE Group has set environmental targets to achieve our environmental policies. Further, we have established and operate an environmental management system, striving for continuous improvement.

**5 Disclose and make the relevant parties fully aware of our Environmental Policy**

We will disclose our Environmental Policy to the public and make all who work for the NAGASE Group fully aware of its contents.

**Reducing Our Ecological Footprint**

As the core company of the NAGASE Group, NAGASE & CO., LTD. sets an example through activities to reduce its ecological footprint. In addition, the Company views developing eco-conscious businesses as a major component of its environmental policies. NAGASE & CO., LTD. contributes to society by reducing its own footprint, while discovering and developing the types of eco-friendly products that society demands.

In line with revisions made to the Act on the Rational Use of Energy, NAGASE & CO., LTD. has been designated as a specified corporation by the Bureau of Economy, Trade and Industry since its energy usage exceeds fixed levels. Consequently, since fiscal 2011, we have compiled data on the amount of energy consumed at every facility, formulated medium- and long-term energy reduction plans, and submitted regular reports to the Bureau of Economy, Trade and Industry.

We adopted and operate a building energy management system (BEMS) at our Tokyo head office building and Nagoya branch office. We use automated environmental impact reduction controls and energy conservation operations during summer

peak usage times to keep environmental settings within target levels. The building energy management system gives us more visibility in building operations, allowing us to publish electricity usage to Company personnel in real time, helping employees understand the need for and status of our energy conservation.

**Activities Undertaken by Nagase ChemteX**

The slogan of the core NAGASE Group manufacturing subsidiary Nagase ChemteX is, "We are a green company and want to help make the world greener." Nagase ChemteX is actively engaged in environmental activities, one of which is the creation of a company-wide energy conservation organization that drives energy-saving activities. During fiscal 2016, a working group at each business unit level was responsible for reducing energy output by at least 1%, setting conditions for energy reduction according to equipment, manufacturing processes, and operating rules.

Once again in fiscal 2016, Kansai Electric Power Co. Inc. asked Nagase ChemteX to cooperate with energy-saving measures during the hot summer months. We signed a special peak-time adjustment contract to cut 10% of used electricity during July, August, and September. We achieved that goal for all three months of the contract, earning a discount on electricity fees.

**Environmental Performance Data**

**Electricity Usage**

	Fiscal 2014	Fiscal 2015	Fiscal 2016
Electricity Usage (kWh)	5,861,177	6,110,367	6,131,628

**Waste and Recycling**

	Fiscal 2014	Fiscal 2015	Fiscal 2016
Waste (t)	188	217	189
Recycling (t)	149	183	148
Recycling (Ratio)	79.5%	84.1%	78.6%

**CO<sub>2</sub> Output**

	Fiscal 2014	Fiscal 2015	Fiscal 2016
CO <sub>2</sub> Output (t-CO <sub>2</sub> )	2,826	2,494	3,197

**Paper Usage**

	Fiscal 2014	Fiscal 2015	Fiscal 2016
Paper Usage (1,000 sheets)	7,264	6,007	5,431
Paper Usage (t)	31.0	25.8	23.4

**CO<sub>2</sub> Output from Logistics Activities**

	Fiscal 2014	Fiscal 2015	Fiscal 2016
CO <sub>2</sub> Output (t-CO <sub>2</sub> )	1,727	1,787	1,840

Participating Companies: NAGASE & CO., LTD.  
Period: April 2014 to March 2017



**Fair Business Practices**

**Risk Management and Compliance**

**Identify, Understand, and Control Risk**

The Company established the Risk Management & Compliance Committee to put into place a structure for risk management as well as to monitor risk management and compliance as an advisory body to the Board of Directors. This committee determines committee member functions and authority, operating a structure of clearly defined roles and responsibilities. Under the committee's leadership, department managers address risks in their particular areas by formulating rules and implementing training. The Company also works through the Risk Management & Compliance Committee to develop systems and departments responsible for additional risks that materialize and strives to lower the risks that could impact the Company's business.

In addition, the Risk Management & Compliance Committee formulates the basic compliance policy to maintain the Company's compliance system and uses regular workshops

and other initiatives to ensure that corporate activities are strictly in line with the NAGASE Group Code of Conduct. Should employees of NAGASE or its Group companies become aware of legal or other compliance issues, they immediately report to the Risk Management & Compliance Committee, which promptly reports to the Audit & Supervisory Board. In addition, the Company has introduced an internal reporting system wherein employees and others can report or discuss issues directly. The Company revised the NAGASE Group Code of Conduct in November 2012, distributing the document to all employees throughout the entire domestic and international NAGASE organization.

In January 2015, we established the Crisis Management Guidelines. These rules are part of a structural and communications system that allows us to quickly and properly respond as a cohesive organization, gathering information, providing reports, and issuing instructions in the event of a crisis that affects business continuity.

**Basic Compliance Policy**

The NAGASE Group is a member of society and, as such, it is our duty to behave in a manner in keeping with this role by maintaining good and fair business practices and providing society with the goods and services it needs. Through continued growth and development, NAGASE can improve the welfare of its employees, while making a contribution to society.

Based on this corporate philosophy, NAGASE has adopted and will implement the following Basic Compliance Policy.

This policy defines the behavior standards that NAGASE and its

officers and employees will observe as it carries out its various business activities.

Officers and employees of NAGASE must behave in accordance with these behavior standards and endeavor to disseminate them to those within the corporate organization, especially those with whom they work. If circumstances arise in which there is a risk that these behavior standards may be compromised, officers and employees must work to resolve problems without delay, and to improve operations by identifying the causes of problems and taking steps to prevent recurrences.

**1 Compliance with laws, regulations and internal rules and regulations**

- Corporate activities will be conducted fairly and in good faith, in accordance with laws and rules, and without any deviation from social standards.
- Business activities will be conducted in accordance with the rules of the international community to ensure the continuing growth and development of NAGASE as a global enterprise.

**2 Elimination of anti-social elements**

- Anti-social elements that threaten public order and safety will be met with firmness and resolutely eliminated.

**3 Provision of goods and services that are useful to society**

- NAGASE will contribute to society by supplying goods and services that are useful to society.

**4 Respect for the qualities and individuality of employees**

- NAGASE will respect the autonomy and creativity of every employee and foster a corporate culture in which those qualities can be applied to corporate activities.
- NAGASE will protect its employees' health, respect their human rights, treat them fairly and without discrimination, and secure and provide safe and enriching work environments.

**5 Disclosure of information to stakeholders**

- NAGASE will strive to ensure transparency by fairly and actively disclosing corporate information to stakeholders, including customers, suppliers, employees and shareholders.

**6 Preserving the global environment**

- NAGASE recognizes its responsibility to maintain the global environment in a better condition and will act in accordance with that responsibility.

## Fair Business Practice Initiatives

### • Basic Approach

The risk of cartel enforcement, particularly surcharges, under the Antimonopoly Act can have a major impact on a business. Since cartel regulations can be an issue, particularly for manufacturing firms, the NAGASE Group actively conducts education activities, mainly for our manufacturing companies.

Our sales companies (including NAGASE & CO., LTD.), must be continually aware of the risks associated with violating sales agent regulations and subcontractor risks under the Antimonopoly Act. As such, we hold regular education activities through a variety of means to keep this risk in the forefront of the minds of our employees.

Moving forward, we will continue to educate our employees about laws related to fair business practices, particularly those directly affecting our business. The NAGASE Group intends to strengthen its approach to the prevention of bribery of foreign public officials with respect to Japan's Unfair Competition Prevention Act. The Group also plans to continue educating employees worldwide regarding bribery prevention regulations throughout fiscal 2017. This education also reflects considerations of extraterritorial application of the U.S. Foreign Corrupt Practices Act and the UK Bribery Act.

### • Education Activities (2014–)

Implementation	Targets	Content/Attendance
April 2014–	NAGASE & CO., LTD. New employees	Training for new hires related to important points of the Subcontract Act Held once each in Okayama and Tokyo
June–July 2015	NAGASE & CO., LTD., certain affiliated companies	Global trends in bribery prevention regulations focusing on the U.S. Foreign Corrupt Practices Act, UK Bribery Act, and Unfair Competition Prevention Act of Japan, given by an outside expert attorney Held nine times in total (Tokyo, Osaka, Nagoya)
February 2016	NAGASE & CO., LTD., certain affiliated companies Section managers	Compliance seminars conducted by rank Held once each in Tokyo and Osaka
March 2016	NAGASE & CO., LTD., certain affiliated companies	Additional seminars conducted by an outside expert attorney related to global trends in anti-bribery regulations, particularly related to the U.S. Foreign Corrupt Practices Act, the UK Bribery Act, and the Unfair Competition Prevention Act of Japan. Held once in Tokyo
August–October 2016	NAGASE & CO., LTD., certain affiliated companies	E-Learning training related to global trends in anti-bribery regulations, particularly related to the U.S. Foreign Corrupt Practices Act, the UK Bribery Act, and the Unfair Competition Prevention Act of Japan. 331 attendees
November 2016– January 2017	Hayashibara Co., Ltd.	Seminar on business-related risks in connection with the Antimonopoly Act Held once each in Okayama and Tokyo
February 2017	NAGASE & CO., LTD., certain business units	Seminar on business-related risks in connection with the Subcontract Act Held once each in Tokyo and Nagoya
February– March 2017	NAGASE & CO., LTD., certain affiliated companies Section managers	Compliance seminars conducted by rank Held once each in Tokyo and Osaka

## Specific Measures Taken for Individual Risks

### • Product Safety and Quality Control

As the NAGASE Group accelerates business globalization, the volume of off-shore transactions it engages in, as well as exports to and imports from China, Asia, and other rapidly growing regions, is increasing. Transactions with suppliers in emerging countries require measures be put in place to prevent quality management and other issues that may arise due to legal and regulatory differences between Japan and the countries in question. Therefore, NAGASE & CO., LTD. recognizes the increasing importance of encouraging overseas suppliers to conduct sound quality management.

We have also worked on test programs to strengthen and expand Group-wide research, development, and manufacturing functions, recognizing the importance of continuing quality improvement for the Group as a whole.

Accordingly, pursuant to the NAGASE Group Product Safety Principles formulated in October 2008, the Company is promoting the establishment of Group-wide rules regarding quality management and product quality assurance while providing its employees with educational programs. Through these activities, we are working to ensure the safety of the products handled throughout the Group.

As NAGASE changes business models from sales agents to manufacturing/processing and manufacturer investment, we will increasingly be called upon to assume responsibility for quality assurance. To assist in this area, the Company established the Quality Assurance Support Team within the Intellectual Property Office (currently the Legal Division) in December 2010. The Quality Assurance Support Team manages vendors and contracted manufacturers, supporting Group manufacturing companies and conducting internal training.

### • Security Trade Controls

As a trading company specializing in technology and information and which also carries out export business activities, mainly of chemical products and precision equipment components, NAGASE has set up its own Security Trade Control Regulations and established the Security Trade Control Committee to appropriately implement security trade control. The Item Compliance Management Section of the Logistics Management Division serves as the office of the Security Trade Control Committee. Furthermore, the Item Compliance Management Section is responsible for security trade control of the Company and acts as the Security Trade Control Committee's secretariat.

Meetings of the Security Trade Control Committee and the Item Compliance Management Council are held as deemed appropriate. At these meetings, the Security Trade Control Committee works to understand the export control situation, follow the latest revisions to the Foreign Exchange and Foreign Trade Control Law and ascertain a detailed

picture of export controls across the entire Group while formulating related Group policies. The Item Compliance Management Council is in charge of directing and educating each business division and Group company in matters and statute updates determined by the Security Trade Control Committee. It is the responsibility of the Item Compliance Management to protect the Company and affiliates against the risk of illegal acts with respect to export controls.

### Specific Management Framework

All information about our export products, technologies, and overseas customers is stored in our proprietary Product Management System. Our Sales Division and Item Compliance Management staff confirm whether certain products or technologies are subject to restriction under the rules of the Foreign Exchange and Foreign Trade Control Law and the U.S. Export Administration Regulations. Only those products approved by the Item Compliance Management Section are put into the system as products allowed for export.

Moreover, going one step beyond mere adherence to the law, we define policies of the entire NAGASE Group associated with security export controls that, as a rule, prohibit trade of products that are military-related items or that have military applications. We also make the NAGASE Group fully aware of Group policies to prevent any exposure to security export control risks.

### Efforts to Promote Personnel Development

Every year, the practical business of security trade controls becomes ever more complex. To keep pace with developments, the NAGASE Group encourages its employees—primarily those involved in export operations—to become Security Trade Control Associates by taking the exam offered by the Center for Information on Security Trade Controls (CISTEC). As of March 2017, NAGASE had 856 qualified STC Associates in 21 Group companies. We continue to strive to foster personnel with a high level of knowledge and expertise.

### Aiming to Raise Awareness of Security Trade Controls

At NAGASE, internal security trade control training is provided to all employees, and the Human Resources & General Affairs Division offers various training opportunities such as orientation for new employees, rank-specific personnel training, and the implementation of other activities that educate and instill knowledge. In addition, we hold lectures for domestic subsidiaries and affiliates as well as overseas-based subsidiaries, with the entire Group participating.

### • Regulatory Compliance in Products

International society is becoming more concerned about environment- and safety-related issues. At NAGASE, we continue to improve product-related compliance and centralized information management, including management of chemical products. All products we deal in are subject to the management system administered by the Item Compliance Management Section within the Logistics Management Division. This allows us to comply properly with any laws or regulations that affect our products.

### Framework for Compliance with Product Laws and Regulations

The NAGASE Group checks related laws for the chemical components and regulated effects of new products that we plan to introduce to the market. Information related to these products is managed within the aforementioned Product Management System database and shared Group-wide. Using this system, we are able to swiftly confirm which products contain regulated materials and ingredients, complying as appropriate with related regulations and providing our customers with the information they require to confirm compliance with revised laws in Japan and abroad. Furthermore, to respond to the demands for more green procurement from our customers, we have established Green Procurement Requirements, procuring and delivering products after confirming they have been procured in compliance with these guidelines.

We are members of the Japan Chemical Industry Association, the Japan Chemical Exporters and Importers Association, and several other industry organizations. In addition, because we distribute information on the chemical substances contained in products along the supply chain, we endeavor to pass on accurate information by participating in the Joint Article Management Promotion-consortium (JAMP) and by using specialized tools for products containing chemical substances, such as MSDSplus and AIS.

### Strategic Approach to International Chemical Management (SAICM)

The action plan adopted at the 2002 World Summit on Sustainable Development—also known as the Johannesburg Summit—is aimed at ensuring that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health. In accordance with this policy, the entire world is adopting more strict and standardized regulations concerning chemical management. Consequently, each nation is witnessing dynamic changes in applicable laws and regulations.

Also, the Registration, Evaluation, Assessment of Chemicals (REACH) regulations took effect in Europe in 2007. Following this, from 2009, China, South Korea, Taiwan, Malaysia and other countries bolstered their respective regulatory systems relating to chemical management. In such an environment, as an entity engaged in business worldwide, the NAGASE Group provides support to its overseas subsidiaries for responding to these legal and regulatory developments via the above-mentioned Product Management System.

These legal and regulatory developments naturally affect the finished products in which NAGASE products are used. Therefore, it is important for the NAGASE Group to offer its customers relevant information. We work to ensure an accurate understanding of worldwide legal and regulatory trends with regard to chemical management. At the same time, with the aim of establishing a system to facilitate the global management of information related to the chemical products and chemical substances used in our products, we are providing product management education and guidance to our overseas counterparts.



## For Consumer Safety and Security

The NAGASE Group deals in more than just chemical products. We also manufacture and sell enzymes and other food products and cosmetics under strict quality management and effective sales systems. On this page, you will find examples of Group companies that focus on the security, safety, and trust of our customers. Read more about Nagase ChemteX and how the company reduces its environmental impact and ensures food security and safety, while dealing in electronics-related materials and food materials. We also highlight Nagase Beauty Care, a NAGASE Group company that deals mainly in cosmetics and health food.

### Green Company Initiatives

Nagase ChemteX is engaged in two pillars of environmental management based on ISO 14001: Green Company (aiming to be a company that does not negatively impact the environment) and Green Technologies and Products (reducing the overall impact of society on the environment by developing and manufacturing environment-friendly products). Nagase ChemteX pays particular focus to not using (or reducing the usage of) hazardous chemical substances subject to intensified regulations worldwide (substances restricted under the RoHS Directive, substances of very high concern regulated under REACH, etc.). The company strives to provide products that customers can use with safety and confidence throughout the product life cycle.



<http://www.nagasechemtex.co.jp/en/environment/index.html>

### Food Safety and Security

To contribute to building a welcoming society in which people can live in peace and safety, Nagase ChemteX believes food safety and security is a quality assurance concept for which there can be no compromise. To ensure food safety and security, our Fukuchiyama Plant, which manufactures food additives and health food materials, is subject to strict management as a member of the food chain, from the acceptance of raw materials and manufacturing to quality assurance and product delivery. These practices incorporate Food Additive Good Manufacturing Practices and FSSC 22000 (voluntary adoption), based mainly on ISO 9001 standards. Through these measures and more, we earn the trust of our customers by delivering safe, high-quality products.

The company is also expanding its lineup of Kosher and Halal certified products to answer the needs and concerns of even more customers across the world.

### Cosmetics Safety and Security

#### Basic Approach

Nagase Beauty Care sells direct to the consumer through an organization of independent sales agents. Because these products are cosmetics and health foods that come in direct contact with the human body, the product manufacturing process must adhere to the strictest quality control standards. Our highest priority is offering safe, secure products and services to our customers, both old and new.

#### Specific Initiatives

Our research and development pursues herb sciences and technology, selecting materials from a variety of plants, seeking out those that combine safety and functionality. The plant materials coming out of our research are used as the raw materials of end products, which are in turn subject to strict quality management systems in connection with the production process.

At the same time, our designs incorporate considerations for ease of use, ease of reading, and ease of understanding to respond to the shift in age demographics of our customers. Nagase Beauty Care has established an after-sales support office, which answers customer questions about their purchases. This support office is staffed with experienced beauty instructors and professionals who work directly with customers. We have received support from this office in raising the quality of our products and services in response to customer feedback.



Careful selection of useful herbs from around the world. The manufacturing of products that are sensitive to changes in temperature and humidity requires efficient extraction technologies and strict quality management to ensure that quality standards remain high.



## Community Involvement and Development

Guided by the NAGASE Management Philosophy, we recognize that our Group is a member of the world society. As such, it is our duty to maintain good and fair business practices and, through continued growth and development, provide society with the goods and services needed while improving the welfare of our employees.

### Nagase Science and Technology Foundation

We believe in the importance of fundamental research in the organic chemistry and biochemistry fields, and that offering subsidies through research and development and international exchange leads to the advancement of science and technology. As part of our contribution to socioeconomic progress, we established the Nagase Science and Technology Foundation in 1989. Current programs include research grants to researchers and other subsidies. To date, NAGASE has helped finance 472 research projects, provided support for 178 international exchange programs (program terminated during fiscal 2004), and contributed a total of ¥1.22 billion to further science.



[URL: http://www.nagase-f.or.jp/](http://www.nagase-f.or.jp/)

### TABLE FOR TWO Initiative

Under our TABLE FOR TWO (TFT) program, when an employee purchases a meal at our corporate cafeteria, a school meal is donated to children in Africa. When an eligible menu item is selected, a ¥20 donation is given to the TFT office, which represents a school lunch for one student. NAGASE is proud to be an active participant in this program since 2008. Through matching gifts, NAGASE donates an equivalent amount to the program. As of April 2017, NAGASE and its employees have donated a combined total of ¥2,578,040.



Source: TABLE FOR TWO

[URL: http://jp.tablefor2.org/](http://jp.tablefor2.org/)

### SCRUM JAPAN PROGRAM

NAGASE & CO., LTD. supports the SCRUM JAPAN PROGRAM, a program operated by the Japan Rugby Football Union to foster human resources through the sport of rugby. This program promotes rugby to elementary, junior high, and high school students, who represent Japan's future leaders. Through rugby, these children learn the spirit of the sport: Courage, trust, responsibility, determination, cooperation, and loyalty.



[URL: https://www.rugby-japan.jp/scrum\\_japan\\_program/](https://www.rugby-japan.jp/scrum_japan_program/)

### Save the Children Japan

NAGASE supports Save the Children Japan. With the aim of realizing every child's right to survival, development, protection and participation, Save the Children Japan is part of a coalition operating in nearly 120 countries around the world, engaged in activities focusing on child protection, disaster risk reduction, humanitarian aid, health, nutrition, and education.



