

### **UBE INDUSTRIES,LTD.**

Annual Report 2017

Year ended March 31, 2017

## Change & Challenge 2018 Being a Sustainable Entity















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#### **UBE Group Profile**

Operating profit -

Establishment 1897 120th anniversary year

Businesses Chemicals, pharmaceuticals, cement & construction materials, machinery, and energy & environment

Consolidated results for fiscal 2016, ended March 31, 2017

Net sales 4616.5 billion

¥34.9 billion

Net income per share (Primary) — ¥22.85

Greenhouse gas reductions — 14% (from fiscal 2005 levels)

Percentage of female managers — 1.4% (as of March 31, 2017)

## How We Stand and Where We Are Heading



**Shareholders** 

Customers

**Business Partners** 

**Employees** 

Communities



The UBE Group's Business Principles

"Coexistence and Mutual Prosperity"
"From Finite Mining to Infinite Industry"

#### The UBE Group Vision

Wings of technology and spirit of innovation. That's our DNA driving our global success.

The UBE Group will embrace a frontier spirit in seeking to achieve coexistence with the global community driven by the limitless possibilities of technology, while continuing to create value for the next generation through manufacturing.

Medium-Term Management Plan
Two basic policies of "Change & Challenge 2018"

Strengthen the business foundation to enable sustainable growth

Address and be part of the solution for resource, energy, and global environmental issues

# as a Sustainable Entity

In this section, we overview the creation of the UBE Group, how it stands today, and its vision as a sustainable business entity.



## A Value Creation Framework that is the Fruit of 120 Years of Technology and Innovation

The UBE Group has five business segments. Since starting out in coal mining in 1897, we have driven technological and manufacturing innovations to reach where we are today, and are drawing on synergies from our business segments to create new value.



The UBE Group started out in 1897 with a coal mining project in the city of Ube.

## : **→** 1933:

### Ammonia and fertilizer

We began by using coal as a raw material in manufacturing ammonium sulfate fertilizer, leading to the development of our Chemicals segment.

## »1923:

#### Cement

This business drew on the rich limestone deposits in Ube and waste from coal and coal mines and evolved into the Cement & Construction Materials segment.

Pulverizing

1914:

### Machinery

This business evolved from manufacturing and servicing coal mining machinery.

Minino

1897:

#### Coal

and fuel

The UBE Group began its journey 120 years ago as a coal mining project in Ube.

## Chemicals

#### Caproclatam by-products

PCD and PUD (raw materials for high-performance polyurethane)



# Cement & Construction

Using molding technology



## Machinery

# Energy & Environment

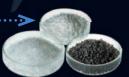
Supplying electricity and coal



## Pharmaceutical

Talion®

We undertake drug discovery in-house and contract pharmaceuticals and generics production, drawing heavily on our unique organic synthesis technology as a chemicals company.







technology and

In addition to nylon and polybutadiene rubber, we make such advanced materials as electrolytes and separators for lithium-ion batteries (LiBs) and gas separation membranes. We also manufacture environmentally friendly fine chemical products that are used widely in industrial and consumer applications.





Separators

(LiB material)

Ready-mixed concrete



Self-leveling materials



We have built a solid reputation over the years for a diverse lineup of infrastructural offerings, from regular to specialty cements and solidification materials. Our construction materials extensively incorporate our chemicals

## ∕lateria

expertise. They include interior and exterior, waterproofing, underfloor, plastering, and basic materials.



Supplying

machines that we supply to automobile manufacturers around the world, and other offerings such as transportation machinery, crusher equipment and bridges, are highly regarded. Our high reliability is backed by our advanced proprietary technologies.

IPP, in-house power generation



production

As well as forming the UBE Group's energy infrastructure, this segment engages in power wholesaling and other areas as part of the deployment of a new energy strategy. We are endeavoring to lower environmental impact through biomass and other energy sources.

Coal and usage

#### **Principal Products and Businesses**

- In-house pharmaceuticals
- Contract pharmaceuticals
- Generics

- Nylon and lactam Nylon resin
  - Caprolactam
  - Industrial chemicals

- Battery materials Battery materials and fine chemicals (Electrolytes and separators)
  - Fine chemicals
  - High-purity chemicals

- Polyimide
- Ceramics
- Separation membranes
- Tyranno Fiber®
- Telecommunications devices

(Self-leveling materials, waterproofing materials, renovation and aseismic retrofitting)

Ready-mixed concrete

#### Calcia, magnesia

- Molding machines (Die-casting machines, injection molding machines, extrusion presses)
- Industrial machinery and bridges
- Steelmaking products

Coal

- Import and sales
- Coal center (storage and distribution)

Power

- Independent power producer (IPP)
- In-house power plant

Supplying electricity and coal

### Producing in Optimal Locations and Pursuing Sustainability

Major Production Sites

The UBE Group centers its production in the city of Ube and the rest of Japan and throughout Asia, the United States, and Europe.