©Save the Children Japan

[URL: http://www.savechildren.or.jp/](http://www.savechildren.or.jp/)

### Hayashibara Museum of Art

NAGASE Group company Hayashibara Co., Ltd. provides operational support for the Hayashibara Museum of Art. The museum houses a collection of Japanese and other East Asian paintings, crafts, and other items collected by the late Ichiro Hayashibara. The museum also exhibits furnishings inherited from the estate of the feudal Ikeda clan of the Okayama Domain. The goal of the museum is to contribute to research of cultural assets and improve the culture of the region and of Japan.



[URL: http://www.hayashibara-museumofart.jp/](http://www.hayashibara-museumofart.jp/)

### Participation in the Living Architecture Museum Festival

The NAGASE & CO., LTD. Osaka head office is a registered cityscape resource of Osaka City. Every year, NAGASE participates in the Living Architecture Museum Festival in Osaka, helping promote the city as an attraction.



[URL: http://ikenchiku.jp/](http://ikenchiku.jp/)

### Community Contribution

NAGASE employees volunteer their time (cleaning, removing protective straw mats from trees, etc., at Hamarikyū Gardens, etc.) participating in the activities of Chuo Planet (Chuo-ku/Tokyo Social Contribution Committee).

### Blood Donation Activities

Employees participate in blood drives in Tokyo and Osaka twice yearly. In fiscal 2016, nearly 170 NAGASE employees donated blood.

In the first year of our **ACE-2020** mid-term management plan, we engaged in *Reform of Corporate Culture* and *Reform of Profit Structure*, taking a first, solid step toward becoming the company we envision for ourselves.



Representative Director and Senior Managing Executive Officer  
**Mitsuro Naba**

**Basic Policy**

Our **ACE-2020** mid-term management plan guides us through the five years to the fiscal year ending March 2021. Our goals under this plan are to reach at least ¥1 trillion in consolidated net sales, at least ¥30 billion in consolidated operating income, and an ROE of at least 6%. We use improved return on invested capital (ROIC) as a benchmark, focusing on measures that contribute to an improved net income ratio (before taxes) and ROIC.

By investing in and financing our manufacturing functions, research and development, technology and information, and global network, we aim to create uniqueness and competitive advantage, improving the core of our businesses and building corporate value.

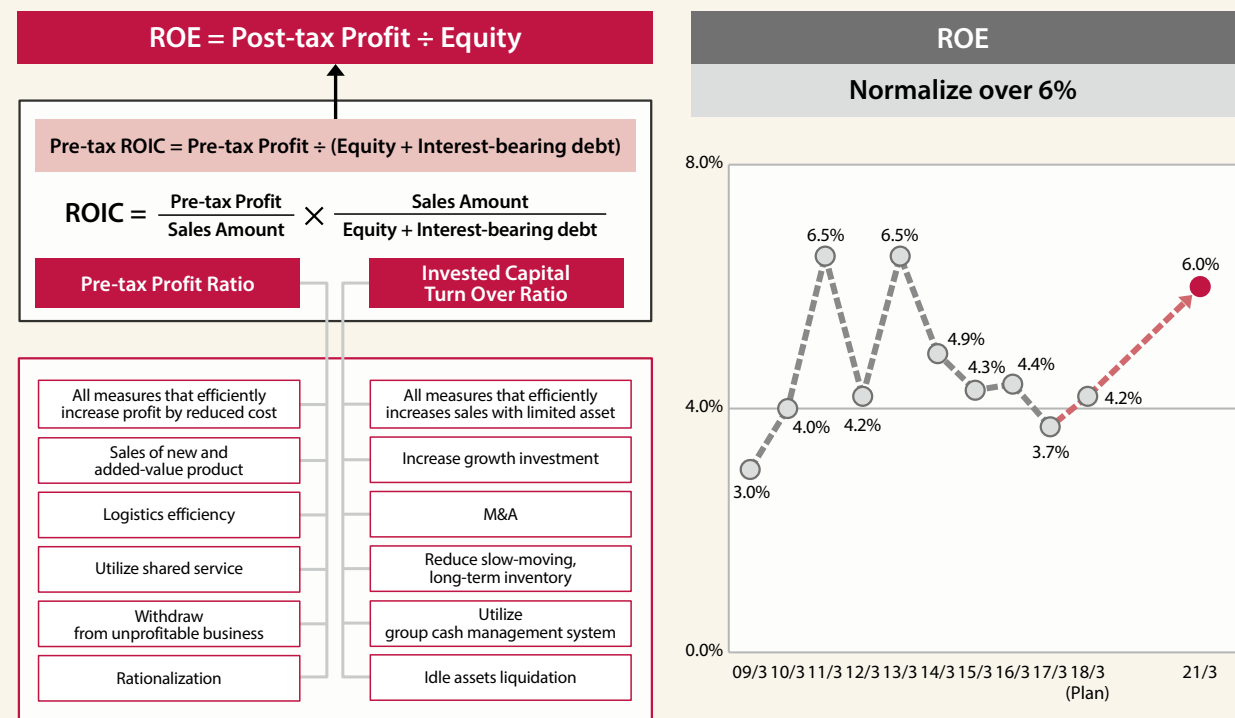
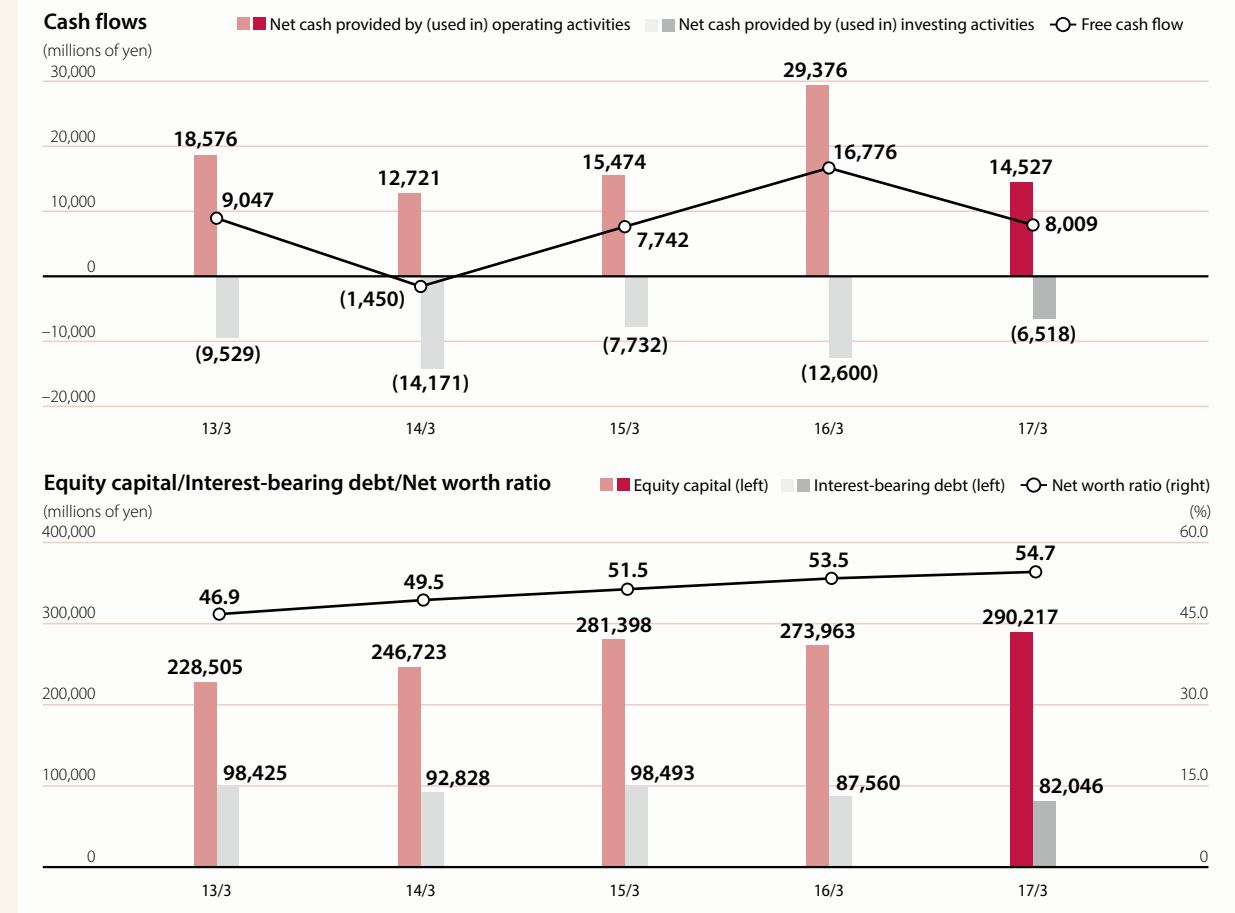
**Capital Procurement**

Under **ACE-2020**, we expect to invest ¥100 billion over five years to grow our businesses. For fiscal 2016, our investments amounted to ¥14 billion. We will source our investment capital and working capital mainly from operating cash flows and interest-bearing debt. At the same time, efficient use of working capital and asset replacement will serve to preserve our strong financial foundation, a particular strength of NAGASE & CO., LTD. We have established an R&I (Rating and Investment Information, Inc.) rank of A or higher as an indicator of our financial strength.

**Return of Profits to Shareholders**

Our basic policy is to continue paying a stable dividend to our shareholders in line with our consolidated results as we improve our earnings power and management structure. We look to improve per-share dividends based on considerations of the consolidated payout ratio and consolidated dividend to equity ratio.

Our initial forecast for fiscal 2016 dividends was ¥32 per share. However, we raised that figure to ¥33 per share, based on our most recent earnings and financial condition. For fiscal 2017, we forecast a ¥35 per share dividend.





## Six-Year Summary

NAGASE & CO., LTD. and Consolidated Subsidiaries (Fiscal years ended March 31, 2012–2017)

	(Millions of yen)						Thousands of U.S. Dollars (Note 1)
	2012	2013	2014	2015	2016	2017	2017
<b>For the Fiscal Year:</b>							
Net Sales	¥631,854	¥666,272	¥723,212	¥759,713	¥742,194	<b>¥722,384</b>	<b>\$6,438,934</b>
Domestic	366,369	361,971	372,939	374,208	363,038	<b>369,365</b>	<b>3,292,317</b>
Overseas	265,484	304,301	350,272	385,505	379,155	<b>353,019</b>	<b>3,146,617</b>
Gross Profit	71,628	82,583	88,936	91,991	91,663	<b>91,503</b>	<b>815,607</b>
Operating Income	13,427	15,578	15,789	18,153	18,024	<b>15,030</b>	<b>133,969</b>
Income before income taxes and non-controlling interests	16,536	19,458	18,353	18,989	15,239	<b>16,100</b>	<b>143,507</b>
Profit attributable to owners of the parent	8,570	14,182	11,663	11,318	12,316	<b>10,331</b>	<b>92,085</b>
<b>As of the Fiscal Year-End:</b>							
Total Assets	¥450,842	¥486,747	¥498,141	¥546,525	¥512,081	<b>¥530,775</b>	<b>\$4,731,037</b>
Net Assets	212,744	237,806	251,892	287,500	279,149	<b>295,198</b>	<b>2,631,233</b>
Interest-Bearing Debt	88,710	98,425	92,828	98,493	87,560	<b>82,046</b>	<b>731,313</b>
Share Price (Yen)	1,024	1,147	1,275	1,573	1,237	<b>1,551</b>	<b>13,825</b>
Market Value	141,730	158,754	176,470	200,413	157,604	<b>197,610</b>	<b>1,761,387</b>
Number of Shares Issued and Outstanding (Thousands of Shares)	138,408	138,408	138,408	127,408	127,408	<b>127,408</b>	—
Number of Shareholders	6,124	6,921	6,984	6,781	7,338	<b>10,394</b>	—
Number of Employees	5,545	5,897	5,960	6,259	6,267	<b>6,241</b>	—

	(Yen)						U.S. Dollars (Note 1)
<b>Per Share Data</b>							
Profit attributable to owners of the parent	¥ 66.69	¥ 111.31	¥ 91.86	¥ 89.10	¥ 96.96	<b>¥ 81.65</b>	<b>\$ 0.73</b>
Net Assets	1,592.87	1,803.31	1,942.20	2,215.18	2,156.67	<b>2,301.10</b>	<b>20.51</b>
Cash Dividends	24.00	26.00	28.00	30.00	32.00	<b>33.00</b>	<b>0.29</b>

<b>Ratio</b>	2012	2013	2014	2015	2016	2017	
Operating Margin (Operating Income/Net Sales) (%)	2.1	2.3	2.2	2.4	2.4	<b>2.1</b>	—
Ratio of Income before Income Taxes and Non-controlling Interests to Net Sales (%)	2.6	2.9	2.5	2.5	2.1	<b>2.2</b>	—
Return on Sales (ROS) (%)	1.4	2.1	1.6	1.5	1.7	<b>1.4</b>	—
Total Assets Turnover (Times)	1.5	1.4	1.5	1.5	1.4	<b>1.4</b>	—
Return on Assets (ROA) (%)	2.1	3.0	2.4	2.2	2.3	<b>2.0</b>	—
Return on Equity (ROE) (%)	4.2	6.5	4.9	4.3	4.4	<b>3.7</b>	—
Shareholders' Equity Ratio (%)	45.4	46.9	49.5	51.5	53.5	<b>54.7</b>	—
Debt to Equity Ratio (Times)	0.43	0.43	0.38	0.35	0.32	<b>0.28</b>	—
Current Ratio (%)	155.4	184.4	187.2	187.0	200.1	<b>192.9</b>	—
Interest Coverage Ratio (Times) (Note: 2)	21.26	15.46	15.8	17.86	18.69	<b>16.31</b>	—

Note: 1. U.S. dollar amounts have been translated from yen, for convenience only, at the rate of ¥112.19=U.S. \$1.00, the approximate rate of exchange prevailing on March 31, 2017.

Note: 2. Interest coverage ratio is calculated as (operating income + interest income + dividend income) / interest expense.

## Management's Discussion and Analysis of Operations and Finances

### Business Lines and Scope of Consolidation

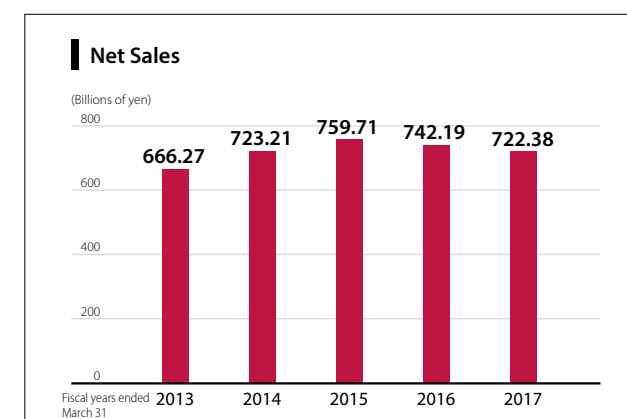
The NAGASE Group imports and exports a diverse array of products and engages in domestic transactions, with NAGASE & CO., LTD. (the "Company" or "NAGASE") at its center. In addition, the NAGASE Group manufactures and sells products and provides services. These businesses are conducted by 99 related companies, consisting of 68 subsidiaries and 31 affiliates. The scope of consolidation includes 59 subsidiaries as well as 21 affiliates, which are accounted for by the equity method.

### Overview of Results

#### Net Sales

Despite weakness in personal spending, improved corporate earnings, employment, and payrolls led to a gradual recovery in the economy of Japan during the current consolidated fiscal year. The global economy continued to grow at a moderate pace, despite slowing growth in China and other emerging economies. Other worrisome factors include uncertainty surrounding the economic and trade policies of the new U.S. administration and the impact of the British exit from the EU.

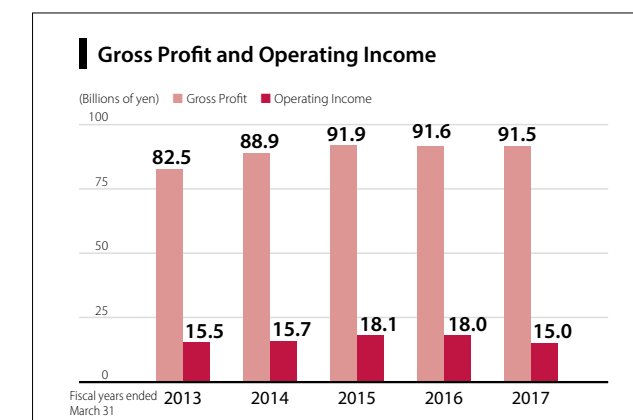
In this environment, the Company recorded domestic sales of ¥369.36 billion for the consolidated fiscal year, which represented a 1.7% increase year on year. Overseas sales, impacted by the comparatively strong yen, fell to ¥353.01 billion (6.9% decrease). In total, the Company recorded ¥722.38 billion in net sales, a decrease of 2.7%.



#### Gross Profit and Profit Attributable to Owners of the Parent

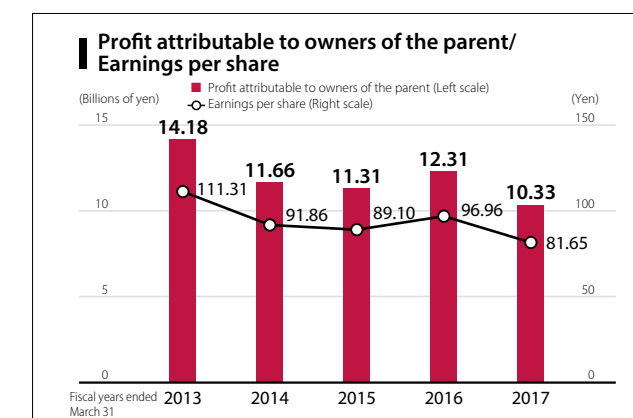
The Company recorded gross profit of ¥91.50 billion (0.2% decrease) in conjunction with lower revenues. Operating income amounted to ¥15.03 billion, a decrease of 16.6%. This decrease was mainly due to an increase in retirement benefit expense in connection with the amortization of actuarial losses. As a result, the gross profit ratio rose 0.3 points compared to the prior fiscal year, up to 12.7%, while the operating margin amounted to 2.1%.

Ordinary income amounted to ¥16.36 billion (11.0% decrease). The ratio of ordinary income to net sales fell 0.2 points to 2.3%.



The Company recorded profit before income taxes of ¥16.10 billion (5.6% increase) with a ratio of profit before income taxes to net sales of 2.2%, which was a 0.2-point increase compared to the prior fiscal year.

Profit attributable to owners of the parent amounted to ¥10.33 billion (16.1% decrease). Return on sales decreased 0.2 points to 1.4%, while earnings per share was ¥81.65, compared to ¥96.96 in the prior year.



## Results by Business Segment

### Functional Materials

Fiscal years ended March 31	(Millions of yen)	
	2016	2017
Sales to customers	¥157,149	¥153,546
Segment Income	3,679	4,185
Segment Assets	71,042	72,576
Depreciation and Amortization	509	476
Amortization of Goodwill	—	—
Goodwill	—	—
Investments in Equity Affiliates	1,752	1,716
Increase in Property, Plant, and Equipment and Intangible Fixed Assets	1,690	297

The Functional Materials segment recorded slightly lower sales in both domestic and overseas markets.

The Performance Chemicals business recorded slightly lower sales as a whole, mainly due to lower naphtha prices driving sales of coating raw materials and urethane materials down in Japan and Greater China.

The Speciality Chemicals business recorded slightly lower sales for the year. While sales of plastic additives and silicone materials were strong in the Americas, sales fell in other regions.

As a result, the segment recorded sales of ¥153.54 billion for the year, representing a ¥3.6 billion (2.3%) decrease compared to the prior consolidated fiscal year. Operating income for the segment was ¥4.18 billion, representing a ¥500 million (13.7%) increase. This increase was mainly due to lower raw materials procurement costs at domestic manufacturing subsidiaries.

### Advanced Materials & Processing

Fiscal years ended March 31	(Millions of yen)	
	2016	2017
Sales to customers	¥255,505	¥242,609
Segment Income	4,979	5,093
Segment Assets	122,802	121,346
Depreciation and Amortization	859	809
Amortization of Goodwill	—	—
Goodwill	—	—
Investments in Equity Affiliates	2,389	1,394
Increase in Property, Plant, and Equipment and Intangible Fixed Assets	1,466	3,561

The Advanced Materials & Processing segment recorded lower sales in both domestic and overseas markets.

The Colors & Advanced Processing business recorded lower sales. Despite higher sales of conductive materials from domestic manufacturing subsidiaries, sales of plastic resins for packaging applications and digital print processing materials were lower both in Japan and overseas.

The Polymer Global Account business mainly sells plastics to office equipment, appliance, and video game device markets. Here, sales were lower as a whole, as performance declines in sales of thermo-plastic resins were lower in Greater China and other overseas markets, despite gains from domestic manufacturing subsidiaries.

As a result, the segment recorded sales of ¥242.6 billion for the year, representing a ¥12.89 billion (5.0%) decrease compared to the prior consolidated fiscal year. Meanwhile, operating income increased ¥110 million (2.3%) to ¥5.09 billion, mainly due to improved product mix and cost reduction measures at domestic manufacturing subsidiaries.

### Electronics

Fiscal years ended March 31	(Millions of yen)	
	2016	2017
Sales to customers	¥127,926	¥127,722
Segment Income	6,255	6,333
Segment Assets	62,912	65,610
Depreciation and Amortization	2,672	2,524
Amortization of Goodwill	132	41
Goodwill	672	627
Investments in Equity Affiliates	1,968	2,318
Increase in Property, Plant, and Equipment and Intangible Fixed Assets	2,855	1,825

The Electronics segment recorded segment sales level with the prior year. Despite higher sales in Japan, driven by the performance of domestic manufacturing subsidiaries, overseas sales were lower.

The Electronic Chemicals business recorded increased sales for the period, driven by higher sales of formulated epoxy resin to the electronic components and semiconductor industries.

The Electronic Materials business recorded lower net sales, mainly due to lower sales of materials for touch panels and thin glass processing.

As a result, the segment recorded sales of ¥127.72 billion for the year, representing a ¥200 million (0.2%) decrease compared to the prior consolidated fiscal year. Operating income for the segment was ¥6.33 billion, representing a ¥70 million (1.2%) increase. This increase was mainly due to the contribution of higher revenues raising profits at domestic manufacturing subsidiaries.

### Automotive & Energy

Fiscal years ended March 31	(Millions of yen)	
	2016	2017
Sales to customers	¥115,351	¥112,956
Segment Income	1,300	1,539
Segment Assets	42,136	46,258
Depreciation and Amortization	157	219
Amortization of Goodwill	—	—
Goodwill	—	—
Investments in Equity Affiliates	1,355	1,235
Increase in Property, Plant, and Equipment and Intangible Fixed Assets	244	284

The Automotive Solutions business recorded slightly lower sales for the year. While sales increased thanks to growth in the resins business in Japan, the impact of lower naphtha prices drove sales down overseas.

As a result, the Automotive & Energy segment recorded sales of ¥112.95 billion for the year, representing a ¥2.39 billion (2.1%) decrease compared to the prior consolidated fiscal year. Operating income for the segment was ¥1.53 billion, representing a ¥230 million (18.4%) increase. This increase was mainly due to the profit improvements at domestic manufacturing subsidiaries.

### Life & Healthcare

Fiscal years ended March 31	(Millions of yen)	
	2016	2017
Sales to customers	¥85,571	¥84,904
Segment Income	3,864	3,332
Segment Assets	99,620	98,221
Depreciation and Amortization	3,258	3,412
Amortization of Goodwill	1,502	1,502
Goodwill	23,909	22,407
Investments in Equity Affiliates	2,385	2,476
Increase in Property, Plant, and Equipment and Intangible Fixed Assets	2,341	4,906

The Life & Healthcare segment recorded net sales slightly lower compared to the same period in the prior fiscal year. While sales were level domestically, sales from Greater China and other overseas regions were lower.

The Life & Healthcare Products business recorded slightly lower sales of TREHA™ and other products to food ingredient makers in Japan, while sales were also lower in overseas markets. Although the business recorded lower sales of AA2G™ to major Japanese customers in the skin care and toiletries field, sales of raw materials to the same field in Japan and overseas grew year on year. In the pharmaceuticals and medical fields, sales of raw pharmaceuticals and intermediates grew, significantly, while sales of medical materials were lower. As a result, the business recorded slightly lower sales compared to the prior year.

The Beauty Care Products business, which includes sales of cosmetics and health foods, recorded lower sales, mainly due to weakness in the performance of existing products, despite growth in new product sales.

As a result, the segment recorded sales of ¥84.90 billion for the year, representing a ¥660 million (0.8%) decrease compared to the prior consolidated fiscal year. Operating income for the segment was ¥3.33 billion, which was ¥530 million (13.8%) lower. This decrease was mainly due to lower profits in connection with lower sales of cosmetics and health foods.

### Others

Our Other segment recorded sales of ¥644 million, representing a ¥40 million (6.5%) decrease compared to the prior fiscal year. Segment profit amounted to ¥140 million, down ¥60 million (31.2%) versus the prior year.

## Financial Condition

### (Summary of Consolidated Cash Flows)

Cash and cash equivalents (Cash) decreased by ¥3.17 billion (7.4%) compared to the end of the prior consolidated fiscal year, amounting to ¥39.73 billion.

#### ■ Cash Flows from Operating Activities

Cash flows from operating activities for the consolidated fiscal year amounted to ¥14.52 billion. While the Company paid ¥7.73 billion in income taxes, it also recorded profit before income taxes of ¥16.1 billion and depreciation and amortization in the amount of ¥9.38 billion.

#### ■ Cash Flows from Investing Activities

Cash used in investing activities during the consolidated fiscal year amounted to ¥6.51 billion. This result was mainly due to cash outlays of ¥11.53 billion for purchases of property, plant and equipment and intangible fixed assets, as well as ¥1.82 billion used for purchases of investments in securities. These factors offset cash proceeds of ¥4.65 billion in proceeds from sales of investments in securities.

#### ■ Cash Flows from Financing Activities

Cash used in financing activities for the consolidated fiscal year amounted to ¥10.59 billion. This result was mainly due to ¥9.18 billion in repayments of long-term loans and ¥4.05 billion in dividend payments.

### Cash Flow Summary

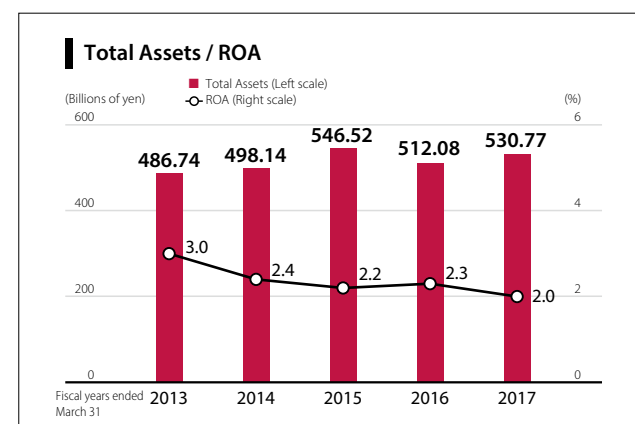
Fiscal years ended March 31	(Millions of yen)				
	2013	2014	2015	2016	2017
Cash Flows from Operating Activities	¥18,576	¥12,721	¥15,474	¥29,376	¥14,527
Cash Flows from Investing Activities	(9,529)	(14,171)	(7,732)	(12,600)	(6,518)
Cash Flows from Financing Activities	1,164	(11,833)	(3,205)	(12,822)	(10,592)



### Summary of the Consolidated Balance Sheet

#### ■ Assets

Total assets increased by ¥18.69 billion, up to ¥530.77 billion as of the end of the consolidated fiscal year. Current assets amounted to ¥321.21 billion. This represented an increase of ¥8.88 billion compared to the end of the prior consolidated fiscal year, mainly due to increases in notes and accounts receivable in excess of decreases in cash and time deposits. Non-current assets amounted to ¥209.55 billion, up ¥9.81 billion. Although the Company sold shares of affiliates during the period, higher fair values for shares retained resulted in an increase in investments in securities. As a result of these various factors.



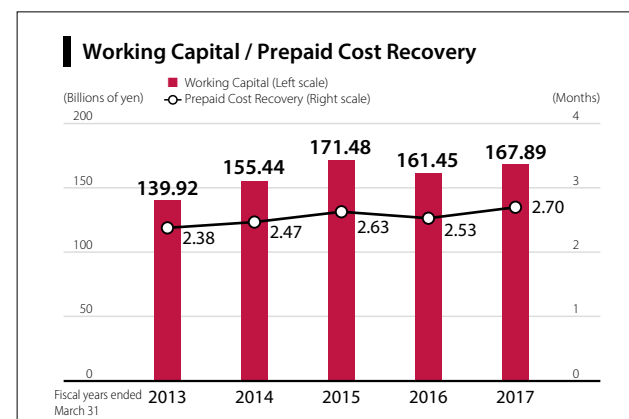
#### ■ Liabilities

Liabilities amounted to ¥235.57 billion, a ¥2.64 billion increase compared to the end of the prior consolidated fiscal year. This increase was mainly due to increases in notes and accounts payable and long-term deferred tax liabilities.

Current liabilities increased ¥10.37 billion compared to the end of the prior fiscal year, amounting to ¥166.49 billion. This increase was mainly due to increases in short-term loans and current portion of bonds.

Long-term liabilities decreased ¥7.73 billion to ¥69.08 billion. This decrease was mainly due to a decrease in bonds.

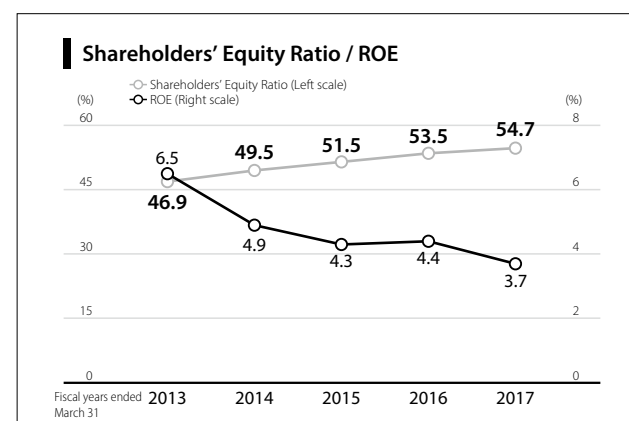
As a result, working capital increased from ¥161.45 billion at the end of the prior fiscal year to ¥167.89 billion. Prepaid cost recovery rose 0.17 months to 2.70 months. The current ratio was 192.9%, compared to 200.1% at the end of the prior year.



#### ■ Net Assets

Net assets amounted to ¥295.19 billion, up ¥16.04 billion. This increase was mainly due to ¥10.33 billion in profit attributable to owners of the parent and an increase in net unrealized holding gain in securities.

As a result, the Company recorded a shareholders' equity ratio of 54.7%, up 1.2 points compared to the end of the prior consolidated fiscal year.



#### Capital Investment

The NAGASE Group recorded ¥12.17 billion in capital investment (including intangible fixed assets), including ¥2.93 billion in capital investment for Hayashibara Co., Ltd., to stabilize supplies of functional sugar products and enhance competitiveness (in the Life & Healthcare segment).

A breakdown of capital investment amounts by segment is set forth below.

Reportable Segments	(Millions of yen)
Functional Materials	¥ 297
Advanced Materials & Processing	3,561
Electronics	1,825
Automotive & Energy	284
Life & Healthcare	4,906
Others	1,297
Total	12,173

#### Research Costs

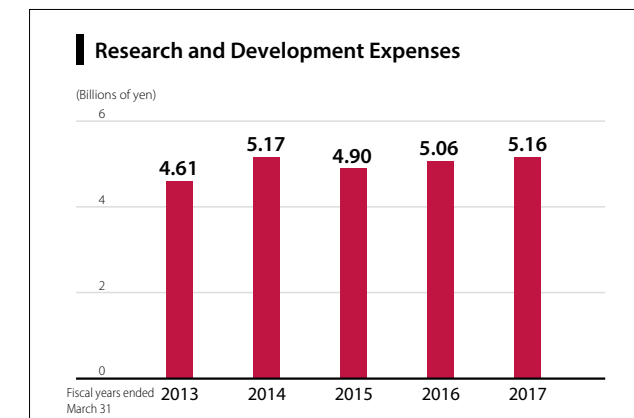
To leverage the total capacity of the Group and create new business opportunities, the NAGASE Group engages in research activities designed for marketing-driven development of new technologies and products, as well as to gather and share technological information.

The Nagase R&D Center works to advance foundational technology development and propose new avenues of research in NAGASE Group bio-related technologies. In addition to core substance production technology utilizing actinomycetes, the center has expertise in a wide variety of foundational technologies, including genetic engineering, metabolic engineering, fermentation engineering, bioprocess engineering, and bioinformatics. With these technologies, the center references the latest technologies developed at universities and other outside research institutes, coordinating with Nagase ChemteX, Hayashibara, NAGASE Group companies, and other external partners to develop eco-friendly chemicals utilizing bioprocesses. In so doing, the center plays an important role in helping create a welcoming society in which people can live in peace and safety. At present, the center is pursuing research across a wide range of disciplines, including the development of new enzymes, non-natural amino acids, and antiaging substances, as well as research applications for use in cosmetics and health foods incorporating natural extracts. The center has applied for numerous patents in these and peripheral fields. In this way, the Nagase R&D Center accomplishes its mission to develop foundational biotechnologies that usher in the future of the NAGASE Group, while developing products through the utilization of biotechnology.

The Nagase Application Workshop (NAW) is home to specialized equipment and expert staff capable of conducting raw materials analysis, application development, and final product formulation for plastics and coating materials. This organization is responsible for technological development, incubation, and research. The NAW combines the materials and processing technologies from Group manufacturing companies and other business partners to propose innovative solutions that meet the needs of customers and the market, after these needs have been identified by the NAGASE Group marketing function. This strategy is one way in which the Company proves itself to be a unique evolution of the traditional trading company business model. The NAW works to accurately formulate new elemental technologies and functional materials, as well as develop proprietary technologies we can suggest as effective solutions to our customers, developing new business ideas in cooperation with NAGASE & CO. divisions and Group companies.

Nagase ChemteX Corporation focuses on electronics, life science, automotive, and environment/energy fields. Nagase ChemteX staff, in a cross-organizational research and development division, and product development departments in each Group business work together to develop new products, leveraging our long-accumulated proprietary technologies in synthesis, compounding, biotechnology and evaluation—all developed over many years of technological experience. In particular, Nagase ChemteX works to develop high-function, high-value-added products (automobiles, aircraft, and other transport-related equipment, biomaterials, etc.) that are lightweight, durable, and recyclable.

Hayashibara Co., Ltd. conducts research and development into functional saccharides and functional dyes. The functional saccharides business consists of screening for microbes leading to the discovery and analysis of new enzyme-producing bacteria and research and development into unique functional saccharides produced from these enzyme-producing bacteria. The NAGASE Group's functional saccharides have applications and usages in a wide variety of fields, from foods to cosmetics and perfumes, pharmaceuticals, health care, agriculture, and industry. On top of our long history of technological development, we continue to explore and adopt new methods. This work has resulted in products such as TREHA™, AA2G™, and a new generation of powerful, functional saccharide products. We continue to pursue research and development programs that create new products and applications, from basic research to applied research and from application development to patents, all linked in a cohesive intellectual property strategy. In the functional dyes business, we are making use of the extensive Hayashibara functional dyes library, pursuing development to offer products and new applications in the photo and printing plate and other commercial fields, as well as in life sciences fields such as pharmaceuticals. The Group incurred a total of ¥5.16 billion in consolidated research and development expenses for the fiscal year under review.



#### Outlook for the Year Ending March 31, 2018

Personal spending is expected to remain strong throughout the next fiscal year, buoyed by an improving picture in domestic employment and payrolls. Overseas, corporate earnings and strong personal spending in the United States is expected to continue. However, the impact of policies introduced by the new U.S. administration on China and other emerging economies is unclear, leading to continued instability in the overall business environment.

For the year ending March 31, 2018, we forecast consolidated net sales of ¥732 billion (1.3% year-on-year increase), operating income of ¥19.1 billion (27.1% increase), ordinary income of ¥20.9 billion (27.7% increase), and profit attributable to owners of the parent in the amount of ¥12.5 billion (21.0% increase).

These forecasts have been developed based on a currency conversion rate of ¥108 to the US dollar.

(Announced on May 2, 2017) (Millions of yen)

	Net sales	Operating Income	Ordinary Income	Profit attributable to owners of the parent
Year ending March 31, 2018 (Projected)	¥732,000	¥19,100	¥20,900	¥12,500
Year ended March 31, 2017 (Actual)	722,384	15,030	16,361	10,331
Change	+1.3%	+27.1%	+27.7%	+21.0%

### Profit Sharing Policy

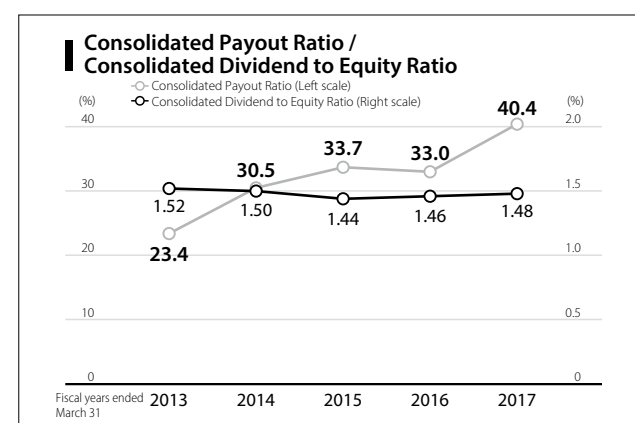
#### Dividend Policy

Our basic policy is to continue paying a stable dividend to our shareholders in line with our consolidated results as we improve our earnings power and management structure. We look to improve per-share dividends based on considerations of the consolidated payout ratio and consolidated dividend to equity ratio. We also plan to use funds from internal reserves effectively in our business activities and to build a stronger management function.

In addition, the Company has determined in its articles of incorporation, allowances or interim dividend payments according to the provisions of article 454 Paragraph 5 of the Companies Act. Accordingly, the Company's Board of Directors has resolved to adopt a dividend policy calling for two dividend payments every year, one interim subject to board of director resolution and one at the end of the fiscal year, subject to approval by the general meeting of shareholders.

The NAGASE Group declared a year-end dividend of ¥17 per share based on this policy, a ¥1 increase compared to the prior fiscal year. As a result, the scheduled full-year cash dividend will amount to ¥33 per share.

We forecast a full-year dividend of ¥35 per share for the next fiscal year, ¥2 higher than the prior year. This dividend will consist of a ¥17 per-share interim dividend and a ¥18 per share year-end dividend.



May 2, 2017. Forecasts in connection with the Group's future performance are subject to a variety of risks and uncertainties including those outlined as follows. As a result, readers are advised that actual results may differ from projections.

### Operating and Other Risks

The NAGASE Group is engaged in trading, marketing, research and development, manufacturing and processing in six business segments across the world: Functional Materials, Advanced Materials & Processing, Electronics, Automotive & Energy, Life & Healthcare, and Other.

The nature of these businesses entails various risks that may have a material effect on investment decisions. We provide a discussion of the major risks below.

Any forward-looking statements are based on management decisions as of the end of fiscal year under review.

#### (1) Overall Operating Risk

The NAGASE Group is engaged in activities that rely on the use of chemicals across a wide spectrum of products and services through our Functional Materials, Advanced Materials & Processing, Electronics, Automotive & Energy and Life & Healthcare business. These products and services include dyes/pigments, coating materials/inks, surfactants, OA, electrical equipment, home electronics, automobiles, LCDs, semiconductors, and pharmaceutical/medical applications. Accordingly, significant changes in domestic and international commercial chemicals industry could affect the NAGASE Group's earnings and financial condition.

#### (2) Product Market Conditions

The NAGASE Group handles extensive petrochemicals manufactured from naphtha in our Functional Materials, Advanced Materials & Processing, and Automotive & Energy segments. Raw materials markets and demand-supply balance are two factors that result in unique market circumstances for each of our products. Fluctuations in these factors could affect our revenues and profits in related product lines. Also, some products manufactured by the Group use raw materials derived from grains. Raw materials costs fluctuate widely due to changes in grain market prices; we may not be able to pass on increased raw materials costs through higher sales prices, which could affect our profits in related product lines.

#### (3) Impact of Fluctuations in Foreign Currency Exchange Rates

The NAGASE Group conducts import/export as well as non-trade business transactions denominated in foreign currencies. Fluctuations in currency markets have a significant impact when prices are converted to yen. While the Group executes exchange contract hedges for these transactions to minimize exchange rate risk to the greatest extent possible, currency exchange rate fluctuations could have a significant impact on Group earnings and financial conditions. The NAGASE Group owns foreign-domiciled corporations whose financial statements are prepared using local currencies. The conversion of these currencies to Japanese yen for consolidated reporting purposes entails currency conversion risk due to fluctuating exchange rates.