Isa • Yamaguchi
prefecture

Ube

Vamaguchi prefecture

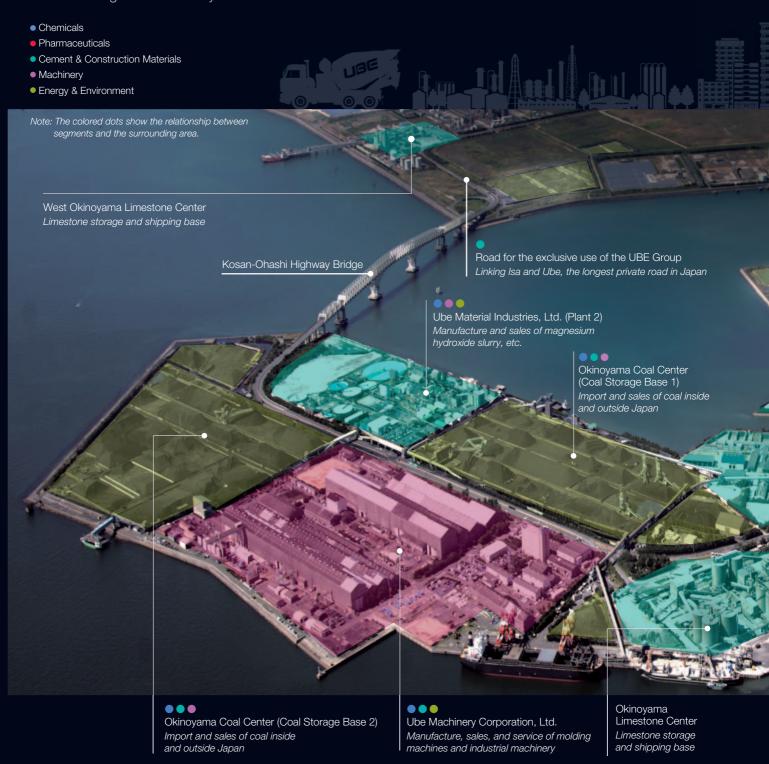
Yamaguchi prefecture

Sakai • Osaka
prefecture

Kanda • Fukuoka

In the city of Ube, we draw on synergies between coal storage facilities, in addition to chemicals, pharmaceutical, cement, and machinery production, as well as our electric power plants and research laboratories.

As a member of the local community, we champion the spirit of coexistence and mutual prosperity in contributing to sustainability in our heartland of Ube.



## Grao de Castellon ● Spain Jiangsu ● China Rayong ● Thailand Johor ● Malaysia

Factory

of various kinds of cement



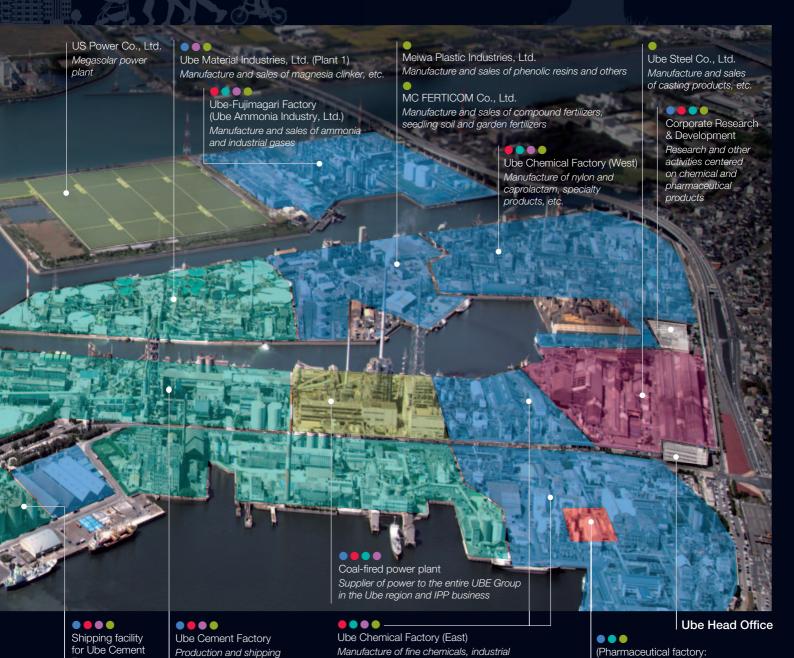
13th annual Responsible Care Regional Dialogue Meeting in the Ube District

#### **Pursuing Coexistence for Social Sustainability**

The UBE Group collaborates closely with the communities in which it operates in recognition that such ties are vital for corporate activities.

The Ube Chemical Factory is a district member of the Responsible Care Committee of the Japan Chemical Industry Association, and engages extensively with local residents, including through dialogue, facilities tours, and the *Wings* magazine.

Our efforts as a good corporate citizen in Ube began in the 1950s with efforts to tackle the issues of soot and dust at the Ube Cement Factory. We addressed this environmental issue through mutual trust and collaboration between industry, government, academia, and the people. We called this approach the Ube System, which was subsequently leveraged to overcome complex environmental challenges. In 1997, the city of Ube received a Global 500 Award from the United Nations Environment Program. The Ube System remains relevant today, and all stakeholders are striving to make Ube a sustainable city, one that abounds in nature and offers a positive living environment.

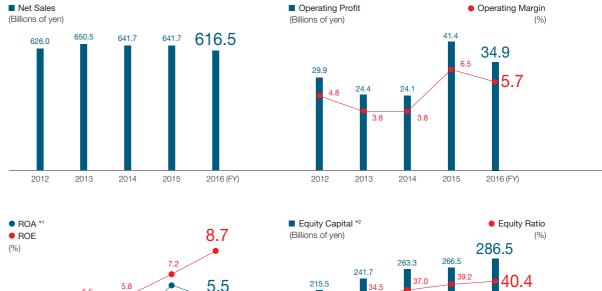


chemicals and pharmaceuticals, etc.

Manufacture of pharmaceuticals)

#### Consolidated Financial and Non-Financial Highlights

### Financial Highlights



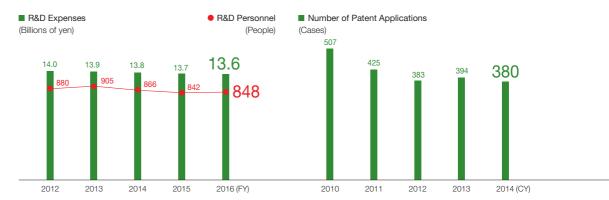


Notes: 1. ROA = (Operating profit + Interest and dividend income + Share of profit of entities accounted for using equity method) / Average total assets

2. Equity capital = Net assets - Share subscription rights - Non-controlling interests

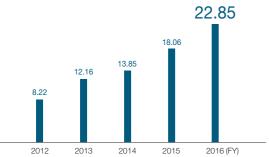
### Non-Financial Highlights

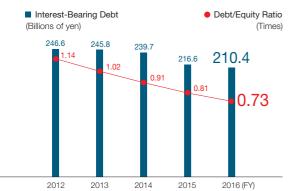




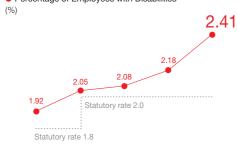
#### ■ Net Income per Share (Primary)







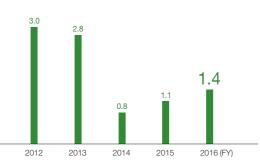
#### Percentage of Employees with Disabilities



2012	2013	2014	2015	2016 (FY)

#### ■ Percentage of Female Managers





Note: Figures for Ube-Kohsan Central Hospital Corp. are not included from fiscal 2014.