#### (4) Impact of Fluctuations in Interest Rates

The NAGASE Group obtains funds for operating and investing activities through loans from financial institutions; some of these loans are interest-bearing debt including variable interest terms. The Group reduces interest rate fluctuation risk related to variable interest loans by utilizing interest-rate swap contracts. Group earnings and financial conditions may be affected by future interest rate trends. Interest rate fluctuations cause variations in discount rates used for retirement benefit obligations and plan asset investment income, impacting NAGASE Group business performance and financial position.

#### (5) Risks Involved in Operating Overseas

A significant and increasing percentage of NAGASE Group sales and manufacturing are conducted overseas in locations such as China, Southeast Asia, Europe, and the United States. While Group management keeps a close eye on local trends and conditions in order to respond appropriately, unforeseen events stemming from local government regulations, business customs, or other influences could have an impact on Group business performance and financial conditions.

#### (6) Impact of Changes in Stock Prices

The NAGASE Group maintains a portfolio of marketable securities, primarily equity shares of companies doing business with the Group. These equity investments are subject to share price fluctuation risks. As a matter of policy, the NAGASE Group reduces risk by continuously reviewing and reorganizing its shareholdings. However, changes in share prices could impact Group earnings and financial condition. A decline in share prices could damage the value of pension plan assets managed by the Group, increasing retirement benefit costs and thereby reducing Group profits.

#### (7) Counterparty Credit Risk

The NAGASE Group extends credit to domestic and overseas purchasers in connection with various transactions. As a matter of policy, the NAGASE Group reduces credit risk by obtaining guarantees, collateral, and insurance, etc. according to the financial condition of the purchaser. Although the NAGASE Group strives to ensure stable, uninterrupted product procurement, financial weakness or bankruptcies among suppliers or others could damage the Group's ability to procure goods. Such circumstances could have an impact on the Group's earnings and financial condition.

#### (8) Risk of Investments

The NAGASE Group engages in investment activities to establish new companies, to invest in equipment at manufacturing subsidiaries, and to acquire other business entities. These types of investment activities involve certain risks, including the risk of failing to recover investments in cases where the Company is not able to record profits at initially planned levels, the risk that additional funding may be required, and the risk that the Group will not be able to withdraw from investments according to the desired timing and method. The NAGASE Group strives to reduce risk in this area. Decisions to invest in new businesses are made after a careful study of the viability of business plans and profitability. At the same time, the Group regularly monitors the performance of existing investments. However, even

these management initiatives cannot completely negate potential investment risk, and such risk may have an impact on Group earnings and financial condition.

#### (9) Risk of Asset Impairment

The NAGASE Group owns non-current assets such as business assets in manufacturing subsidiaries and goodwill. These assets entail the risk of impairment loss if asset value declines. The NAGASE Group records impairment losses when deemed necessary. However, even greater impairment losses may be incurred as a result of deteriorating business profits or other factors in the future, which may have an impact on Group business performance and financial condition.

#### (10) Product Quality Risk

The NAGASE Group operates the Nagase R&D Center and manufacturing subsidiaries to offer high-value-added products to our customers. We pay detailed attention to the quality of the technologies and products that bear the name of NAGASE and our affiliates. We also bear manufacturers' liability for imported products, products manufactured on a contract basis, etc. Accordingly, the Group treats these products with the same attention to detail and quality as if they were made in our own facilities. However, product defects could result in cessation of sales and/or product recalls, exposing the NAGASE Group to liability for damages, which could have an impact on Group earnings and financial conditions.

#### (11) Risks related to Product Laws

The NAGASE Group imports, exports, and sells domestically a wide variety of chemicals and other products for a broad range of uses. To maintain international peace and safety, the chemicals and other items we export are subject to different laws, including the Foreign Exchange and Foreign Trade Control Law and the Export Trade Control Order. Imports and domestic sales are subject to the Chemical Substances Control Law and other related statutes, as well as similar regulations in foreign jurisdictions. To ensure compliance, the Group has established internal Security Trade Control Regulations and Chemical/Product Control Regulations. However, a violation of such laws and statutes could result in restrictions on Group business activities, having an impact on Group earnings and financial condition.

#### (12) Risks of Natural Disasters

The NAGASE Group has put emergency response systems in place, including the creation of a business contingency plan, the adoption of safety confirmation systems, the creation of a disaster-response manual, earthquake-response measures, disaster-response training, and other measures to deal with natural disasters. However, as we conduct business across a great number of countries and regions, we are exposed to the risk of major natural disasters, H1N1 influenza and other communicable diseases, and other emergencies that could disrupt our supply chain. Such disruptions could prevent us from selling our products or damage the manufacturing capabilities of important Group facilities. Such interruptions would result in opportunity loss, and could have a significant impact on Group earnings and financial condition.



# Consolidated Balance Sheet

NAGASE & CO., LTD. and Consolidated Subsidiaries (March 31, 2017 and 2016)

ASSETS	Millions of yen		Thousands of
	2017	2016	U.S. dollars (Note 1)
<b>Current assets:</b>			<b>2017</b>
Cash and time deposits (Notes 14 and 20)	¥ 39,830	¥ 43,283	\$ 355,023
Notes and accounts receivable (Note 14)	206,846	196,335	1,843,712
Inventories (Note 4)	63,120	62,920	562,617
Deferred tax assets (Note 11)	2,375	2,842	21,169
Other current assets	9,681	7,843	86,291
Less allowance for doubtful accounts	(638)	(890)	(5,687)
Total current assets	321,215	312,334	2,863,134
<b>Property, plant and equipment, at cost (Notes 5 and 6):</b>			
Land	21,939	18,910	195,552
Buildings and structures	54,911	55,731	489,446
Machinery, equipment and vehicles	83,372	83,243	743,132
Leased assets	532	503	4,742
Construction in progress	1,874	1,876	16,704
	162,630	160,265	1,449,594
Less accumulated depreciation	(95,011)	(93,790)	(846,876)
Property, plant and equipment, net (Note 21)	67,619	66,474	602,719
<b>Investments and other assets:</b>			
Investments in securities (Notes 7 and 14):			
Unconsolidated subsidiaries and affiliates	7,788	9,498	69,418
Other	86,759	71,847	773,322
	94,548	81,345	842,749
Long-term loans receivable	482	1,023	4,296
Goodwill (Note 21)	23,034	24,582	205,312
Technology-based assets	13,791	15,366	122,925
Asset for retirement benefits (Note 10)	1	—	9
Deferred tax assets (Note 11)	1,524	1,544	13,584
Other assets (Note 6)	8,846	9,584	78,848
Less allowance for doubtful accounts	(289)	(174)	(2,576)
Total investments and other assets	141,940	133,272	1,265,175
Total assets (Note 21)	¥530,775	¥512,081	\$4,731,037

LIABILITIES AND NET ASSETS	Millions of yen		Thousands of
	2017	2016	U.S. dollars (Note 1)
<b>Current liabilities:</b>			<b>2017</b>
Notes and accounts payable (Note 14)	¥102,076	¥ 97,800	\$ 909,849
Short-term loans (Notes 8 and 14)	28,162	25,294	251,021
Current portion of long-term loans and finance lease obligations (Notes 8 and 14)	3,582	8,895	31,928
Current portion of bonds (Notes 8 and 14)	10,000	—	89,135
Accrued income taxes (Note 11)	1,849	4,305	16,481
Deferred tax liabilities (Note 11)	37	13	330
Accrued expenses	3,095	3,551	27,587
Accrued bonuses for employees	4,512	4,224	40,217
Accrued bonuses for directors and executive officers	171	194	1,524
Other current liabilities	13,006	11,838	115,928
Total current liabilities	166,494	156,118	1,484,036
<b>Long-term liabilities:</b>			
Bonds (Notes 8 and 14)	20,000	30,000	178,269
Long-term loans and finance lease obligations (Notes 8 and 14)	20,335	23,370	181,255
Deferred tax liabilities (Note 11)	13,503	8,433	120,358
Liability for retirement benefits (Note 10)	14,625	14,060	130,359
Other long-term liabilities	617	949	5,500
Total long-term liabilities	69,082	76,813	615,759
<b>Contingent liabilities (Note 18)</b>			
<b>Net assets:</b>			
<b>Shareholders' equity (Note 12):</b>			
Common stock:			
Authorized— 346,980,000 shares			
Issued— 127,408,285 shares in 2017 and 2016	9,699	9,699	86,452
Capital surplus	11,590	11,615	103,307
Retained earnings (Note 22)	219,721	213,572	1,958,472
Treasury stock, at cost (Note 13)—1,287,366 shares in 2017 and 377,300 shares in 2016	(1,337)	(230)	(11,917)
Total shareholders' equity	239,674	234,657	2,136,322
<b>Accumulated other comprehensive income (loss):</b>			
Net unrealized holding gain on securities (Note 7)	47,683	37,074	425,020
Deferred gain (loss) on hedges (Note 14)	4	(9)	36
Translation adjustments	3,129	4,411	27,890
Retirement benefit liability adjustments (Note 10)	(274)	(2,169)	(2,442)
Total accumulated other comprehensive income	50,542	39,305	450,504
<b>Non-controlling interests</b>	4,981	5,185	44,398
Total net assets	295,198	279,149	2,631,233
Total liabilities and net assets	¥530,775	¥512,081	\$4,731,037

See notes to consolidated financial statements.

## Consolidated Statement of Income

NAGASE & CO., LTD. and Consolidated Subsidiaries (Years ended March 31, 2017 and 2016)

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2017	2016	2017
Net sales (Note 21)	¥722,384	¥742,194	\$6,438,934
Cost of sales (Note 16)	630,881	650,530	5,623,326
<b>Gross profit</b>	<b>91,503</b>	91,663	<b>815,607</b>
Selling, general and administrative expenses (Note 16)	76,472	73,639	681,629
<b>Operating income (Note 21)</b>	<b>15,030</b>	18,024	<b>133,969</b>
Other income (expenses):			
Interest and dividend income	1,812	1,562	16,151
Interest expense	(1,032)	(1,048)	(9,199)
Equity in earnings of affiliates	217	—	1,934
Equity in losses of affiliates	—	(48)	—
Gain on sales of investments in securities (Note 7)	2,006	70	17,880
Gain on sales of shares of an affiliate	—	33	—
Loss on sales of shares of a subsidiary and affiliates	(290)	—	(2,585)
Loss on devaluation of investments in securities	(106)	(70)	(945)
Gain on sales of property, plant and equipment	239	57	2,130
Loss on sales of property, plant and equipment	(60)	(47)	(535)
Loss on disposal of property, plant and equipment	(227)	(251)	(2,023)
Loss on impairment of fixed assets (Notes 6 and 21)	(1,398)	(2,756)	(12,461)
Loss on reduction of property, plant and equipment	(290)	—	(2,585)
Subsidy income	314	—	2,799
Other, net	(112)	(287)	(998)
<b>Profit before income taxes</b>	<b>16,100</b>	15,239	<b>143,507</b>
Income taxes (Note 11):			
Current	5,020	6,536	44,746
Deferred	417	(3,763)	3,717
<b>Profit</b>	<b>10,662</b>	12,466	<b>95,035</b>
Profit attributable to:			
Non-controlling interests	(330)	(150)	(2,941)
<b>Owners of parent</b>	<b>¥ 10,331</b>	¥ 12,316	<b>\$ 92,085</b>

See notes to consolidated financial statements.

## Consolidated Statement of Comprehensive Income

NAGASE & CO., LTD. and Consolidated Subsidiaries (Years ended March 31, 2017 and 2016)

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2017	2016	2017
<b>Profit</b>	<b>¥10,662</b>	¥ 12,466	<b>\$ 95,035</b>
Other comprehensive income (loss) (Note 9):			
Net unrealized holding gain (loss) on securities	10,602	(7,844)	94,500
Deferred gain (loss) on hedges	14	(13)	125
Translation adjustments	(1,223)	(5,065)	(10,901)
Retirement benefit liability adjustments	1,895	(2,835)	16,891
Share of other comprehensive loss of affiliates accounted for by the equity method	(152)	(553)	(1,355)
	11,135	(16,312)	99,251
<b>Comprehensive income (loss)</b>	<b>¥21,798</b>	¥ (3,845)	<b>\$194,295</b>
Total comprehensive income (loss) attributable to:			
Owners of parent	¥21,622	¥ (3,446)	\$192,727
Non-controlling interests	¥ 175	¥ (399)	\$ 1,560

See notes to consolidated financial statements.

## Consolidated Statement of Changes in Net Assets

NAGASE & CO., LTD. and Consolidated Subsidiaries (Years ended March 31, 2017 and 2016)

	Millions of yen											
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity	Net unrealized holding gain on securities	Deferred gain (loss) on hedges	Translation adjustments	Retirement benefit liability adjustments (Note 10)	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
<b>Balance at April 1, 2015</b>	¥ 9,699	¥ 11,654	¥ 205,203	¥ (228)	¥ 226,328	¥ 44,920	¥ 3	¥ 9,478	¥ 666	¥ 55,069	¥ 6,102	¥ 287,500
Profit attributable to owners of parent	—	—	12,316	—	12,316	—	—	—	—	—	—	12,316
Cash dividends	—	—	(3,937)	—	(3,937)	—	—	—	—	—	—	(3,937)
Purchases of treasury stock	—	—	—	(1)	(1)	—	—	—	—	—	—	(1)
Changes in parent's ownership interest due to transactions with non-controlling interests	—	(38)	—	—	(38)	—	—	—	—	—	—	(38)
Decrease in retained earnings resulting from changes in scope of consolidation	—	—	(9)	—	(9)	—	—	—	—	—	—	(9)
Other changes	—	—	—	—	—	(7,845)	(13)	(5,067)	(2,835)	(15,763)	(916)	(16,679)
<b>Balance at April 1, 2016</b>	<b>9,699</b>	<b>11,615</b>	<b>213,572</b>	<b>(230)</b>	<b>234,657</b>	<b>37,074</b>	<b>(9)</b>	<b>4,411</b>	<b>(2,169)</b>	<b>39,305</b>	<b>5,185</b>	<b>279,149</b>
Profit attributable to owners of parent	—	—	10,331	—	10,331	—	—	—	—	—	—	10,331
Cash dividends	—	—	(4,050)	—	(4,050)	—	—	—	—	—	—	(4,050)
Purchases of treasury stock	—	—	—	(1,107)	(1,107)	—	—	—	—	—	—	(1,107)
Disposition of treasury stock	—	0	—	0	0	—	—	—	—	—	—	0
Changes in parent's ownership interest due to transactions with non-controlling interests	—	(25)	—	—	(25)	—	—	—	—	—	—	(25)
Changes resulting from merger with an unconsolidated subsidiary	—	—	0	—	0	—	—	—	—	—	—	0
Decrease in retained earnings resulting from changes in scope of equity method	—	—	(132)	—	(132)	—	—	—	—	—	—	(132)
Other changes	—	—	—	—	—	10,609	14	(1,281)	1,895	11,236	(204)	11,032
<b>Balance at March 31, 2017</b>	<b>¥9,699</b>	<b>¥11,590</b>	<b>¥219,721</b>	<b>¥(1,337)</b>	<b>¥239,674</b>	<b>¥47,683</b>	<b>¥ 4</b>	<b>¥ 3,129</b>	<b>¥ (274)</b>	<b>¥50,542</b>	<b>¥4,981</b>	<b>¥295,198</b>

	Thousands of U.S. dollars (Note 1)											
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity	Net unrealized holding gain on securities	Deferred gain (loss) on hedges	Translation adjustments	Retirement benefit liability adjustments (Note 10)	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
<b>Balance at April 1, 2016</b>	<b>\$86,452</b>	<b>\$103,530</b>	<b>\$1,903,663</b>	<b>\$ (2,050)</b>	<b>\$2,091,604</b>	<b>\$330,457</b>	<b>\$ (80)</b>	<b>\$ 39,317</b>	<b>\$(19,333)</b>	<b>\$350,343</b>	<b>\$46,216</b>	<b>\$2,488,181</b>
Profit attributable to owners of parent	—	—	92,085	—	92,085	—	—	—	—	—	—	92,085
Cash dividends	—	—	(36,099)	—	(36,099)	—	—	—	—	—	—	(36,099)
Purchases of treasury stock	—	—	—	(9,867)	(9,867)	—	—	—	—	—	—	(9,867)
Disposition of treasury stock	—	0	—	0	0	—	—	—	—	—	—	0
Changes in parent's ownership interest due to transactions with non-controlling interests	—	(223)	—	—	(223)	—	—	—	—	—	—	(223)
Changes resulting from merger with an unconsolidated subsidiary	—	—	0	—	0	—	—	—	—	—	—	0
Decrease in retained earnings resulting from changes in scope of equity method	—	—	(1,177)	—	(1,177)	—	—	—	—	—	—	(1,177)
Other changes	—	—	—	—	—	94,563	125	(11,418)	16,891	100,152	(1,818)	98,333
<b>Balance at March 31, 2017</b>	<b>\$86,452</b>	<b>\$103,307</b>	<b>\$1,958,472</b>	<b>\$(11,917)</b>	<b>\$2,136,322</b>	<b>\$425,020</b>	<b>\$ 36</b>	<b>\$ 27,890</b>	<b>\$(2,442)</b>	<b>\$450,504</b>	<b>\$44,398</b>	<b>\$2,631,233</b>

See notes to consolidated financial statements.



# Consolidated Statement of Cash Flows

NAGASE & CO., LTD. and Consolidated Subsidiaries (Years ended March 31, 2017 and 2016)

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2017	2016	2017
<b>Operating activities:</b>			
Profit before income taxes	¥ 16,100	¥ 15,239	\$ 143,507
Adjustments to reconcile profit before income taxes to net cash provided by operating activities:			
Depreciation and amortization other than amortization of goodwill	9,381	9,493	83,617
Amortization of goodwill	1,543	1,634	13,753
Loss on impairment of fixed assets	1,398	2,756	12,461
Subsidy income	(314)	—	(2,799)
Loss on reduction of property, plant and equipment	290	—	2,585
Increase (decrease) in liability for retirement benefits	3,297	(848)	29,388
Interest and dividend income	(1,812)	(1,562)	(16,151)
Interest expense	1,032	1,048	9,199
Exchange loss (gain), net	345	(640)	3,075
Gain on sales of property, plant and equipment, net	(178)	(10)	(1,587)
Gain on sales of investments in securities, investments in capital, shares of subsidiaries and affiliates, and investments in capital of subsidiaries and affiliates, net	(1,690)	(94)	(15,064)
Changes in operating assets and liabilities:			
Notes and accounts receivable	(11,885)	6,784	(105,936)
Inventories	(1,017)	3,162	(9,065)
Notes and accounts payable	5,198	(3,829)	46,332
Other, net	(614)	(168)	(5,473)
Subtotal	21,075	32,964	187,851
Interest and dividends received	2,235	1,965	19,922
Interest paid	(1,045)	(1,013)	(9,315)
Income taxes paid	(7,737)	(4,540)	(68,963)
Net cash provided by operating activities	14,527	29,376	129,486
<b>Investing activities:</b>			
Purchases of property, plant and equipment	(10,667)	(8,937)	(95,080)
Proceeds from sales of property, plant and equipment	976	414	8,700
Purchases of intangible fixed assets included in other assets	(867)	(1,898)	(7,728)
Purchases of investments in securities	(1,825)	(2,129)	(16,267)
Proceeds from sales of investments in securities	4,658	213	41,519
Purchases of investments in capital	(53)	(358)	(472)
Proceeds from sales of shares of a subsidiary resulting in change in scope of consolidation	293	—	2,612
Decrease (increase) in short-term loans receivable included in other current assets, net	434	(177)	3,868
Decrease (increase) in time deposits, net	274	(351)	2,442
Proceeds from subsidy income	314	—	2,799
Other, net	(54)	623	(481)
Net cash used in investing activities	(6,518)	(12,600)	(58,098)
<b>Financing activities:</b>			
Increase (decrease) in short-term loans, net	3,232	(3,764)	28,808
Proceeds from long-term loans	950	1,976	8,468
Repayments of long-term loans	(9,182)	(6,440)	(81,843)
Proceeds from issuance of bonds	—	9,949	—
Redemption of bonds	—	(10,000)	—
Purchase of treasury stock	(1,107)	(1)	(9,867)
Cash dividends paid	(4,050)	(3,937)	(36,099)
Cash dividends paid to non-controlling interests	(254)	(421)	(2,264)
Other, net	(181)	(182)	(1,613)
Net cash used in financing activities	(10,592)	(12,822)	(94,411)
<b>Effect of exchange rate changes on cash and cash equivalents</b>	(596)	(1,575)	(5,312)
<b>Net (decrease) increase in cash and cash equivalents</b>	(3,180)	2,377	(28,345)
<b>Cash and cash equivalents at beginning of the year</b>	42,900	40,522	382,387
<b>Increase in cash and cash equivalents resulting from merger with an unconsolidated subsidiary</b>	10	—	89
<b>Cash and cash equivalents at end of the year (Note 20)</b>	¥ 39,730	¥ 42,900	\$ 354,131

See notes to consolidated financial statements.