#### Topics for Fiscal 2016

2016		
April	Chemicals	Merges three Spanish subsidiaries
		Decides to increase large-crystal ammonium sulfate production at Ube Chemical Factory and agrees to establish joint venture with National Federation of Agricultural Co-operative Associations to ship and manage ammonium sulfate
	Cement & Construction Materials	Transfers limestone products sales and logistics operations to Ube Material Industries, Ltd.
August	Chemicals	Opens Osaka Research & Development Center
	Machinery	UBE Machinery Inc. sets up sales and service office in Kentucky, U.S.A.
	Cement & Construction Materials	Ube Shipping & Logistics, Ltd., becomes Japan's first coastal shipping company to establish a joint venture in Indonesia
September	Chemicals	Decides to expand production capacity of LiB separators
	Cement & Construction Materials	Ube Material Industries, Ltd., sets up Thai subsidiary
October	Chemicals	Decides to construct nylon plant in Spain
		Agrees to form Chinese electrolyte business alliance with Mitsubishi Chemical Corporation*
2017		
January	Machinery	Ube Machinery Corporation, Ltd., completes acquisition of shares in

\*Mitsubishi Chemical Corporation, Mitsubishi Plastics, Inc., and Mitsubishi Rayon Co., Ltd., merged in April 2017, the surviving entity being Mitsubishi Chemical Corporation.

#### **External Evaluations**

Chemicals

MS-SRI (Morningstar Socially

March

Responsible Investment Index)

Certified as an Excellent Enterprise of Health and Productivity Management-White 500

Mitsubishi Heavy Industries Plastic

Signs shareholders agreement with

Corporation to integrate acrylonitrile butadiene styrene businesses

Mitsubishi Rayon Co., Ltd.,\* and JSR

Technology Co., Ltd.



As of June 30, 2017



Note: The Excellent Enterprises of Health and Productivity Management — White 500 program was created by the Ministry of Economy, Trade and Industry (METI) and certified by Nippon Kenko Kaigi.



FY2016: Proceeding overall according to plan.

FY2017: Further improve the revenue strength of businesses, implement streamlining and cost reductions, and firmly execute strategies that were started up until FY2016.

		Billions of yen		
	-	FY2016 (Results)	FY2017 (Forecast)	FY2018 (Initial plan)
Key Figures	Net sales	¥616.5	¥700.0	¥750.0
	Operating profit	34.9	40.0	50.0
	Ordinary profit	33.3	38.0	49.0
	Profit attributable to owners of parent	24.1	24.5	29.0
			%	
Key Indicators	Return on sales (ROS)	5.7	5.7	6.5 or above
	Return on equity (ROE)	8.7	8.3	9.0 or above

#### To Our Stakeholders

#### Celebrating Our 120th Anniversary

# Continuing to Evolve through Technological Innovation

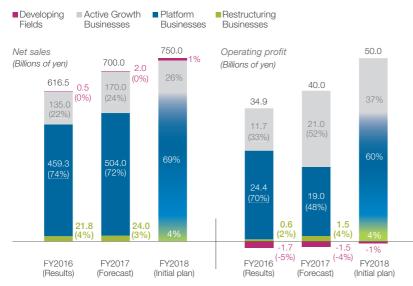
The UBE Group celebrates its 120th anniversary in 2017. While reforms are commonplace in the modern era, they are nothing new for us, as our history is replete with reforms in what have been largely turbulent times for our businesses. Only a handful of our 120 years have been truly good times.

Today, we focus on chemistry and other fields such as cement & construction materials and machinery. We started out in coal mining, launching industrial businesses based on coal in the event that our mines could no longer function. We replaced those businesses when oil took over as the world's prime energy source, but then there was a coal revival when oil crises struck in the 1970s.

These examples illustrate how the UBE Group has experienced constant transformations in the operating climate but has evolved by overcoming its challenges with technological innovations and driving its businesses toward the future. Innovation is central to our corporate culture.

As President and CEO, I never settle for the here and now. I am constantly looking for ways to create a better future because I assume times will always be turbulent.

Progress by Business Portfolio Categorization



What is different today, however, is that change is happening faster than ever before. It is tough for any company to go it alone these days. So, we believe it is the right time to explore open innovations and other external collaborations, joint businesses with companies that have been our rivals, mergers and acquisitions (M&As), and other alternatives.

Our management fundamentals must accordingly be about valuing the assets and aspects of corporate culture that our predecessors have bequeathed us in exploring businesses that can keep the Company sustainable.

## Initial Results of Our "Change & Challenge 2018" Medium-Term Management Plan

## A Year of Determining and Deploying Crucial Investments for Growth

In our view, the economic environment in fiscal 2016 was little changed from a year earlier, albeit that foreign exchange fluctuations did have some impact. Some claimed that domestic consumption was slow, but my impression was that the situation was not bad overall.

We posted mixed results in fiscal 2016, but our performance was basically as we projected.

The year was also one in which we determined and deployed investments that are vital to revitalize and restore growth in our chemicals business—a central strategy in our medium-term management plan—and to expand other segments.

We decided on and began upgrades at several sites in our chemicals business. They included large-crystal ammonium sulfate at the Ube Chemical Factory, high-value-added nylon 6 in Spain, and lithium-ion battery (LiB) separator operations at the Sakai Factory.

We formed an alliance with Mitsubishi Chemical Corporation in LiB electrolytes in China. We also acquired the injection molding machine business of Mitsubishi Heavy Industries, Ltd.

#### Progress in Business Portfolio Management

Here, we made considerable progress. We took the right steps in active growth businesses, especially in the chemicals area, that included capital expenditures

#### **Business Portfolio Segmentation**

Target business domains: Environment and energy, mobility, construction and infrastructure, healthcare

	Chemicals and Pharmaceuticals	Cement & Construction Materials	Machinery	Energy & Environment
Developing Fields	New battery materials, specialty aeronautical fields (Tyranno Fibe metal immobilizer, etc.), biomate	er®), environmental material		,,
Active Growth Businesses	Nylon, synthetic rubber, separators, high-performance coatings, pharmaceuticals	Fine materials (MOS-HIGE, etc.)	Machinery servicing	
Platform Businesses	Caprolactam and industrial chemicals, fine chemicals, separation membranes, ceramics	Cement and ready-mixed concrete, calcia and magnesia, recycling	Molding machinery, industrial machinery, steel products	Coal, power
Restructuring Businesses	Polyimide, electrolytes	_		
D E	LIDE III			

Developing Fields: UBE will promote growth in these fields to turn them into future sources of income. Active Growth Businesses: Market expansion is expected and UBE will pursue further growth in its fields of strength.

Platform Businesses: UBE will aim to maintain and expand stable income.

Restructuring Businesses: UBE will revamp the business models and undertake business restructuring.

on the above upgrade for high-value-added nylon 6 facilities and on boosting separator production.

Our platform businesses can provide stable cash flows. We will make minimum required investments in these areas, such as equipment renewals, to keep these businesses running, and will generate sufficient cash from each platform business to fund spending in active growth fields.

We made dramatic improvements in restructuring businesses. As mentioned earlier, we formed an electrolyte business alliance with Mitsubishi Chemical in China. In polyimide, we are focusing first on growth areas so that we can head into the black. Specifically, we will maintain our polyimide film operations while accelerating research and development (R&D) and expanding varnish sales to cater to rising demand.

In developing fields, we are endeavoring to create new markets.

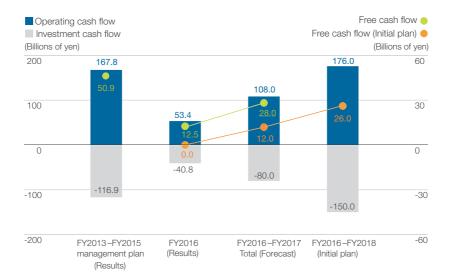
## Basic Strategy of Strengthening Business Foundations to Enable Sustainable Growth

Key focuses in this strategy are to revitalize and restore growth in our chemicals business and reinforce the active growth businesses in our portfolio. Acting fast so all businesses can generate cash will help reinforce our business infrastructure. An example is deploying dramatic measures to make restructuring businesses part of the platform business. To that end, we must commit ourselves to our objective 10 years hence of becoming an enterprise that continues to create value for customers.

We took the right steps in active growth businesses, especially in the chemicals area, that included capital expenditures on the above upgrade for high-value-added nylon 6 facilities and on boosting separator production.

Progress of Investment Plan and Cash Flow Plan

### Free cash flows exceeding ¥26 billion in three years



Innovating materials and applications will be important to generate value. We have two R&D approaches. One is long term and the other is closer to markets. We have reorganized so that we can deliver results in both respects.

Another consideration is working out ways to deliver value from our efforts to customers. We need to provide solutions that integrate services and other intangibles with our products. Customers want solutions to issues, not products, so combinations with external resources would work well from their perspective. We do not have to rely solely on in-house resources.

In any case, I consider it crucial to concentrate on creating value that customers find valuable.

#### Investing for Growth

Under our medium-term management plan, we target ¥26 billion in free cash flow over three years. We will accordingly choose investments to reach that goal. Much of our Group capital expenditures will continue for two or three years, which would be after our current medium-term management plan. So, in that sense, we need to think of amounts for future investments. As we have already determined the spending we need for growth, we will adjust by appropriating funds for maintaining and upgrading operations.

## Plans for the Second Year of "Change & Challenge 2018"

We have positioned fiscal 2017, the second year of our medium-term management plan, as a period of executing investment projects selected in fiscal 2016. We will also undertake rationalization and other measures to ameliorate the impact of coal price hikes since we formulated the plan. While

monitoring changes in the business climate and other developments, we will work on a successor medium-term management plan.

#### **Role of Outside Directors**

# Advising from Macroeconomic Perspectives

Outside directors think in macroeconomic terms of what we explain to them and the Group's overall policies and plans. Executive officers like myself tend to debate details, as we are so familiar with the contents of plans. So, it is vital that outside directors point out differences. Sometimes, they ask us fundamental questions. For example, in the portfolio businesses they might want to know if active growth businesses are really growing. I find it positive and stimulating to constantly face such questions. And because outside directors have their own areas of expertise, we find their points persuasive because they are based on experience.

## Environment, Safety, and Work Approach Initiatives

# Tackling Environmental Issues a Financial Must

The second key strategy of our medium-term management plan is to address and be part of the solution for resource, energy, and global

environmental issues. In fiscal 2016, our environmental efforts beyond what we normally do included starting construction to adopt phenolic processes for caprolactam manufacturing, thereby lowering greenhouse gas emissions. We also installed facilities to generate power from waste heat at the Kanda Cement Factory and built recycling facilities for our cement business. Eco-initiatives have become so central to our business activities that we do not even consider investments that do nothing for the environment. In the UBE Group, streamlining investments that are also good for the environment have helped save energy and cut greenhouse gas emissions. In other words, we see no financial benefits in investments or businesses that do not contribute to a better environment.

Because the chemicals business needs highpressure gas facilities, the risk of accidents is higher than in other businesses, so safety is our top priority. Safety is at any rate fundamental to corporate activities, and so our messaging to each employee inhouse is constantly about safety, health, and compliance. All of us have to be aware of these issues as preconditions for our operations and activities.