# Notes to Consolidated Financial Statements

NAGASE & CO., LTD. and Consolidated Subsidiaries (March 31, 2017)

## 1. BASIS OF PREPARATION

The accompanying consolidated financial statements of NAGASE & CO., LTD. (the "Company") and consolidated subsidiaries are prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards, and have been compiled from the consolidated financial statements prepared by the Company as required by the Financial Instruments and Exchange Act of Japan.

In preparing the accompanying consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a format which is more familiar to readers outside Japan.

Certain amounts in the prior year's consolidated financial statements have been reclassified to conform to the current year's presentation. Such reclassifications had no effect on consolidated profit or net assets.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### (a) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and companies that it controls directly or indirectly. Affiliates over which the Company exercises significant influence in terms of their operating and financial policies have been accounted for by the equity method. All significant intercompany balances and transactions have been eliminated in consolidation.

Certain subsidiaries were excluded from the scope of consolidation because the effect of their sales, net profit or loss, total assets and retained earnings on the accompanying consolidated financial statements was immaterial. The unconsolidated subsidiaries and affiliates not accounted for by the equity method were excluded from the scope of application of the equity method, because their profit or loss and retained earnings attributable to the Company's interest were not material to the consolidated financial statements.

For consolidation purposes, the financial statements of the consolidated subsidiaries whose fiscal year end date differs from that of the Company have been included in consolidation based on a provisional statement of accounts for a full fiscal year ending March 31.

Unrealized intercompany gains among the Company and the consolidated subsidiaries have been entirely eliminated and the portion attributable to non-controlling interests has been charged to non-controlling interests.

### (b) Foreign currency translation

All monetary assets and liabilities denominated in foreign currencies are translated into yen at the rates of exchange in effect at the balance sheet date, except that receivables and payables hedged by qualified foreign currency forward exchange contracts are translated at the corresponding contract rates. All other assets and liabilities denominated in foreign currencies are translated at their historical rates. Gain or loss on each translation is credited or charged to income.

Revenue and expense items arising from transactions denominated in foreign currencies are generally translated into yen at the rates in effect at the respective transaction dates. Foreign exchange gain or loss is credited or charged to income in the period in which such gain or loss is recognized for financial reporting purposes.

The U.S. dollar amounts in the accompanying consolidated financial statements have been translated from yen amounts solely for the convenience of the reader, as a matter of arithmetic computation only, at ¥112.19 = U.S.\$1.00, the rate of exchange prevailing on March 31, 2017. This translation should not be construed as a representation that the yen amounts have been, could have been, or could in the future be, converted into U.S. dollars at the above or any other rate.

As permitted by the Financial Instruments and Exchange Act of Japan, amounts of less than one million yen for the years ended March 31, 2017 and 2016 have been omitted. Consequently, the totals shown in the accompanying consolidated financial statements for the years ended March 31, 2017 and 2016 (both in yen and in U.S. dollars) do not necessarily agree with the sum of the individual amounts.

The balance sheet accounts of the overseas consolidated subsidiaries are translated into yen at the rates of exchange in effect at the balance sheet date, except that the components of net assets excluding non-controlling interests, net unrealized holding gain on securities, and deferred gain or loss on hedges are translated at their historical exchange rates. Revenue and expense accounts are translated at the average rates of exchange in effect during the year. Adjustments resulting from translating financial statements whose accounts are denominated in foreign currencies are not included in the determination of net income but are reported as "Translation adjustments" as a component of accumulated other comprehensive income or loss in the accompanying consolidated balance sheets.

### (c) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand, demand deposits, and short-term investments which are readily convertible to cash and subject to an insignificant risk of any change in their value, which were purchased with an original maturity of three months or less.

### (d) Inventories

Inventories are stated at the lower of cost or net selling value, cost being determined primarily by the moving-average method.

### (e) Investments in securities

Securities are classified into three categories: trading securities, held-to-maturity debt securities or other securities. Trading securities, consisting of debt and marketable equity securities, are stated at fair value. Gain and loss, both realized and unrealized, are credited or charged to income. Held-to-maturity debt securities are stated at their amortized cost. Marketable securities classified as other securities are carried at fair value with any changes in unrealized holding gain or loss, net of the applicable income taxes, reported as a separate component of accumulated other comprehensive income or loss. Non-marketable securities classified as other securities are carried at cost determined by the moving-average method.

### (f) Property, plant and equipment and depreciation (except for leased assets)

Property, plant and equipment are stated at cost.

Depreciation of property, plant and equipment is calculated by the straight-line method based on the estimated useful lives of the respective assets.

The estimated useful lives of the principal assets are as follows:

Buildings	
(other than structures attached to the buildings)	15 to 50 years
Machinery and equipment	2 to 17 years

**(g) Intangible assets (except for leased assets)**

Technology-based assets recognized upon acquisition are amortized on a straight-line basis over 13 to 17 years.

Costs incurred for computer software obtained for internal use are capitalized and amortized on a straight-line basis over an estimated useful life of 5 years.

**(h) Goodwill**

Goodwill is amortized over a period not exceeding 20 years on a straight-line basis. When immaterial, goodwill is charged to income as incurred.

**(i) Leased assets**

Leased assets under finance lease contracts which do not transfer ownership to the lessee are depreciated to a residual value of zero by the straight-line method over the respective lease terms.

**(j) Allowance for doubtful accounts**

The Company and its consolidated subsidiaries provide allowances for doubtful accounts based on their historical experience of bad debts on ordinary receivables plus an additional estimate of probable specific doubtful accounts from customers experiencing financial difficulties.

**(k) Income taxes**

Income taxes are calculated based on taxable income and charged to income on an accrual basis. Deferred tax assets and liabilities are computed based on the temporary differences between the financial reporting and the tax bases of the assets and liabilities that will result in taxable or deductible amounts in the future. Computations of deferred tax assets and liabilities are based on the tax rates which have been enacted as of the balance sheet date or are subsequently enacted.

**(l) Application of consolidated taxation system**

The Company and certain domestic consolidated subsidiaries adopted the consolidated taxation system from the year ended March 31, 2017.

**(m) Accrued bonuses for employees**

Accrued bonuses for employees are provided based on the estimated amount of bonuses to be paid to employees in the following fiscal year which is attributable to the current fiscal year.

**(n) Accrued Bonuses for Directors and Executive Officers**

Accrued bonuses for directors and executive officers are provided based on the estimated amount of bonuses to be paid to directors and executive officers in the following fiscal year which is attributable to the current fiscal year.

**(o) Liability for retirement benefits**

Liability for retirement benefits is provided based on the amount of the retirement benefit obligation less estimated pension plan assets at the end of the fiscal year. The estimated benefit is attributed to each period based on the plan's benefit formula.

### 3. ACCOUNTING CHANGES

**(a) Change in Method of Inventory Valuation**

Inventories of the Company and certain domestic consolidated subsidiaries, which were previously determined by the weighted-average method, are now determined by the moving-average method, effective from the year ended March 31, 2017. As a result of the adoption of new core systems in August 2016, this change was implemented

Prior service cost is charged to income in the fiscal year in which such cost is recognized for financial reporting purposes. Actuarial differences are principally credited or charged to income in the fiscal year following the fiscal year in which such differences are recognized for financial reporting purposes.

**(p) Derivatives and hedging activities**

Derivative positions are carried at fair value with any changes in unrealized gain or loss charged or credited to income, except for those which meet the criteria for deferral hedge accounting under which unrealized gain or loss is deferred as a component of net assets. Foreign currency receivables and payables hedged by qualified foreign currency forward exchange contracts are translated at the corresponding foreign exchange contract rates ("allocation method"). Interest-rate swaps which meet certain conditions are accounted for as if the interest rates applied to the swaps had originally applied to the underlying loans.

Derivative financial instruments are utilized principally in order to manage the risk arising from adverse fluctuation in foreign currency exchange rates and interest-rate swaps are also utilized to mitigate the risk of fluctuation in interest rates on loans. Hedging instruments are foreign currency forward exchange contracts, foreign currency deposits, foreign currency loans and interest-rate swaps. Hedged items are foreign currency receivables and payables, forecast transactions and interest rates on loans from financial institutions.

The Company and its consolidated subsidiaries (collectively, the "Group") manage derivative transactions in accordance with internal management rules. Under these rules, the Group conducts foreign currency forward exchange contracts within a range of actual demand of accounts receivable, accounts payable and actual transactions in foreign currencies. Execution and management of interest-rate swaps are based on internal management rules and hedged items of interest-rate swaps are identified by individual contracts.

The Company and certain consolidated subsidiaries assess the effectiveness of the hedging activities based on a comparison of the accumulated fluctuations of the hedged items and those of the hedging instruments in the period from the start of the hedging activities to the assessment date. However, with regard to interest-rate swaps which meet certain conditions, the evaluation of effectiveness is omitted.

**(q) Research and development costs**

Research and development costs are charged to income when incurred.

**(r) Distributions of retained earnings**

Dividends and other distributions of retained earnings are approved by the shareholders at a meeting held subsequent to the end of the fiscal year to which such distributions are applicable. The accompanying consolidated financial statements do not, however, reflect the applicable distributions of retained earnings as approved by the shareholders subsequent to the fiscal year end. (Refer to Note 22.)

for the purpose of conducting periodic profit and loss accounting more promptly and accurately, by calculating costs of inventories on a more timely basis.

As the effect of this change on the consolidated financial statements as of March 31, 2017 and for the year then ended was immaterial, the moving-average method was not applied retrospectively.

**(b) Implementation guidance on recoverability of deferred tax assets**

Effective April 1, 2016, the Company and its domestic consolidated subsidiaries adopted "Revised Implementation Guidance on

Recoverability of Deferred Tax Assets" (Accounting Standards Board of Japan ("ASBJ") Guidance No. 26, March 28, 2016).

### 4. INVENTORIES

Inventories at March 31, 2017 and 2016 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Merchandise and finished goods	¥58,162	¥57,404	\$518,424
Work in process	1,309	1,726	11,668
Raw materials and supplies	3,648	3,789	32,516
Total	¥63,120	¥62,920	\$562,617

### 5. REDUCTIONS IN ACQUISITION COST DUE TO SUBSIDIES

The amounts of subsidies received from the national government and deducted from the acquisition cost of property, plant and equipment at March 31, 2017 and 2016 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Buildings and structures	¥359	¥140	\$3,200
Machinery, equipment and vehicles	575	511	5,125
Total	¥935	¥652	\$8,334

### 6. LOSS ON IMPAIRMENT OF FIXED ASSETS

Loss on impairment of fixed assets for the years ended March 31, 2017 and 2016 was as follows:

Major use	Classification	Area	Millions of yen		Thousands of U.S. dollars
			2017	2016	2017
Business-use assets for manufacturing and selling of color formers	Buildings and structures, machinery, equipment and vehicles, construction in progress, intangible assets included in other assets	Hokuriku	¥1,233		\$10,990
Business-use assets for manufacturing and selling of color formers	Machinery, equipment and vehicles	Tennessee, U.S.A	15		134
Business-use assets for processing and selling of plastic materials	Buildings and structures, machinery, equipment and vehicles, intangible assets included in other assets	Kinki	85		758
Business-use assets for manufacturing and selling of rechargeable battery systems	Machinery, equipment and vehicles, intangible assets included in other assets	Tokai	38		339
Business-use assets for manufacturing and selling of polymer products	Buildings and structures	Tokai	17		152
Business-use assets for semiconductors and display devices	Buildings and structures, machinery, equipment and vehicles	Kanto	1		9
Idle assets	Land	Kinki	6		53
Total			¥1,398		\$12,461



Major use	Classification	Area	Millions of yen
			2016
Goodwill for developing, manufacturing and selling of industrial adhesives and other	Goodwill	Ohio, U.S.A	¥1,364
Business-use assets for manufacturing and selling of color formers	Buildings and structures, machinery, equipment and vehicles	Tennessee, U.S.A	500
Business-use assets for processing of thin glass panels	Buildings and structures, machinery, equipment and vehicles	Fujian, China	440
Business-use assets for processing and selling of plastic materials	Buildings and structures, machinery, equipment and vehicles, intangible assets included in other assets	Kinki	304
Business-use assets for manufacturing and selling of rechargeable battery systems	Buildings and structures, construction in progress, intangible assets included in other assets	Tokai	36
Business-use assets for semiconductors and display devices	Machinery, equipment and vehicles, intangible assets included in other assets	Kanto	19
Idle assets	Land, buildings and structures, machinery, equipment and vehicles	Kinki and other	91
<b>Total</b>			<b>¥2,756</b>

The Company and its consolidated subsidiaries group fixed assets for business use principally based on its business management segment. They also group fixed assets to be disposed of and idle assets at each asset individually as smallest cash-generating units.

For the year ended March 31, 2017, due to decreasing profitability on business-use assets, the carrying values were reduced to their recoverable amounts. As to idle assets, due to a declining fair value, the carrying values were reduced to their recoverable amounts.

The recoverable amounts were measured at net selling value or value in use. Net selling value was calculated based on the appraisal value published by the tax authorities or the real estate appraisers.

For the year ended March 31, 2016, as achieving the initially projected level of income could no longer be expected, the carrying

value of goodwill mainly for developing, manufacturing and selling industrial adhesives was reduced to the recoverable amount. In addition, due to decreasing profitability on business-use assets, their carrying values were reduced to their recoverable amounts. As to idle assets, due to a declining fair value, their carrying values were reduced to their recoverable amounts.

The recoverable amounts were measured at net selling value or value in use. The value in use of goodwill is measured based on future cash-flows using a discount rate of 9.1%. In addition, the value in use of processing facilities for thin glass panels is measured based on future cash-flows using a discount rate of 10.1%. Net selling value was calculated based on the appraisal value published by the tax authorities or the real estate appraisers.

## 7. INVESTMENTS IN SECURITIES

(a) Marketable securities classified as other securities at March 31, 2017 and 2016 are summarized as follows:

	Millions of yen					
	2017			2016		
	Carrying value	Acquisition costs	Unrealized gain (loss)	Carrying value	Acquisition costs	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition costs:						
Equity securities	¥83,820	¥16,299	¥67,520	¥69,183	¥16,378	¥52,805
Securities whose carrying value does not exceed their acquisition costs:						
Equity securities	269	344	(74)	518	678	(159)
<b>Total</b>	<b>¥84,090</b>	<b>¥16,643</b>	<b>¥67,446</b>	<b>¥69,702</b>	<b>¥17,056</b>	<b>¥52,645</b>

	Thousands of U.S. dollars		
	2017		
	Carrying value	Acquisition costs	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition costs:			
Equity securities	\$747,125	\$145,280	\$601,836
Securities whose carrying value does not exceed their acquisition costs:			
Equity securities	2,398	3,066	(660)
<b>Total</b>	<b>\$749,532</b>	<b>\$148,347</b>	<b>\$601,177</b>

"Acquisition costs" in the above table represent the carrying value after recognizing impairment losses. The Company and its consolidated subsidiaries recognized impairment losses on valuation of marketable securities of ¥98 million (\$874 thousand) for the year ended March 31, 2017. For the year ended March 31, 2016, the Company and its consolidated subsidiaries did not recognize any such impairment losses.

(b) Securities classified as other securities for which market value was not determinable and not included in the table at March 31, 2017 and 2016 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
	Carrying value	Carrying value	Carrying value
Market value not determinable:			
Unlisted equity securities	¥2,669	¥2,144	\$23,790
<b>Total</b>	<b>¥2,669</b>	<b>¥2,144</b>	<b>\$23,790</b>

(c) Proceeds from sales of, and gross realized gain and loss on, other securities for the years ended March 31, 2017 and 2016 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Proceeds from sales	¥2,401	¥163	\$21,401
Gain on sales	2,006	70	17,880
Loss on sales	25	9	223

## 8. SHORT-TERM LOANS, BONDS, LONG-TERM LOANS AND FINANCE LEASE OBLIGATIONS

Short-term loans at March 31, 2017 and 2016, principally represented notes and loans in the form of deeds at weighted-average annual interest rates of 1.47% and 1.31% per annum, respectively.

Long-term loans, bonds and finance lease obligations at March 31, 2017 and 2016 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Unsecured loans from banks and insurance companies, payable in Yen, U.S. dollars and RMB, due through 2023, at rates from 0.13% to 2.60%	¥ 23,601	¥31,932	\$ 210,366
Unsecured bonds in Yen, due 2017, at a rate of 0.442%	10,000	10,000	89,135
Unsecured bonds in Yen, due 2019, at a rate of 0.753%	10,000	10,000	89,135
Unsecured bonds in Yen, due 2022, at a rate of 0.539%	10,000	10,000	89,135
Lease obligations	316	333	2,817
	<b>53,918</b>	<b>62,265</b>	<b>480,595</b>
Less current portion	(13,582)	(8,895)	(121,062)
<b>Total</b>	<b>¥ 40,335</b>	<b>¥53,370</b>	<b>\$ 359,524</b>

The aggregate annual maturities of bonds, long-term loans and finance lease obligations subsequent to March 31, 2017 are summarized as follows:

Years ending March 31,	Millions of yen	Thousands of U.S. dollars
2018	¥13,582	\$121,062
2019	10,711	95,472
2020	10,281	91,639
2021	501	4,466
2022	4,735	42,205
2023 and thereafter	14,104	125,715
<b>Total</b>	<b>¥53,918</b>	<b>\$480,595</b>

In order to achieve more efficient and flexible financing, the Company has concluded line-of-credit agreements with certain financial institutions. The status of these lines of credit at March 31, 2017 and 2016 is as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Lines of credit	¥10,000	¥10,000	\$89,135
Credit utilized	—	—	—

## 9. OTHER COMPREHENSIVE INCOME (LOSS)

Reclassification adjustments and tax effects allocated to each component of other comprehensive income (loss) for the years ended March 31, 2017 and 2016 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Net unrealized holding gain (loss) on securities:			
Amount arising during the year	¥16,799	¥(12,628)	\$149,737
Reclassification adjustments for gains and losses realized in the statement of income	(1,884)	(49)	(16,793)
Amount before tax effect	14,915	(12,678)	132,944
Tax effect	(4,313)	4,834	(38,444)
Net unrealized holding gain (loss) on securities	10,602	(7,844)	94,500
Deferred gain (loss) on hedges:			
Amount arising during the year	121	(50)	1,079
Reclassification adjustments for gains and losses realized in the statement of income	(100)	30	(891)
Amount before tax effect	20	(19)	178
Tax effect	(6)	6	(53)
Deferred gain (loss) on hedges	14	(13)	125
Translation adjustments:			
Amount arising during the year	(1,108)	(5,021)	(9,876)
Reclassification adjustments for gains and losses realized in the statement of income	(159)	—	(1,417)
Amount before tax effect	(1,267)	(5,021)	(11,293)
Tax effect	44	(44)	392
Translation adjustments	(1,223)	(5,065)	(10,901)
Retirement benefit liability adjustments:			
Amount arising during the year	(369)	(3,173)	(3,289)
Reclassification adjustments for gains and losses realized in the statement of income	3,111	(957)	27,730
Amount before tax effect	2,742	(4,130)	24,441
Tax effect	(847)	1,294	(7,550)
Retirement benefit liability adjustments	1,895	(2,835)	16,891
Share of other comprehensive loss of affiliates accounted for by the equity method:			
Amount arising during the year	(152)	(553)	(1,355)
Total other comprehensive income (loss)	¥11,135	¥(16,312)	\$ 99,251

## 10. RETIREMENT BENEFIT PLANS

### (a) Outline of retirement benefit plans for employees

The Company and its domestic consolidated subsidiaries have defined benefit plans, i.e., defined benefit pension plans and lump-sum payment plans. Certain overseas consolidated subsidiaries also have defined benefit pension plans. Also, the Company and certain

consolidated subsidiaries have defined contribution pension plans. In addition to the retirement benefit plans described above, the Company and its consolidated subsidiaries pay additional retirement benefits under certain conditions.