In recent years, work practices have become an important issue. Current personnel shortages in some industries may spread further in the next five years or so. To address this challenge, we need to change our employment environment. Long working hours were once considered a virtue, and such thinking has yet to disappear. Some UBE Group companies are overseas, often with local people in top management. In the process of changing, we can incorporate their ideas into our work practices in Japan. We are committed to promoting better work environments, and that also means creating an organization that is more conducive to the successes of women.

#### The Next 120 Years

## Relentlessly Pursuing Change & Challenge to Reach Our Goals

Returning to my discussion at the start of my message, our 120th anniversary is an excellent milestone for expressing thanks to our predecessors, customers, business partners, and the local communities that have enabled the UBE Group to remain in business today.

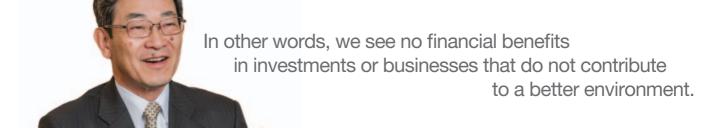
The anniversary also presents an important opportunity to look toward how social changes in the years ahead will shape the Group's future. When formulating our current medium-term management plan, we debated in-house about what sort of entity we seek to become in the next 10 years. The ideas were diverse, as befits the broad nature of our operations. But the consensus at the end of the day was that we all wanted to be an enterprise that continues to create value for customers. This unity was gratifying, as I had reached the same conclusion.

This notion of customer value is something we all can feel motivated to pursue. We will get there by responding flexibly to transformations in the business climate while relentlessly pursuing challenges and change. I look forward to your ongoing support and encouragement for these efforts.

J. Jamanoto

July 2017

Yuzuru Yamamoto, President and CEO



#### Financial Strategy

## A Financial Strategy that Balances Financial Soundness and Efficiency

A key role of finance is to help management improve enterprise value while also balancing corporate stability and growth. As such, we strive to balance financial soundness and efficiency. The UBE Group has long endeavored to reinforce its financial position. At the end of fiscal 2016, we posted an equity ratio exceeding 40% and a debt/equity ratio of 0.7 times. The notion of maintaining a level of debt not exceeding our net assets has spread beyond the Finance Department to our business units, so the whole Group understands the importance of financial discipline. We look to

This is one of several numerical targets of our medium-term management plan.

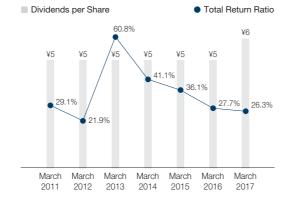
lift our return on equity (ROE) to above 9.0%.

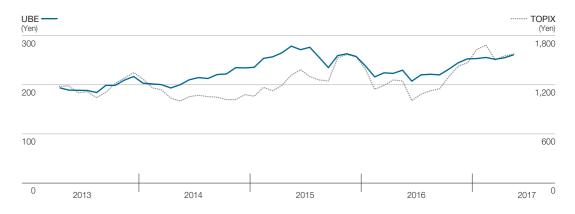
## Enhancing Profitability Central to Reaching Our ROE Goal

As well as earnings goals, our medium-term management plan incorporates closely related ROE and return on sales (ROS) benchmarks. In endeavoring to boost ROE to above 9.0% in the final year of the plan, we aim to generate higher earnings in business units and generate ROS of 6.5%. We believe that we can maintain financial stability for the foreseeable future, and will work to reach our ROE target by improving ROS.

#### Drawing on Stable Dividends and Considering Stock Buybacks to Enhance Shareholder Returns

In fiscal 2016, we paid annual dividends per share of ¥6.00, up ¥1.00. Our basic policy on shareholder returns is to provide stable and sustainable dividends. While balancing financial soundness and preparations for investing in the future, we conduct comprehensive assessments with a view to repurchasing shares according to profitability and cash flow, and seek to maintain a consolidated total return ratio of at least 30%.





A key role of finance is to help management improve enterprise value while balancing financial soundness and efficiency.

Masayuki Fujii Group CFO, General Manager of Corporate Planning & Administration Office

#### **Basic Stance on Corporate Citizenship**

Throughout its 120 years, the UBE Group has retained its business principles of coexistence and mutual prosperity as the cornerstone of its operations. We believe that our corporate governance, environmental protection, community contribution, and other initiatives will enable us to enhance corporate value, drive sustainable growth, and remain a good corporate citizen.

#### UBE Group Basic Policies for CSR

- Continually improve profits and earnings and maintain a sound financial position in order to increase corporate value
- Provide products, services, and systems that contribute to safety and the environment, reduce the use of harmful materials and waste, and institute policies for the prevention of global warming in order to contribute to the conservation of the global environment
- Establish compliance procedures to improve corporate governance and create a better working environment as a part of our activities to contribute to society

For more information on the UBE Group's CSR, please check out our CSR Report. http://www.ube-ind.co.jp/english/eco/csr\_report.htm

In this section, we showcase the UBE Group's efforts to contribute

to social progress as a sustainable business entity.

## How We Live in Harmony with Stakeholders





Michio Takeshita Chairman of the Board of Directors Ube Industries, Ltd.

Nobuyoshi Ootoh Equity Investment Group Analyst Asset Management One Co., Ltd.

# as a Sustainable Entity

#### **Corporate Governance Dialogue**

Nobuyoshi Ootoh, an analyst from the Equity Investment Group of Asset Management One Co., Ltd., sat down with Ube Industries Chairman Michio Takeshita to assess the UBE Group's corporate governance and discuss ways to further enhance investor engagement.

#### Appointing Outside Directors Since Fiscal 2005

**Ootoh:** We chemicals analysts believe that the UBE Group has attained outstanding transparency in corporate governance. Your four outside directors have fit in extremely well, and investors are satisfied with your information disclosure. The fairness of your corporate culture seems to underpin all this.

Takeshita: We began appointing outside directors to the Board in fiscal 2005. This was not simply to improve transparency. Rather, our goal was to confirm how we really stand in terms of our philosophy as an organization and our management approach and to ensure that we are in sync with the world around us.