### (b) Defined benefit pension plans

The changes in the retirement benefit obligation for the years ended March 31, 2017 and 2016 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Balance at the beginning of the year	¥32,993	¥29,613	\$294,081
Service cost	1,445	1,312	12,880
Interest cost	253	382	2,255
Actuarial differences	120	2,847	1,070
Retirement benefits paid	(1,316)	(1,126)	(11,730)
Other	16	(36)	143
Balance at the end of the year	¥33,512	¥32,993	\$298,708

The changes in plan assets for the years ended March 31, 2017 and 2016 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Balance at the beginning of the year	¥18,932	¥18,810	\$168,749
Expected return on plan assets	395	400	3,521
Actuarial differences	(249)	(331)	(2,219)
Contributions by the Company and its consolidated subsidiaries	584	697	5,205
Retirement benefits paid	(782)	(632)	(6,970)
Other	7	(12)	62
Balance at the end of the year	¥18,888	¥18,932	\$168,357

The following table sets forth the funded status of the plans and the amounts recognized in the consolidated balance sheets as of March 31, 2017 and 2016 for the Company's and the consolidated subsidiaries' defined benefit plans:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Funded retirement benefit obligation	¥ 22,273	¥ 22,047	\$ 198,529
Plan assets at fair value	(18,888)	(18,932)	(168,357)
	3,384	3,115	30,163
Unfunded retirement benefit obligation	11,239	10,945	100,178
Net liability for retirement benefits in the balance sheet	14,624	14,060	130,350
Liability for retirement benefits	14,625	14,060	130,359
Asset for the retirement benefits	(1)	—	(9)
Net liability for retirement benefits in the balance sheet	¥ 14,624	¥ 14,060	\$ 130,350

The components of retirement benefit expenses for the years ended March 31, 2017 and 2016 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Service cost	¥1,445	¥1,312	\$12,880
Interest cost	253	382	2,255
Expected return on plan assets	(395)	(400)	(3,521)
Amortization of actuarial differences	3,111	(957)	27,730
Retirement benefit expenses	¥4,414	¥ 337	\$39,344

Actuarial differences included in other comprehensive income (loss) (before tax effect) for the years ended March 31, 2017 and 2016 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Actuarial differences	¥2,742	¥(4,130)	\$24,441

Unrecognized actuarial differences included in accumulated other comprehensive income (before tax effect) as of March 31, 2017 and 2016 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Unrecognized actuarial differences	¥(388)	¥(3,131)	\$(3,458)

The allocation of plan assets, by major category, as a percentage of total plan assets at fair value as of March 31, 2017 and 2016 is as follows:

	2017		2016	
	Percentage	Value	Percentage	Value
Bonds	73%		74%	
Equity securities	17		15	
Other	10		11	
Total	100%		100%	

The expected long-term rate of return on plan assets is determined as a result of consideration of both the portfolio allocation at present and in the future, and long-term rate expected to earn the profit from multiple plan assets at present and in the future.

The assumptions used in accounting for the above plans were as follows:

	2017		2016	
	Rate	Value	Rate	Value
Discount rate	0.8%		0.8%	
Expected long-term rate of return on plan assets	2.1%		2.1%	



## (c) Defined contribution pension plans

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Contributions to defined contribution pension plans by the Company and its consolidated subsidiaries	¥287	¥279	\$2,558

## 11. INCOME TAXES

Income taxes applicable to the Company and its domestic consolidated subsidiaries consist of corporation, inhabitants' and enterprise taxes, which, in the aggregate, resulted in statutory tax rates of approximately 30.9% and 33.1% for the years ended March 31, 2017 and 2016, respectively.

The effective tax rates reflected in the accompanying consolidated statements of income for the years ended March 31, 2017 and 2016 differ from the statutory tax rates for the following reasons:

	2017	2016
Statutory tax rates	30.9%	33.1%
Adjustments for:		
Expenses not deductible for income tax purposes	3.0	2.4
Dividends and other income deductible for income tax purposes	(6.9)	(12.3)
Net adjustment resulting from elimination of dividend income upon consolidation	8.8	12.4
Different tax rates applied at overseas subsidiaries	(3.1)	(5.9)
Tax credit	(2.1)	(2.5)
Amortization of goodwill	3.0	3.5
Loss on impairment of goodwill	—	3.0
Valuation allowance	1.4	(1.3)
Decrease in deferred tax assets resulting from change in statutory tax rates	0.1	2.9
Decrease in tax expenses resulting from application of consolidated taxation system	—	(18.3)
Other, net	(1.3)	1.2
Effective tax rates	33.8%	18.2%

The significant components of the Company's and its consolidated subsidiaries' deferred tax assets and liabilities at March 31, 2017 and 2016 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Deferred tax assets:			
Accrued bonuses for employees	¥ 1,202	¥ 1,141	\$ 10,714
Allowance for doubtful accounts	237	290	2,112
Unrealized gain on inventories	508	561	4,528
Accrued enterprise taxes	247	379	2,202
Tax loss carryforwards	3,555	3,044	31,687
Liability for retirement benefits	4,496	4,343	40,075
Investments in securities	1,114	1,040	9,930
Loss on impairment of fixed assets	1,338	1,038	11,926
Tax goodwill	8,444	10,567	75,265
Other	2,770	2,585	24,690
Gross deferred tax assets	23,916	24,992	213,174
Valuation allowance	(6,032)	(5,522)	(53,766)
Total deferred tax assets	¥ 17,884	¥ 19,469	\$ 159,408
Deferred tax liabilities:			
Technology-based assets	¥ (4,204)	¥ (4,687)	\$ (37,472)
Deferred capital gain on property	(1,425)	(1,410)	(12,702)
Reserve for special depreciation	(354)	(103)	(3,155)
Undistributed earnings of subsidiaries and affiliates	(553)	(255)	(4,929)
Revaluation of land	(311)	(312)	(2,772)
Net unrealized holding gain on securities	(20,186)	(15,757)	(179,927)
Other	(490)	(1,002)	(4,368)
Total deferred tax liabilities	(27,526)	(23,529)	(245,352)
Net deferred tax liabilities	¥ (9,641)	¥ (4,059)	\$ (85,935)

The "Act for Partial Revision of Regulations Including the Act for, among Other Purposes, Partial Revision of the Consumption Tax Act to Implement a Drastic Reform of the Taxation System for Purposes Such as Securing Stable Financial Resources for Social Security" (Act No. 85, 2016) and the "Act for Partial Revision of Regulations Including the Act for, among Other Purposes, Partial Revision of the Local Tax Act and the Local Allocation Tax Act to Implement a Drastic Reform of the Taxation System for Purposes Such as Securing Stable Financial Resources for Social Security" (Act No. 86, 2016) were enacted in the Japanese Diet session on November 18, 2016 and the timing of implementation of the consumption tax rate increase to 10% was postponed from April 1, 2017 to October 1, 2019.

In line with these revisions, the timing of implementation of the abolishment of the special local corporation tax, the restoration of the enterprise tax on corporations as a result of said abolishment, the revision of the local corporate income tax rate, and the revision of the

rate of the corporation levy that comprises a part of the corporate residential tax, which had been scheduled from fiscal years beginning on or after April 1, 2017, was postponed to fiscal years beginning on or after October 1, 2019.

Though the domestic statutory tax rates to calculate deferred tax assets and liabilities will not change, the tax rates are reclassified between national tax and local tax. Since the Company and certain domestic consolidated subsidiaries have been using the consolidated taxation system, deferred tax assets decreased and deferred income taxes-deferred increased for the consolidated subsidiaries whose judgments regarding the recoverability of deferred tax assets differ between national taxes based on the consolidated taxation system and local taxes based on non-consolidated local tax payments.

The effect of the change on the consolidated financial statements was immaterial.

## 12. SHAREHOLDERS' EQUITY

The Corporation Law of Japan (the "Law") provides that an amount equal to 10% of the amount to be disbursed as distributions of capital surplus (other than the capital reserve) and retained earnings (other than the legal reserve) be transferred to the capital reserve and the legal reserve, respectively, until the sum of the capital reserve and the legal reserve equals 25% of the capital stock account.

Such distributions can be made at any time by resolution of the shareholders, or by the Board of Directors if certain conditions are met. The Company's capital reserve included in capital surplus at

March 31, 2017 amounted to ¥9,634 million (\$85,872 thousand). In addition, the Company's legal reserve included in retained earnings at March 31, 2017 amounted to ¥2,424 million (\$21,606 thousand).

Under the Law, upon the issuance and sale of new shares of common stock, the entire amount of the proceeds is required to be accounted for as common stock, although a company may, by resolution of the Board of Directors, account for an amount not exceeding 50% of the proceeds of the sale of new shares as additional paid-in capital.

Movements in common stock during the years ended March 31, 2017 and 2016 are summarized as follows:

	Number of shares			
	2017			
	April 1, 2016	Increase	Decrease	March 31, 2017
Common stock	127,408,285	—	—	127,408,285
2016				
	April 1, 2015	Increase	Decrease	March 31, 2016
Common stock	127,408,285	—	—	127,408,285

## 13. TREASURY STOCK

Movements in treasury stock during the years ended March 31, 2017 and 2016 are summarized as follows:

	Number of shares			
	2017			
	April 1, 2016	Increase	Decrease	March 31, 2017
Treasury stock	377,300	910,147	81	1,287,366
2016				
	April 1, 2015	Increase	Decrease	March 31, 2016
Treasury stock	376,363	937	—	377,300

The increase in treasury stock consists of 908,000 shares resulting from the purchase of treasury stock by resolution of the Board of Directors and 2,147 shares resulting from the purchase of shares of less than one voting unit for the year ended March 31, 2017. The decrease in treasury stock consists of 81 shares resulting from the disposition of

shares less than one voting unit for the year ended March 31, 2017.

The increase in treasury stock consists of 937 shares resulting from the purchase of shares of less than one voting unit for the year ended March 31, 2016.

## 14. FINANCIAL INSTRUMENTS

## (a) Policy for financial instruments

The Group invests excess funds in highly secure and short-term financial assets, whose principal is guaranteed to be recoverable. With regard to financing policy, short-term working funds are raised by bank borrowings or issuance of commercial paper and long-term funds are raised by bank borrowings and the issuance of bonds. The policy for derivative transactions is that those are utilized to mitigate the foreign currency exchange rate fluctuation risk arising from the receivables and payables denominated in foreign currencies, and fluctuation risk related to interest rates with respect to loans payable, and derivative transactions are not carried out for speculative purposes.

## (b) Types of financial instruments, related risk and risk management for financial instruments

Receivables such as trade notes and accounts receivable are exposed to customers' credit risks. With regard to this risk, the Group manages the settlement date by each customer, and establishes credit limits by each customer based on the Group's internal credit rating policy and monitors outstanding balances. The Group establishes system under which the credit status by each customer is reviewed at least once a year and the sales limit amount updated as necessary.

In the cases of notes and accounts receivable or payable denominated in foreign currencies, foreign currency forward exchange contracts are used to hedge the risk of fluctuation. However, for foreign

currency transactions denominated in the same currency involving either payables or receivables, foreign currency forward exchange contracts are used solely for the netted position.

Investments in securities are subject to market price fluctuation risk. However, these are mainly equity securities of other companies with which the Group has business relationships. The Group regularly monitors both their fair value and the financial condition of the issuer. The Group also reviews as needed the condition of its holdings with concern to the status of business and financial transactions.

Short-term loans are raised primarily in connection with business activities. Long-term loans and bonds are taken out principally for the purpose of making capital spending, investments and financing. Loans with variable interest rates are subject to the risk of fluctuating interest rates. However, to reduce such risk, the Group utilizes derivatives (interest-rate swap transactions) as a hedging instrument.

Derivatives include foreign currency forward exchange contracts to manage fluctuation risk in foreign currency exchange rates and interest-rate swaps to manage fluctuation risk of interest rates related to the interest payments for bank loans.

In addition, notes and accounts payable and bank loans are exposed to liquidity risk. However, the Group manages such risk by monitoring the balance of inflow and outflow of cash and establishing liquidity on hand in excess of half of the amount of monthly net sales.

## (c) Fair value of financial instruments

The carrying value of financial instruments on the consolidated balance sheets, fair value and the differences as of March 31, 2017 and 2016, are shown in the following table. Financial instruments for which fair value is deemed extremely difficult to determine are not included.

	Millions of yen		
	2017		
	Carrying value	Fair value	Difference
<b>Assets</b>			
Cash and time deposits	¥ 39,830	¥ 39,830	¥ —
Notes and accounts receivable	206,846	206,846	—
Investments in securities			
Other securities	84,090	84,090	—
<b>Total assets</b>	<b>¥330,767</b>	<b>¥330,767</b>	<b>¥ —</b>
<b>Liabilities</b>			
Notes and accounts payable	¥102,076	¥102,076	¥ —
Short-term loans	28,162	28,162	—
Current portion of long-term loans	3,522	3,522	—
Current portion of bonds	10,000	10,007	7
Bonds	20,000	20,256	256
Long-term loans	20,078	20,329	250
<b>Total liabilities</b>	<b>¥183,840</b>	<b>¥184,354</b>	<b>¥513</b>
<b>Derivatives*</b>			
Not subject to hedge accounting	¥ 21	¥ 21	¥ —
Subject to hedge accounting	1	1	—
<b>Total derivative transactions</b>	<b>¥ 22</b>	<b>¥ 22</b>	<b>¥ —</b>

	Millions of yen		
	2016		
	Carrying value	Fair value	Difference
<b>Assets</b>			
Cash and time deposits	¥ 43,283	¥ 43,283	¥ —
Notes and accounts receivable	196,335	196,335	—
Investments in securities			
Other securities	69,702	69,702	—
<b>Total assets</b>	<b>¥309,320</b>	<b>¥309,320</b>	<b>¥ —</b>
<b>Liabilities</b>			
Notes and accounts payable	¥ 97,800	¥ 97,800	¥ —
Short-term loans	25,294	25,294	—
Current portion of long-term loans	8,823	8,823	—
Bonds	30,000	30,430	430
Long-term loans	23,108	23,375	266
<b>Total liabilities</b>	<b>¥185,027</b>	<b>¥185,723</b>	<b>¥696</b>
<b>Derivatives*</b>			
Not subject to hedge accounting	¥ 108	¥ 108	¥ —
Subject to hedge accounting	3	3	—
<b>Total derivative transactions</b>	<b>¥ 111</b>	<b>¥ 111</b>	<b>¥ —</b>

	Thousands of U.S. dollars		
	2017		
	Carrying value	Fair value	Difference
<b>Assets</b>			
Cash and time deposits	\$ 355,023	\$ 355,023	\$ —
Notes and accounts receivable	1,843,712	1,843,712	—
Investments in securities			
Other securities	749,532	749,532	—
<b>Total assets</b>	<b>\$2,948,275</b>	<b>\$2,948,275</b>	<b>\$ —</b>
<b>Liabilities</b>			
Notes and accounts payable	\$ 909,849	\$ 909,849	\$ —
Short-term loans	251,021	251,021	—
Current portion of long-term loans	31,393	31,393	—
Current portion of bonds	89,135	89,197	62
Bonds	178,269	180,551	2,282
Long-term loans	178,964	181,202	2,228
<b>Total liabilities</b>	<b>\$1,638,649</b>	<b>\$1,643,230</b>	<b>\$4,573</b>
<b>Derivatives*</b>			
Not subject to hedge accounting	\$ 187	\$ 187	\$ —
Subject to hedge accounting	9	9	—
<b>Total derivative transactions</b>	<b>\$ 196</b>	<b>\$ 196</b>	<b>\$ —</b>

\* Receivables and payables arising from derivative transactions are presented as a net value with the amount in parentheses representing a net liability position.

The calculation methods of fair values of financial instruments and securities and derivative transactions are as follows:

**Cash and time deposits**

Their carrying value approximates the fair value.

**Notes and accounts receivable**

The fair value of notes and accounts receivable is based on their present values discounted by the interest rate determined taking into account the remaining period to maturity for each receivable classified by settlement date.

**Investments in securities**

The fair value of investment in securities is based on quoted market prices. Please refer to Note 7 regarding information on securities by holding purpose.

**Notes and accounts payable**

The fair value of notes and accounts payable is based on their present values discounted by the interest rate determined taking into account the remaining period to maturity for each payable classified by settlement date.

**Short-term loans and current portion of long-term loans**

Since these items are settled in a short period of time, their carrying value approximates the fair value.

**Current portion of bonds and bonds**

The fair value of bonds is based on the market price.



## Notes to Consolidated Financial Statements

### Long-term loans

The fair value of long-term loans with fixed interest rates is based on the present value of the total of principal and interest discounted by the interest rate to be applied assuming new loans under similar conditions to existing loans are made. Floating interest rates for long-term loans are hedged by interest-rate swap agreements and accounted for as loans with fixed interest rates. The fair value of those

long-term loans is based on the present value of the total of principals, interests and net cash flows of swap agreements discounted by the interest rates, estimated reasonably, applicable to new loans under similar conditions.

### Derivative transactions

Please refer to Note 15.

The carrying value of financial instruments without determinable market value at March 31, 2017 and 2016 is presented as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Unlisted equity securities	¥ 2,669	¥ 2,144	\$23,790
Investments in unconsolidated subsidiaries and affiliates	7,788	9,498	69,418
Total	¥10,458	¥11,642	\$93,217

The redemption schedule for time deposits and notes and accounts receivable with maturity dates at March 31, 2017 is summarized as follows:

	Millions of yen	
	Within 1 year	Over 1 year and less than 5 years
Time deposits	¥ 39,637	¥—
Notes and accounts receivable	206,846	—
Total	¥246,483	¥—

	Thousands of U.S. dollars	
	Within 1 year	Over 1 year and less than 5 years
Time deposits	\$ 353,302	\$—
Notes and accounts receivable	1,843,712	—
Total	\$2,197,014	\$—

With respect to the redemption schedule of bonds, long-term loans and finance lease obligations, please refer to Note 8.

## 15. DERIVATIVES AND HEDGING ACTIVITIES

The currency-related derivatives positions outstanding for which hedge accounting has not been applied at March 31, 2017 and 2016 are as follows:

Classification	Transaction	Millions of yen			
		Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value	Valuation gain (loss)
	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars	¥ 7,475	¥—	¥ 24	¥ 24
	Yen	1,772	—	(10)	(10)
	Euro	763	—	3	3
	RMB	440	—	1	1
	Others	88	—	(1)	(1)
	Buying:				
	U.S. dollars	750	—	2	2
	Yen	379	—	2	2
	Euro	33	—	(0)	(0)
	Others	3	—	0	0
Total		¥11,706	¥—	¥ 21	¥ 21

Classification	Transaction	Millions of yen			
		Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value	Valuation gain (loss)
	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars	¥ 5,629	¥—	¥ 51	¥ 51
	Yen	1,520	—	(10)	(10)
	Euro	656	—	9	9
	RMB	516	—	2	2
	Others	67	—	0	0
	Buying:				
	U.S. dollars	1,423	—	54	54
	Yen	563	—	0	0
	Euro	43	—	(0)	(0)
	Others	2	—	(0)	(0)
Total		¥10,497	¥—	¥108	¥108

Classification	Transaction	Thousands of U.S. dollars			
		Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value	Valuation gain (loss)
	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars	\$ 66,628	\$—	\$214	\$214
	Yen	15,795	—	(89)	(89)
	Euro	6,801	—	27	27
	RMB	3,922	—	9	9
	Others	784	—	(9)	(9)
	Buying:				
	U.S. dollars	6,685	—	18	18
	Yen	3,378	—	18	18
	Euro	294	—	(0)	(0)
	Others	27	—	0	0
Total		\$104,341	\$—	\$187	\$187

The fair value of foreign currency forward exchange contracts is mainly computed using the prices provided by counterparty financial institutions.

Notes to Consolidated Financial Statements

The currency-related derivatives positions outstanding for which hedge accounting has been applied at March 31, 2017 and 2016 are as follows:

Millions of yen					
2017					
Method for hedge accounting	Transaction	Major hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Deferral hedge accounting	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars		¥ 4	¥—	¥ 0
	Euro	Accounts receivable	434	—	1
	RMB		76	—	0
	Others		23	—	(0)
	Buying:				
	U.S. dollars		45	—	0
	Euro		178	—	(1)
	RMB	Accounts payable	29	—	(0)
THB		24	—	0	
Others		18	—	0	
Allocation method for foreign currency forward exchange contracts (Note 2(p))	Foreign currency forward exchange contracts:				
	Selling				
	Euro	Accounts receivable	12	—	(*)
	Buying:				
	Euro	Accounts payable	86	—	(*)
	Others	23	—	(*)	
Total			¥956	¥—	¥ 1

Millions of yen					
2016					
Method for hedge accounting	Transaction	Major hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Deferral hedge accounting	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars		¥ 44	¥—	¥ 1
	Euro	Accounts receivable	204	—	3
	RMB		58	—	0
	Others		8	—	(0)
	Buying:				
	U.S. dollars		13	—	(0)
	Euro		25	—	(0)
	THB	Accounts payable	20	—	(0)
Others		36	—	(0)	
Allocation method for foreign currency forward exchange contracts (Note 2(p))	Foreign currency forward exchange contracts:				
	Selling				
	Euro	Accounts receivable	0	—	(*)
	Buying:				
	Euro	Accounts payable	49	—	(*)
	Others	7	—	(*)	
Total			¥469	¥—	¥ 3

Thousands of U.S. dollars					
2017					
Method for hedge accounting	Transaction	Major hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Deferral hedge accounting	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars		\$ 36	\$—	\$ 0
	Euro	Accounts receivable	3,868	—	9
	RMB		677	—	0
	Others		205	—	(0)
	Buying:				
	U.S. dollars		401	—	0
	Euro		1,587	—	(9)
	RMB	Accounts payable	258	—	(0)
THB		214	—	0	
Others		160	—	0	
Allocation method for foreign currency forward exchange contracts (Note 2(p))	Foreign currency forward exchange contracts:				
	Selling				
	Euro	Accounts receivable	107	—	(*)
	Buying:				
	Euro	Accounts payable	767	—	(*)
	Others	205	—	(*)	
Total			\$8,521	\$—	\$ 9

The fair value of foreign currency forward exchange contracts is mainly computed using the prices provided by counterparty financial institutions.

(\*): The fair value of foreign currency forward exchange contracts that qualify for the allocation method is included in the fair value of the underlying accounts receivable and payable.

The interest-related derivatives positions outstanding for which hedge accounting has been applied at March 31, 2017 and 2016 are as follows.

Millions of yen					
2017					
Method for hedge accounting	Transaction	Hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Swap rates applied to underlying long-term loans	Interest-rate swap transactions (pay—fixed, receive—variable)	Long-term loans	¥20,465	¥18,000	(**)

Millions of yen					
2016					
Method for hedge accounting	Transaction	Hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Swap rates applied to underlying long-term loans	Interest-rate swap transactions (pay—fixed, receive—variable)	Long-term loans	¥25,626	¥20,439	(**)

Thousands of U.S. dollars					
2017					
Method for hedge accounting	Transaction	Hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Swap rates applied to underlying long-term loans	Interest-rate swap transactions (pay—fixed, receive—variable)	Long-term loans	\$182,414	\$160,442	(**)

(\*\*): Since interest-rate swap agreements are accounted for as if the interest rates applied to the swaps had originally applied to the underlying long-term loans, their fair values were included in the fair value of the long-term loans.



**16. RESEARCH AND DEVELOPMENT COSTS**

Research and development costs included in cost of sales and selling, general and administrative expenses for the years ended March 31, 2017 and 2016 totaled ¥5,167 million (\$46,056 thousand) and ¥5,063 million, respectively.

**17. OPERATING LEASES**

Future minimum lease payments subsequent to March 31, 2017 under noncancelable operating leases are as follows:

Years ending March 31,	Millions of yen	Thousands of U.S. dollars
2018	¥437	\$3,895
2019 and thereafter	391	3,485
Total	¥829	\$7,389

**18. CONTINGENT LIABILITIES**

At March 31, 2017, the Company and its consolidated subsidiaries were contingently liable as guarantors of loans of customers and other in the aggregate amount of ¥316 million (\$2,817 thousand), and as guarantors of loans of employees in the amount of ¥1 million (\$9 thousand).

In addition, at March 31, 2017, the Company and its consolidated subsidiaries had contingent liabilities arising from notes discounted with banks in the amount of ¥245 million (\$2,184 thousand).

**19. AMOUNTS PER SHARE**

Amounts per share at March 31, 2017 and 2016 and for the years then ended are as follows:

	Yen		U.S. dollars
	2017	2016	2017
Profit attributable to owners of parent:			
Basic	¥ 81.65	¥ 96.96	\$ 0.73
Diluted	—	—	—
Net assets	2,301.10	2,156.67	20.51
Cash dividends applicable to the year	33.00	32.00	0.29

Basic profit attributable to owners of parent per share has been computed based on the profit attributable to owners of parent available for distribution to the shareholders of common stock and the weighted-average number of shares of common stock outstanding during the year.

Diluted profit attributable to owners of parent per share for the years ended March 31, 2017 and 2016 has not been presented

The financial data used in the computation of basic profit attributable to owners of parent per share for the years ended March 31, 2017 and 2016 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Profit attributable to owners of parent	¥10,331	¥12,316	\$92,085
Profit available for distribution to shareholders of common stock	¥10,331	¥12,316	\$92,085
Weighted-average number of shares	126,541,671	127,031,413	

because no potentially dilutive shares of common stock were outstanding.

Net assets per share have been computed based on the number of shares of common stock outstanding at the year end.

Cash dividends per share represent the cash dividends proposed by the Board of Directors as applicable to the respective years together with the interim cash dividends paid.

**20. CASH AND TIME DEPOSITS**

A reconciliation of cash and time deposits in the accompanying consolidated balance sheets at March 31, 2017 and 2016 and cash and cash equivalents in the accompanying consolidated statements of cash flows for the years then ended is as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Cash and time deposits	¥39,830	¥43,283	\$355,023
Long-term deposit included in other assets of investments and other assets	2	1	18
Time deposits with maturities of more than three months	(102)	(384)	(909)
Cash and cash equivalents	¥39,730	¥42,900	\$354,131

**21. SEGMENT INFORMATION****(a) Overview of reportable segments**

The reportable segments of the Company comprise those entities for which obtaining separate financial reports is possible and that are subject to regular review by the Board of Directors, which decides upon the distribution of management resources and assesses their performance.

Reflecting the respective positions of each business in the value chain, as well as identifying the most closely aligned industries, the Company defined five segment categories: Functional Materials (located at the top of the value chain), Advanced Materials & Processing (located in the next stage of the value chain), Electronics, Automotive & Energy, and Life & Healthcare (functioning within the corresponding industries).

The following describes the major products and services handled by each reportable segment.

The Functional Materials segment is engaged in the sales of materials for paints/inks, urethane materials, auxiliaries, plastic materials, plastic additives, industrial oil solutions, surfactants materials, fluorochemicals, encapsulant materials, silicone materials, and more for the paints/inks, resins, urethane foams, organic synthesis, surfactants, and semiconductors industries.

The Advanced Materials & Processing segment is engaged in the sales of dyestuffs, dyes, functional dyes, digital print processing products, thermoplastic resins, thermosetting resins, conductive coatings, synthetic rubber, inorganic materials, plastics products, resins molding tools/dies, and external inspection equipment for the dye/additive, digital print processing materials, fiber processing, raw resin materials, resins molding, functional films and sheets, constructions,

and other industries.

The Electronics segment is engaged in the sales of pre-processing materials and devices for LCD/semiconductors, materials for display panels, materials and devices for semiconductor assembly, low-temperature/vacuum equipment, high-function epoxy resins, precision electronics abrasives, and more for the displays, touch panels, semiconductors, hard disk drives, electronic components, and heavy electrical industries.

The Automotive & Energy segment is engaged in the sales of plastic products, thermoplastic resins, thermosetting resins, silicone products, resins molding tools/dies, battery materials, solar cell/secondary battery materials and more for the automotives, automotive components, and energy industries.

The Life & Healthcare segment is engaged in the sales of pharmaceutical/agricultural chemicals and materials, research products, in vitro diagnostics, enzymes, food additives, additives for cosmetics, feeds/fertilizers, and surfactants for the pharmaceutical, food, and cosmetics industries. Furthermore, the segment offers radiation measurement as one of its main services. In addition, this segment sells cosmetics, health foods, and beauty foods directly to consumers.

**(b) Calculation methods of net sales, income or loss, assets, and other items by reportable segments**

The accounting policies of reportable segments are generally identical to those described in Note 2. Reportable segment income corresponds to operating income in the consolidated statements of income. Intersegment internal income and transfers are determined based on the values of transactions at actual market prices.

## Notes to Consolidated Financial Statements

### (c) Information on net sales, income or loss, assets and other items for each reportable segment

Information by reportable segments for the year ended March 31, 2017 is as follows:

Millions of yen											
2017											
Reportable Segments											
	Functional Materials	Advanced Materials & Processing	Electronics	Automotive & Energy	Life & Healthcare	Total	Others	Total	Corporate	Adjustments	Consolidated
Sales to customers	¥153,546	¥242,609	¥127,722	¥112,956	¥84,904	¥721,739	¥ 644	¥722,384	¥ —	¥ —	¥722,384
Intersegment sales and transfers	2,000	2,414	1,977	2,619	472	9,483	5,432	14,916	—	(14,916)	—
Net sales	155,546	245,024	129,699	115,576	85,376	731,223	6,077	737,300	—	(14,916)	722,384
Segment income	¥ 4,185	¥ 5,093	¥ 6,333	¥ 1,539	¥ 3,332	¥ 20,484	¥ 148	¥ 20,633	¥ (6,153)	¥ 550	¥ 15,030
Segment assets	¥ 72,576	¥121,346	¥ 65,610	¥ 46,258	¥98,221	¥404,013	¥5,089	¥409,102	¥149,020	¥(27,347)	¥530,775
Other items											
Depreciation and amortization other than amortization of goodwill	¥ 476	¥ 809	¥ 2,524	¥ 219	¥ 3,412	¥ 7,442	¥ 216	¥ 7,658	¥ 1,722	¥ —	¥ 9,381
Amortization of goodwill	—	—	41	—	1,502	1,543	—	1,543	—	—	1,543
Unamortized balance of goodwill	—	—	627	—	22,407	23,034	—	23,034	—	—	23,034
Investments in affiliates accounted for by the equity method	1,716	1,394	2,318	1,235	2,476	9,140	—	9,140	—	(1)	9,139
Increase in property, plant and equipment, net and intangible assets	297	3,561	1,825	284	4,906	10,875	190	11,066	1,107	—	12,173

Millions of yen											
2016											
Reportable Segments											
	Functional Materials	Advanced Materials & Processing	Electronics	Automotive & Energy	Life & Healthcare	Total	Others	Total	Corporate	Adjustments	Consolidated
Sales to customers	¥157,149	¥255,505	¥127,926	¥115,351	¥85,571	¥741,505	¥ 689	¥742,194	¥ —	¥ —	¥742,194
Intersegment sales and transfers	1,955	2,241	1,211	2,626	514	8,549	5,851	14,401	—	(14,401)	—
Net sales	159,105	257,747	129,138	117,978	86,086	750,055	6,540	756,595	—	(14,401)	742,194
Segment income	¥ 3,679	¥ 4,979	¥ 6,255	¥ 1,300	¥ 3,864	¥ 20,079	¥ 215	¥ 20,295	¥ (2,725)	¥ 455	¥ 18,024
Segment assets	¥ 71,042	¥122,802	¥ 62,912	¥ 42,136	¥99,620	¥398,514	¥7,213	¥405,728	¥145,038	¥(38,685)	¥512,081
Other items											
Depreciation and amortization other than amortization of goodwill	¥ 509	¥ 859	¥ 2,672	¥ 157	¥ 3,258	¥ 7,458	¥ 208	¥ 7,667	¥ 1,826	¥ —	¥ 9,493
Amortization of goodwill	—	—	132	—	1,502	1,634	—	1,634	—	—	1,634
Unamortized balance of goodwill	—	—	672	—	23,909	24,582	—	24,582	—	—	24,582
Investments in affiliates accounted for by the equity method	1,752	2,389	1,968	1,355	2,385	9,852	1,944	11,797	—	(53)	11,743
Increase in property, plant and equipment, net and intangible assets	1,690	1,466	2,855	244	2,341	8,598	158	8,757	2,368	—	11,125

Thousands of U.S. dollars

2017											
Reportable Segments											
	Functional Materials	Advanced Materials & Processing	Electronics	Automotive & Energy	Life & Healthcare	Total	Others	Total	Corporate	Adjustments	Consolidated
Sales to customers	\$1,368,625	\$2,162,483	\$1,138,444	\$1,006,828	\$756,788	\$6,433,185	\$ 5,740	\$6,438,934	\$ —	\$ —	\$6,438,934
Intersegment sales and transfers	17,827	21,517	17,622	23,344	4,207	84,526	48,418	132,953	—	(132,953)	—
Net sales	1,386,452	2,184,009	1,156,066	1,030,181	760,995	6,517,720	54,167	6,571,887	—	(132,953)	6,438,934
Segment income	\$ 37,303	\$ 45,396	\$ 56,449	\$ 13,718	\$ 29,700	\$ 182,583	\$ 1,319	\$ 183,911	\$ (54,844)	\$ 4,902	\$ 133,969
Segment assets	\$ 646,903	\$1,081,612	\$ 584,811	\$ 412,318	\$875,488	\$3,601,150	\$45,361	\$3,646,510	\$1,328,282	\$(243,756)	\$4,731,037
Other items											
Depreciation and amortization other than amortization of goodwill	\$ 4,243	\$ 7,211	\$ 22,498	\$ 1,952	\$ 30,413	\$ 66,334	\$ 1,925	\$ 68,259	\$ 15,349	\$ —	\$ 83,617
Amortization of goodwill	—	—	365	—	13,388	13,753	—	13,753	—	—	13,753
Unamortized balance of goodwill	—	—	5,589	—	199,724	205,312	—	205,312	—	—	205,312
Investments in affiliates accounted for by the equity method	15,295	12,425	20,661	11,008	22,070	81,469	—	81,469	—	(9)	81,460
Increase in property, plant and equipment, net and intangible assets	2,647	31,741	16,267	2,531	43,729	96,934	1,694	98,636	9,867	—	108,503

### (d) Geographical information

Net sales by country or region for the years ended March 31, 2017 and 2016 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Japan	¥369,365	¥363,038	\$3,292,317
Greater China	193,784	207,191	1,727,284
ASEAN	101,998	109,837	909,154
Americas	29,573	32,016	263,597
Europe	11,975	13,992	106,739
Other	15,687	16,117	139,825
Total	¥722,384	¥742,194	\$6,438,934

- Net sales are categorized by country or region based on the locations of customers.
- Country or region is determined by geographical proximity.
- Major countries in each region:
  - Greater China China, Hong Kong, and Taiwan
  - ASEAN Thailand, and Singapore
  - Americas U.S.A, and Mexico
  - Europe Germany
  - Other Korea
- Change in regional classifications

The Company had classified its regions as Northeast Asia, Southeast Asia, North America, and Europe & Others in the previous years. During the year ended March 31, 2017, the Company renamed and reclassified its regions for coordination with Company's mid-term management plan "ACE-2020." Geographical information for the year ended March 31, 2016 was reclassified to conform to this change in the regional classifications in the current fiscal year.

- Northeast Asia was renamed Greater China; Southeast Asia was renamed ASEAN; and North America was renamed Americas. Europe & Others was categorized separately into Europe and Other.
- Brazil, which was previously classified under Europe & Others, was included in Americas.
- Korea, which was previously classified under Northeast Asia, was included in Other.

Property, plant and equipment by country or region as of March 31, 2017 and 2016 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Japan	¥61,666	¥59,646	\$549,657
Other	5,952	6,828	53,053
Total	¥67,619	¥66,474	\$602,719



**(e) Information on loss on impairment of fixed assets per reportable segments**

Loss on impairment of fixed assets for the years ended March 31, 2017 and 2016 is as follows:

Millions of yen									
2017									
Reportable Segments									
	Functional Materials	Advanced Materials & Processing	Electronics	Automotive & Energy	Life & Healthcare	Total	Others	Eliminations or corporate	Total
Loss on impairment of fixed assets	¥—	¥1,352	¥1	¥38	¥—	¥1,392	¥—	¥6	¥1,398

Millions of yen									
2016									
Reportable Segments									
	Functional Materials	Advanced Materials & Processing	Electronics	Automotive & Energy	Life & Healthcare	Total	Others	Eliminations or corporate	Total
Loss on impairment of fixed assets	¥—	¥818	¥1,862	¥36	¥—	¥2,717	¥—	¥39	¥2,756

Thousands of U.S. dollars									
2017									
Reportable Segments									
	Functional Materials	Advanced Materials & Processing	Electronics	Automotive & Energy	Life & Healthcare	Total	Others	Eliminations or corporate	Total
Loss on impairment of fixed assets	\$—	\$12,051	\$9	\$339	\$—	\$12,408	\$—	\$53	\$12,461

For the year ended March 31, 2017, as to business-use assets for manufacturing of color formers in Advanced Materials & Processing segment, due to a decreasing profitability, the carrying values were reduced to their recoverable amounts and recorded loss on impairment of fixed assets of ¥1,249 million (\$11,133 thousand).

For the year ended March 31, 2016, as to business-use assets for manufacturing of color formers and business-use assets for processing of plastic materials in Advanced Materials & Processing segment, due to a decreasing profitability, the carrying values were reduced to their recoverable amounts and recorded loss on impairment of fixed assets

of ¥500 million and ¥304 million, respectively.

As to goodwill for developing and manufacturing of industrial adhesives and other in Electronics segment, as achieving the initially projected level of income could no longer be expected, the carrying value of goodwill was reduced to the recoverable amount and recorded loss on impairment loss of fixed assets of ¥1,364 million. And as to business-use assets for processing of thin glass panels in the same segment, due to decreasing profitability, the carrying values were reduced to their recoverable amounts and recorded loss on impairment of fixed assets of ¥440 million.

**22. SUBSEQUENT EVENTS**

The following distribution of retained earnings of the Company, which has not been reflected in the accompanying consolidated financial statements for the year ended March 31, 2017, was approved at a meeting of the shareholders held on June 28, 2017:

	Millions of yen	Thousands of U.S. dollars
Cash dividends (¥17.0 = U.S.\$0.15 per share)	¥2,144	\$19,110

**Independent Auditor's Report**

Ernst &amp; Young ShinNihon LLC

**Independent Auditor's Report**

The Board of Directors  
NAGASE&CO., LTD.

We have audited the accompanying consolidated financial statements of NAGASE&CO., LTD. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2017, and the consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

*Management's Responsibility for the Consolidated Financial Statements*

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

*Auditor's Responsibility*

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

*Opinion*

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of NAGASE&CO., LTD. and its consolidated subsidiaries as at March 31, 2017, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

*Convenience Translation*

We have reviewed the translation of these consolidated financial statements into U.S. dollars, presented for the convenience of readers, and, in our opinion, the accompanying consolidated financial statements have been properly translated on the basis described in Note 1.