We have an eight-person Board of Directors and a four-person Board of Corporate Auditors, and half of the individuals on these bodies are from outside the Company. We have been completely comfortable with this setup since the beginning, and this was not in response to the corporate governance code or anything like that. We are a company with a Board of Corporate Auditors. Within the Board of Directors are a Nominating Committee and an Evaluation and Compensation Committee, which outside directors head, so we function more like a company with nominating committees.

#### **Encouraging Free-Ranging Discussion**

Ootoh: We consider it vital to create an atmosphere in which outsiders can freely express their opinions. Do you provide such opportunities?

Takeshita: Yes, we do. We hold outside director gatherings for that purpose in which I am the sole internal participant. Recent meetings have focused on ways to make the Board of Directors more effective. Japan's Corporate Governance Code encompasses such areas as assessing the effectiveness of the Board of Directors, and we go further in that respect by conducting surveys whose findings we use as the basis for free-ranging discussion by



insiders and outsiders alike of how best to improve what that body does.

**Ootoh:** I believe that is exactly the right approach to take.

**Takeshita:** In surveys we undertook of the Board of Directors and the Board of Corporate Auditors, everyone concurred that we have succeeded in creating a cordial atmosphere.

#### The Need for Investor Relations (IR) Engagement

Ootoh: More and more companies in Japan are endeavoring to engage meaningfully with investors. Companies that I think are excelling in this regard go the extra mile. You will find their CEOs committing to action in briefings, whether it to be to cut costs or to state when they will do something. In addition, they will also provide detailed updates on the figures.

**Takeshita:** Japanese companies have solid IR approaches in terms of presenting specific numbers, examples being sales, earnings, and return on equity targets under medium-term management plans. However, they are not all that proficient at explaining

where they are heading over the medium or long terms, an example being to highlight and explain areas in their business portfolios that are top priorities. I think engagement will become a greater priority down the track.

## Embracing Environmental, Social, and Governance (ESG) Commitments

Ootoh: I believe that ESG criteria will become the basis for engagement with internal and external stakeholders over the medium and long terms because these factors are pivotal to the sustainability of businesses particularly at entities like yours that have employees around the world.

**Takeshita:** A large number of companies end up presenting rather superficial information about ESG management or investments. But in my view, investing for the medium and long terms begins with management presenting clear grounds for their ESG goals over such durations.

**Ootoh:** You have taken various steps to cut costs by eliminating waste, one example being your efforts to



lower your CO<sub>2</sub> emissions. I think it would be great for you to position emissions reductions as a key performance indicator that you periodically update at investor and analyst briefings. We would all find it easy to understand cost-cutting progress, which is also acceptable from your business principles and contributes to profitability.

**Takeshita:** That is certainly true. Our true value comes from fully integrating ESG into our business management framework.

elsewhere that they are quite good at conveying the essence of what companies are striving to achieve.

**Takeshita:** That would make perfect sense to me and our outside directors. We would be happy to look into it, as we are always open to the perspectives and advice of investors.



#### Sharing the Perspectives of Outside Directors

**Ootoh:** I think investors and analysts would appreciate more opportunities to speak directly with the president and Board members.

**Takeshita:** Well, we do hold small meetings with investors, and we are looking into having outside directors attend them. This would be a good way to share external perspectives on our management and governance approaches.

**Ootoh:** It would be great if you could do that. We have found in discussions with external directors

#### Profile of Nobuyoshi Ootoh

- 1992 Graduates from Faculty of Social Studies of Hitotsubashi University and joins Yasuda Trust & Banking Co., Ltd.
- 2000 Becomes domestic stock analyst in Corporate Research Office of Mizuho Trust & Banking Co., Ltd.
- 2004 Becomes domestic stock analyst in Equity Management
  Department
- 2012 Becomes domestic stock analyst in Strategic Operations
  Department
- 2013 Becomes stock analyst in Strategic Operations Department
- 2016 Becomes analyst in Equity Investment Group of Asset Management One Co., Ltd.

## Yuzuru Yamamoto President & Representative Director, President & Executive Officer, and Group CEO

#### Tadashi Matsunami

Senior Managing Executive Officer & Representative Director, and Company President of Cement & Construction Materials Company and General Manager of Cement Dept. with responsibility for Technical Development Center.

Miyako Suda

Seiichi Ochiai

Takanobu Kubota

Atsushi Yamamoto

Auditor



#### **Corporate Governance**

#### Corporate Governance Overview

Organizational structure	Company with Board of Corporate Auditors
Chairman of the Board of Directors	s¹ Michio Takeshita
Number of directors <sup>1</sup>	8 (of which 4 are outside directors)
Number of corporate auditors <sup>1</sup>	4 (of which 2 are outside corporate auditors)
Independent officers appointed <sup>1</sup>	4 outside directors, 2 outside auditors
Determination of compensation for each director	• Compensation consists of base compensation and stock-based compensation.
	<ul> <li>Total compensation for the year ended March 31, 2017 (4 directors excluding the independent directors): ¥232 million (base compensation: ¥211 million; stock options: ¥20 million)</li> </ul>
Determination of compensation	Compensation consists of base compensation.
for each corporate auditor	Total compensation for the year ended March 31, 2017 (2 auditors excluding the independent auditors): ¥58 million (base compensation: ¥58 million)
Outside officers	Compensation consists of base compensation and retirement benefits.
(Independent officers)	Total compensation for the year ended March 31, 2017 (6 officers): ¥68 million (base compensation: ¥68 million)
Independent auditors	Ernst & Young ShinNihon LLC

Note1: As of June 30, 2017

#### Governance

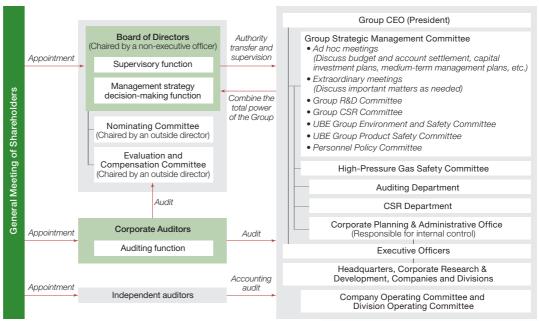
The UBE Group's fundamental mission is to achieve sustainable growth and increase the corporate value of the Group over the long term. The confidence of shareholders, customers, business partners, employees, communities and other stakeholders is essential to this mission, so we have established

effective corporate governance to maintain appropriate business activities that fulfill our obligations to stakeholders.