*Ernst & Young ShinNihon LLC*

June 29, 2017  
Osaka, Japan

A member firm of Ernst & Young Global Limited

# Consolidated Subsidiaries, Affiliates and Offices

● Consolidated subsidiary ○ Company accounted for under the equity method As of April 1, 2017

Category	Company name	Description of business	Location	Year of establishment
<b>Japan</b>				
<b>Manufacturing and Processing</b>				
●	Nagase ChemteX Corporation	Research, manufacture, and sale of enzymes, fermented products, pharmaceutical intermediates, disinfecting agents, functional polymers, epichlorohydrine derivatives, electronics materials, etc.	Osaka Pref.	1970
●	Hayashibara Co., Ltd.	Development, manufacture, and sale of food raw materials, pharmaceutical raw materials, cosmetics raw materials, health foods raw materials, functional dyes, etc.	Okayama Pref.	1932
●	Nagase Medicals Co., Ltd.	Manufacture and sale of pharmaceuticals, animal drugs, health foods, and cosmetics	Hyogo Pref.	1972
●	Setsunan Kasei Co., Ltd.	Coloring and sale of plastics	Osaka Pref.	1966
●	Totaku Industries, Inc.	Manufacture and sale of plastic products	Osaka Pref.	1952
●	Kotobuki Kasei Corporation	Molding, processing and sale of plastic products	Tochigi Pref.	1972
●	Nagase Techno-Engineering Co., Ltd.	Manufacture, sale and maintenance of low-temperature vacuum equipment, systems for chemical supply management and recycling processes, inspection systems, and the peripheral equipment for each of these	Tokyo Pref.	1989
●	Fukui Yamada Chemical Co., Ltd.	Manufacture of color former	Fukui Pref.	1985
●	Nagase Filter Co., Ltd.	Planning, production, processing, quality testing and sale of metal filters	Osaka Pref.	2006
●	CAPTEX Co., Ltd.	Manufacture and development of battery power source controllers, battery power sources and power source peripheral equipment	Aichi Pref.	2004
●	Kawai Hiryo Corporation	Manufacture and sale of organic fertilizers and agricultural chemicals and materials	Shizuoka Pref.	1981
○	Sun Delta Corporation	Development of applications for synthetic plastic products and manufacture and sale of processed products	Tokyo Pref.	2005
○	Honshu Rheem Co., Ltd.	Manufacture and sale of fiber drums, import and sale of food processing machines and materials	Kanagawa Pref.	1968
○	Toyo Beauty Supply Corporation	Contract manufacture of cosmetics and health foods	Tokyo Pref.	1964
○	eX. Grade Co., Ltd.	Development, manufacture and sale of components for electronic equipment	Osaka Pref.	2003
○	SN Tech Corporation	Manufacture of developer, recycling business	Osaka Pref.	2008
○	Nissei Technology Corporation	Design, development, and manufacture of ultra-precision plastic lenses and optical units; manufacture of precision mechanical components and units	Hyogo Pref.	1953
	Uma Yasai Farm Corporation	Processing and sale of agricultural and livestock goods	Shizuoka Pref.	2008
<b>Servicing</b>				
●	Nagase Logistics Co., Ltd.	Warehousing and distribution	Hyogo Pref.	1982
●	Nagase Techno Service Co., Ltd.	Sales of BPO services, catalog & online commerce, recordable media, RFID, logistics services	Chiba Pref.	1991
●	Nagase General Service Co., Ltd.	Sale and lease of various goods, real estate administration	Tokyo Pref.	1983
●	Nagase Information Development, Ltd.	Software development and maintenance	Tokyo Pref.	1987
●	Nagase Trade Management Co., Ltd.	Import/export and receivables/payables administration; shared services for receipts/disbursements	Tokyo Pref.	1996
●	Nagase Chemspec Co., Ltd.	Sale and technical servicing of chemicals	Tokyo Pref.	1976
○	Nagase Landauer, Ltd.	Radiation measuring services	Ibaraki Pref.	1974
	Nagase Logistics Support Co., Ltd.	An exclusive stevedore for Nagase Logistics Co., Ltd.	Hyogo Pref.	1954
	Choko Co., Ltd.	Insurance agency	Osaka Pref.	1971

Category	Company name	Description of business	Location	Year of establishment
<b>Sales</b>				
●	Nagase Chemical Co., Ltd.	Sale of dyestuffs, industrial chemicals, chemicals for manufacturing paper, plastics and machinery	Tokyo Pref.	1995
●	Nagase Plastics Co., Ltd.	Sale of raw materials for plastics and plastic products	Osaka Pref.	1975
●	Nagase Beauty Care Co., Ltd.	Sale of cosmetics and health foods	Tokyo Pref.	1991
●	Nishinohon Nagase Co., Ltd.	Sale of dyestuffs, auxiliaries, industrial chemicals and plastics	Fukuoka Pref.	1969
●	Nagase Elex Co., Ltd.	Sale of raw materials for plastics and plastic products	Tokyo Pref.	1979
●	Nagase Abrasive Materials Co., Ltd.	Sale of abrasives, inorganic materials and related equipment	Osaka Pref.	1955
●	Nagase Sanbio Co., Ltd.	Sales of medicine for agriculture and additives for fertilizers, feed and food	Tokyo Pref.	1987
●	Nagase Tool Matex Co., Ltd.	Sale of auto models, test production materials, and carbon fiber composites	Tokyo Pref.	1965
○	Nagase-OG Colors & Chemicals Co., Ltd.	Purchasing and information services related to dyes, industrial chemicals, etc.	Osaka Pref.	1957
	Nihon UNF Co., Ltd.	Manufacture, sale, import/export, management consulting, and investment in pharmaceuticals and non-pharmaceuticals	Shizuoka Pref.	2001
<b>Greater China and Korea</b>				
<b>Manufacturing and Processing</b>				
●	Nagase ChemteX (Wuxi) Corporation	Plastic manufacture and sale of adhesives and high-tech chemical products for electronics, technology services	China	2002
●	Totaku Industries Suzhou Co., Ltd.	Manufacture and sale of plastic products	China	2005
●	Nagase Electronics Technology Co., Ltd.	Chemical etching of liquid crystal glass panel units	Taiwan	2005
●	Nagase Engineering Service Korea Co., Ltd.	Equipment maintenance service and engineering	Korea	1997
●	Nagase Electronics Technology (Xiamen) Co., Ltd.	Chemical etching of liquid crystal glass panel units	China	2010
○	Guangzhou Kurabo Chemicals Co., Ltd.	Manufacture of molded urethane products for automobiles	China	2001
○	Toyo Quality One (Guangzhou) Co., Ltd.	Research and development, manufacturing, processing, sale, technology consulting, and after-sale service for major automotive parts	China	2004
○	Toyo Quality One Ningbo Co., Ltd.	Manufacture and sale of polyurethane foam	China	1993
○	Tokai Spring Mfg. (Foshan) Co., Ltd.	Development, manufacture, and sale of precision press products, spring, and standard molds	China	2005
○	Light Chemical (Changzhou) Co., Ltd.	Research, development, and after-sale service for high-function composites and intermediates; sales of internally developed products	China	2011
○	Wuxi Chenghong Electronic Chemicals Co., LTD.	Research, development, manufacture, and sales of electronics chemicals including semiconductors and flat panel displays (FPDs)	China	2013
	ON Textile Chemicals (Shanghai) Co., LTD.	Manufacture, sales, and export/import of textile-related products, dyeing processing agents	China	2003
<b>Servicing</b>				
	Nagase CMS Technology (Shanghai) Co., Ltd.	Construction and maintenance of chemical supply and management equipment	China	2006
	NW Consultant Service (Shenzhen) Ltd.	Print quality management consultant	China	2008
	Nagase Business Management and Planning (Shanghai) Co., Ltd.	Management of NAGASE Group operations and promotion of business strategies related to Greater China	China	2011



## Consolidated Subsidiaries, Affiliates and Offices

● Consolidated subsidiary ○ Company accounted for under the equity method

Category	Company name	Description of business	Location	Year of establishment
<b>Sales</b>				
●	Nagase (Hong Kong) Ltd.	Import/export, domestic sales, marketing	China	1971
●	Shanghai Hua Chang Trading Co., Ltd.	Sale of resins and related products	China	1998
	Suzhou Branch Office/ Ningbo Branch Office		China	
	Chengdu Branch Office/ Chongqing Branch Office		China	
	Nanjing Branch		China	
●	Shanghai Nagase Trading Co., Ltd.	Import/export, domestic sales, marketing	China	1997
●	Nagase Wahlee Plastics Corporation	Sale of resins and related products	Taiwan	1990
	Taichung Office		Taiwan	
	Gangshan Office		Taiwan	
●	NWP (B.V.I.) Corporation	Vehicle for investments into China from Taiwan	British Virgin Islands	2007
●	Guangzhou Nagase Trading Co., Ltd.	Import/export, domestic sales, marketing	China	2002
	Wuhan Branch Office/ Chongqing Branch Office		China	
	Zhengzhou Branch Office		China	
●	Nagase (Taiwan) Co., Ltd.	Import/export, domestic sales, marketing	Taiwan	1988
●	Tianjin Nagase International Trading Co., Ltd.	Import/export, domestic sales, marketing	China	2003
	Dalian Branch Office/ Qingdao Branch Office		China	
	Changchun Branch Office		China	
●	NWP International Trading (Shenzhen) Co., Ltd.	Sale of plastic products in South China	China	2004
	Dongguan Branch Office		China	
	Guangzhou Branch Office		China	
	Xiamen Branch Office		China	
●	Nagase Korea Corporation	General import/export trading, retailing/wholesaling, import/export trade agency	Korea	2001
●	Xiamen Nagase International Trading Co., Ltd.	Import/export, domestic sales, marketing	China	2011
●	Nagase Marketing and Service (Shenzhen) Ltd.	Import/export, domestic sales, marketing	China	2006
	Guanlan Branch Co.		China	
	ON Colors & Chemicals (Shanghai) Co., Ltd.	Sales of textile-related products, dyeing processing agents, related equipment; export/import and technology consulting, technological development of dyeing processing	China	2002
	QINGDAO REPLUS CO., LTD.	Planning and development, manufacturing control, quality control and sales of food packaging	China	2015
<b>Asean and The Middle East</b>				
<b>Manufacturing and Processing</b>				
●	Pac Tech Asia Sdn. Bhd.	Manufacture and sale of semiconductor manufacturing equipment, semiconductor wafer bumping contract manufacturing	Malaysia	2006
○	Sanko Gosei Technology (Thailand) Ltd.	Manufacture of automobile components	Thailand	1994
	Bangkok Design Office		Thailand	
○	Automotive Mold Technology Co., Ltd.	Manufacture of automotive molds and dies	Thailand	2000
○	Nafuko Co., Ltd.	Manufacture, import/export and sale of packaging materials and related equipment	Thailand	1996
○	Dainichi Color Vietnam Co., Ltd.	Manufacture and sale of color masterbatch blend for plastic	Vietnam	2006
○	PT. Toyo Quality One Indonesia	Manufacture of flame lamination products	Indonesia	2008

Category	Company name	Description of business	Location	Year of establishment
<b>Sales and Servicing</b>				
●	Nagase (Thailand) Co., Ltd.	Import/export, domestic sales, marketing	Thailand	1989
	Eastern Office		Thailand	
	Yangon Branch		Myanmar	
●	Nagase Singapore (Pte) Ltd.	Import/export, domestic sales, marketing	Singapore	1975
	Australia Branch		Australia	
	Bangladesh Liaison Office		Bangladesh	
	Middle East Representative Office		United Arab Emirates	
●	Nagase (Malaysia) Sdn. Bhd.	Import/export, domestic sales, marketing	Malaysia	1981
	Johor Bahru Office		Malaysia	
	Penang Office		Malaysia	
●	PT. Nagase Impor-Ekspor Indonesia	Import/export, domestic sales, marketing	Indonesia	1998
	Surabaya Branch		Indonesia	
●	Nagase Philippines Corporation	Import/export, domestic sales, marketing	Philippines	1997
●	Nagase Philippines International Services Corporation	Domestic sales, import/export	Philippines	2005
●	Nagase Vietnam Co., Ltd.	Import/export, domestic sales, marketing	Vietnam	2008
	Ho Chi Minh City Branch		Vietnam	
●	Nagase India Private Ltd.	Import/export, domestic sales, marketing	India	2006
	North India Branch (Gurgaon)		India	
	South India Branch (Chennai)		India	
	PT. Indonesia Mold Technology	Design changes and maintenance for large-scale plastic automobile component molds	Indonesia	2015
	Nagase (Siam) Co., Ltd	Contract services for Group companies	Thailand	2000
	Landauer Australasia Pty Ltd	Radiation measuring services	Australia	2006
<b>Americas</b>				
<b>Manufacturing and Processing</b>				
●	Engineered Materials Systems, Inc.	Research and development, manufacture, and sales of materials for commercial adhesives, conductive adhesives	America	1993
●	Pac Tech USA Packaging Technologies Inc.	Semiconductor wafer bumping, manufacture and sale of semiconductor manufacturing equipment	America	2001
●	Sofix Corporation	Manufacture and sale of color formers	America	1990
○	KN Plotech America Corporation	Manufacture and sale of blow-formed plastic molding components and products	America	2010
○	TQ-1 de MEXICO S.A. de C.V.	Manufacture and sale of urethane for automotive seat pads and automotive laminated frames and sale of automotive urethane foam	Mexico	2012
○	Cytech Products Inc.	Manufacture and sales of mold release agents for polyurethane resins, thermal paper additives and emulsion dispersing element	America	1988
<b>Sales</b>				
●	Nagase America Corporation	Import/export, domestic sales, marketing	America	1971
	Michigan Branch		America	
	California Branch		America	
●	Nagase Enterprise Mexico S.A. de C.V.	Import/export sales, intermediate trade, market development, information collection	Mexico	2010
	Leon Branch Office		Mexico	
	Nagase do Brasil Comércio de Produtos Químicos Ltda.	Import/export sales, intermediate trade, market development, information collection	Brazil	2012
<b>Europe</b>				
<b>Manufacturing and Processing</b>				
●	Pac Tech-Packaging Technologies GmbH	Semiconductor wafer bumping, manufacture and sale of semiconductor manufacturing equipment	Germany	1995
<b>Sales</b>				
●	Nagase (Europa) GmbH	Import/export, domestic sales, marketing	Germany	1980
	Hungary Representative Office		Hungary	
	London Branch		England	

Overview

<b>Company Name</b>	NAGASE & CO., LTD.		
<b>Founded</b>	June 18, 1832		
<b>Establishment</b>	December 9, 1917		
<b>Capital</b>	¥9,699 million		
<b>Employees</b>	944 (Consolidated: 6,241)		
<b>Main Business</b>	Import/export and domestic sales of dyestuffs, chemicals, plastics, machinery, electronics materials, cosmetics and health foods		
<b>Main Banks</b>	Sumitomo Mitsui Banking Corporation, The Bank of Tokyo-Mitsubishi UFJ, Ltd., Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited		
<b>Main Offices</b>	Osaka Head Office Tokyo Head Office Nagoya Branch Office Nagase R&D Center Nagase Application Workshop	1-1-17, Shinmachi, Nishi-ku, Osaka City, Osaka 550-8668, Tel: (81) 6-6535-2114 5-1, Nihonbashi-Kobunacho, Chuo-ku, Tokyo 103-8355, Tel: (81) 3-3665-3021 3-14-18, Marunouchi, Naka-ku, Nagoya City, Aichi 460-8560, Tel: (81) 52-963-5615 Kobe High Tech Park, 2-2-3, Murotani, Nishi-ku, Kobe City, Hyogo 651-2241, Tel: (81) 78-992-3162 2-4-45, Higashitsukaguchicho, Amagasaki City, Hyogo 661-0011, Tel: (81) 6-4961-6730	

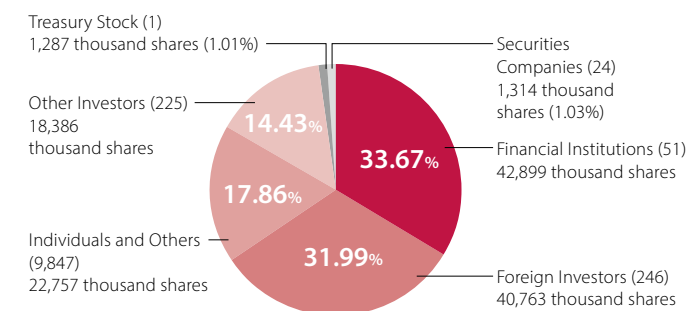
Stock Exchange.....Tokyo (First Section)

Code.....8012

Stock Status.....Authorized Number of Shares 346,980,000 shares  
Issued Number of Shares 127,408,285 shares

Number of Shareholders.....10,394

Composition of Shareholders

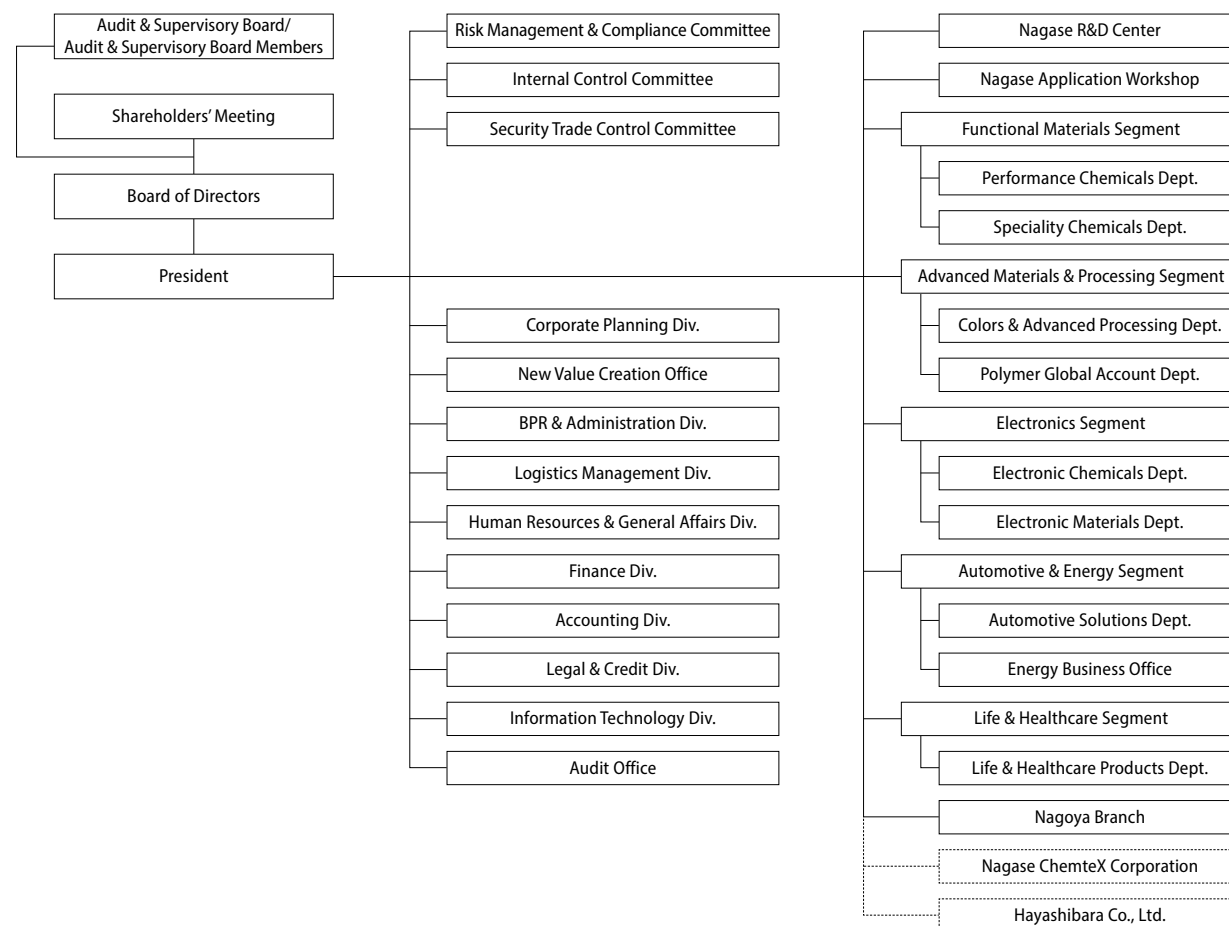


Principal Shareholders

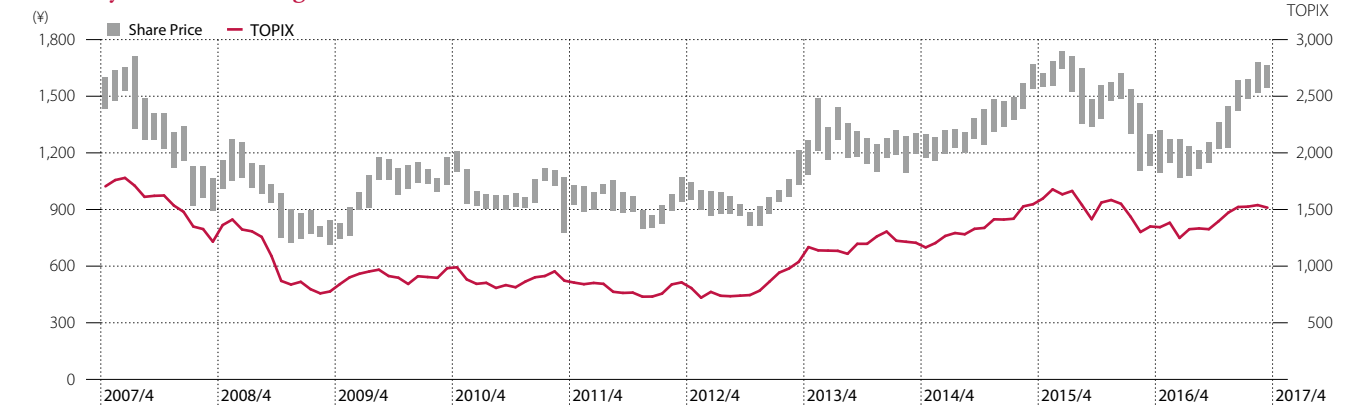
Name	Number of Shares Held (Thousands)	Percentage of Total Shares Outstanding (%)
NORTHERN TRUST CO. (AVFC) RE SILCHESTER INTERNATIONAL INVESTORS INTERNATIONAL VALUE EQUITY TRUST	6,836	5.37
The Master Trust Bank of Japan, Ltd. (Trust Account)	6,161	4.84
Sumitomo Mitsui Trust Bank, Limited	5,776	4.53
Japan Trustee Services Bank, Ltd. (Trust Account)	4,539	3.56
Sumitomo Mitsui Banking Corporation	4,377	3.44
NORTHERN TRUST CO. (AVFC) RE U.S. TAX EXEMPTED PENSION FUNDS	4,193	3.29
Nippon Life Insurance Company	3,589	2.82
Reiko Nagase	3,555	2.79
Hiroshi Nagase	2,948	2.31
NORTHERN TRUST CO. (AVFC) SUB A/C NON TREATY	2,797	2.20

\* Shares owned by Hiroshi Nagase include shares nominally owned by the NAGASE & CO., LTD. Officers' Shareholding Association

Organization (as of April 1, 2017)



Monthly Share Price Range of NAGASE



Monthly Trading Volume