#### **Board of Directors**

In principle, a director who does not serve concurrently as an executive officer serves as Chairman of

#### Corporate Governance Structure



#### Takashi Kusama

Apr. 1971
Joined The Industrial Bank of Japan, Limited
Jun. 1999
Executive Officer, The Industrial Bank of Japan, Limited
Jun. 2000
Managing Director,
Shinko Securities Co., Ltd.
Jun. 2003
President and Representative

May 2009 Chairman of the Board and Representative Director, Mizuho Securities Co., Ltd.

Jun. 2011 Advisor, Mizuho Securities Co., Ltd. (current position)

Director, Shinko Securities Co., Ltd.

Jun. 2012 Outside Auditor, WOWOW Inc. (current position)

Jun. 2013
Outside Director of the Company (current position), Outside Auditor, WOWOW Inc. (important concurrent

Message from Outside Director Takashi Kusama

Outside directors must provide wise counsel in participating in corporate management. We have to consider a wide range of issues. These include whether the UBE Group can continue to grow solidly, employees find their work rewarding, and executives are on top of their tasks. We must also look into whether the Company is cultivating tomorrow's leaders, can maintain its competitiveness, and is able to prosper in times of change.

the Board of Directors. The Board of Directors makes decisions about important management issues in accordance with laws, regulations, the Company's articles of incorporation, and the rules of the Board of Directors, and also supervises directors and executive officers to ensure they are performing their duties appropriately and efficiently.

#### Corporate Auditors

Corporate auditors conduct audits based on auditing policies and auditing plans set each fiscal year to assess the decision-making process for key decisions and the execution of business. Corporate auditors attend Board of Directors' meetings and other important meetings, examine important documents for approval and receive reports on operations from directors and other officers. As a result of these and other activities, corporate auditors are able to evaluate whether directors and executive officers are executing their professional duties appropriately.

#### **Outside Directors**

UBE has appointed outside directors to add independent, third-party viewpoints to the decisionmaking process and to monitor management to ensure efficiency, transparency, and objectivity from June 2005. UBE does not use a committee management system, but employs a Nominating Committee

and an Evaluation and Compensation Committee that report to the Board of Directors. Each consists of six members (four outside directors and two directors) and is chaired by an outside director.

#### **Executive Officers**

UBE has been using an executive officer system to separate governance and management functions since June 2001. The President and CEO delegates authority to executive officers, who perform their duties based on management policies decided by the Board of Directors.

#### Profile of Outside Auditors

#### Seiichi Ochiai

Apr. 1981 Professor, Seikei University Faculty of Law

Apr. 1990 Professor, The University of Tokyo Graduate Schools for Law and Politics, and Faculty of Law

Apr. 2007 Professor, Chuo Law School Registered as an attorney (Daiichi Tokyo BAR Association), and joined Counsel of Nishimura & Tokiwa (currently Nishimura & Asahi) (current position)

Jun. 2007 Professor Emeritus, The University of Tokyo (current position)

Jun. 2012 Outside Audit & Supervisory Board Member of Nippon Telegraph and Telephone Corporation (current position)

Jul. 2012 Outside Director of Meiji Yasuda Life Insurance Company (current position)

Jun. 2013 Outside Auditor of the Company (current position)

#### Miyako Suda

Apr. 1982 Associate Professor, School of Economics, Senshu University

Apr. 1988 Professor, School of Economics, Senshu University

Apr. 1990 Professor, Faculty of Economics, Gakushuin University

Apr. 2001 Member of the Policy Board, the Bank of Japan Resigned (March 2011)

May 2011 Special Advisor, the Canon Institute for Global Studies (current position)

Jun. 2013 Outside Director, Fujitsu Limited (current position)

Jul. 2014 Outside Director, Meiji Yasuda Life Insurance Company (current position)

Jun. 2015 Outside Auditor of the Company (current position)

#### Directors' and Auditors' Attendance at Board Meetings

	Name	Attendance at meetings of the Board of Directors and Board of Corporate Auditors during fiscal 2016
Directors	Michio Takeshita	13/13 times (100%)
	Yuzuru Yamamoto	13/13 times (100%)
	Hideyuki Sugishita	13/13 times (100%)
	Tadashi Matsunami	13/13 times (100%)
Outside Directors	Takashi Kusama	13/13 times (100%)
	Keikou Terui	13/13 times (100%)
	Takashi Shoda	13/13 times (100%)
	Mahito Kageyama	13/13 times (100%)
Auditors	Setsuro Miyake	13/13 times (100%) of Board of Directors' meetings
		8/8 times (100%) of Board of Corporate Auditors' meetings
	Takanobu Kubota	13/13 times (100%) of Board of Directors' meetings
		8/8 times (100%) of Board of Corporate Auditors' meetings
Outside Auditors	Seiichi Ochiai	13/13 times (100%) of Board of Directors' meetings
		8/8 times (100%) of Board of Corporate Auditors' meetings
	Miyako Suda	12/13 times (92.3%) of Board of Directors' meetings
		8/8 times (100%) of Board of Corporate Auditors' meetings

On June 29, 2017, Setsuro Miyake resigned due to Auditor's term of duty expired.

#### Message from Outside Director Keikou Terui

UBE was guick to begin reforming its Board of Directors. Half of its members are now outside directors, and they head and form majorities on the Nomination and the Evaluation and Compensation committees, which advise the Board. I am fully aware of my responsibilities as an outside director, and will emphasize my supervisory duties and help to enhance the Company's enterprise value.

#### Keikou Terui

Joined Ministry of International Trade and Industry (currently Ministry of Economy, Trade and Industry (METI))

Jun. 2008

Director-General for Technology Policy Coordination, Minister's Secretariat, METI

Director-General, Kanto Bureau of Economy, Trade and Industry, METI

Apr. 2012 Director-General for Regional Economic and Industrial Policy, METI

Aug. 2013
President, Japan Utility Telemetering
Association. Non-Profit Organization (current position)

Oct. 2013 Senior Research Associate, Chemicals Evaluation and Research Institute (current position: Part-Time

Jun. 2014

Outside Director of the Company (current position)

Mar. 2016 Outside Director, Bridgestone Corporation (current position)

Jun. 2016 Outside Director, Organo Corporation (current position)

## General Meeting of Shareholders and Exercise of Voting Rights

The Notice of Convocation is sent three weeks prior to the General Meeting of Shareholders, but its contents are posted on UBE's website before it is sent out to notify shareholders of information earlier. UBE provides access to mobile phone and Internet voting in addition to voting by mail so that shareholders who are unable to attend can also exercise their voting rights. UBE also uses an electronic voting platform for institutional investors.

At the General Meeting of Shareholders held on June 29, 2016, a total of 18,497 shareholders exercised their voting rights (including 17,526 shareholders who exercised voting rights in writing and via the Internet), representing 76.3% of total voting rights.

#### **Engagement with Shareholders**

Two-Way Communication through IR Activities
Principal IR activities in fiscal 2016 are listed below.
The UBE Group conducts IR activities aimed at timely, accurate, and fair disclosure, and believes that proactive communication and engagement with investors leads to higher corporate value.

- Earnings briefing for institutional investors and securities analysts (after main briefing)
- Telephone conference for institutional investors and securities analysts (held quarterly)
- Overseas IR (visits with overseas investors, a total of three times, in Europe, the United States, and Asia)
- Domestic IR (visits with 10 major institutional shareholders individually in June)
- Small meetings by the President and CEO (four times yearly)
- Individual meetings with institutional investors and securities analysts (about 220 per year)
- Attendance at conferences held by brokerage firms both in Japan and overseas (four times)
- Business briefing (once) and factory tours (four times) for institutional investors and securities analysts
- Briefings for individual investors (three times)
   Detailed information is available in the Investor
  Relations section of our website:

http://www.ube-ind.co.jp/english/ir/index.htm

#### Internal Control System

The Board of Directors has resolved the basic policies for the configuration of the UBE Group's internal control system. Please refer to www.ube-ind.co.jp/english/ir/management/internalcontrol.htm for details on the UBE Group's Basic Policy for Establishing Internal Control.

#### Compliance

The UBE Group formulated its Personal Action Guidelines outlining the Company's corporate ethics in 1998. The guidelines outline the standards and criteria for compliance in corporate activities, which directors and employees are expected to adhere to.

UBE appoints compliance officers who are responsible for securing and promoting compliance throughout the Company, and operates a Compliance Committee that includes a legal advisor and acts as an advisory body for compliance officers. In particular, we have set up the Competition Law Compliance Committee to prevent acts that impede fair competition and to ensure the soundness of business operations. We have also established the Restricted Cargo and Export Management Committee to prevent the unauthorized export or provision of goods and technology that are restricted under export control laws and regulations designed to maintain international peace and stability, including the Foreign Exchange and Foreign Trade Act.

In addition, UBE is working to upgrade and strengthen compliance structures and frameworks. Initiatives include the introduction of the "UBE C-Line," a hotline that allows executive officers and employees to directly report compliance issues without going through normal channels. This encourages rapid reporting and swift correction of compliance issues. UBE also provides compliance information on the Company website and focuses on education and raising awareness through programs such as e-learning and team coaching.

In fiscal 2016, group training and education on laws and regulations such as the Anti-Monopoly Act, Subcontract Act, and Unfair Competition Prevention Act were held a total of 6 times. In addition, from fiscal 2015 the instructors of internal companies conducted

#### Takashi Shoda

Apr. 1972 Joined Sankyo Co., Ltd.

Jun. 1999 Senior General Manager of International Pharmaceutical Division & General Manager of Europe Department, Sankyo Co., Ltd.

Jun. 2001 Director, Sankyo Co., Ltd. Jun. 2002

Managing Director, Sankyo Co., Ltd. Jun. 2003

Jun. 2003 President and Representative Director, Sankyo Co., Ltd. Sep. 2005

Sep. 2005
President & CEO,
and Representative Director,
Daiichi Sankyo Co., Ltd.

Representative Director and Chairman, Daiichi Sankyo Co., Ltd. Jun. 2014

Senior Corporate Adviser, Daiichi Sankyo Co., Ltd. (current position)

Jun. 2015 Outside Director of the Company (current position)

Jun. 2017 Outside Director, Daito Trust Construction Co., Ltd. Message from Outside Director Takashi Shoda

In Board of Directors' meetings, outside directors with diverse experience and knowledge present their views as part of vigorous deliberations from various perspectives, through which we oversee operational implementation and make decisions on the execution of important business. I aim to draw on my management background and independent stance to help enhance the corporate governance of the Group in keeping with its commitment to technology and innovation and to improve its enterprise value over the medium and long terms.



general compliance training at Group workplaces on behalf of the Compliance Promotion Secretariat, and 4,400 employees received training in fiscal 2016.

#### Risk Management

The UBE Group is enhancing its risk management system to identify risks that would impede achievement of its business objectives, and to take appropriate measures after evaluating the probability of those risks materializing, the scale of their impact, and other factors.

The UBE Group Environment and Safety Committee and the UBE Group Product Safety Committee formulate policies and promote various measures across the UBE Group concerning safety and environmental protection and product safety and quality management, respectively. In addition, the Information Security Committee and Crisis Management Committee have been set up to respond to specific areas of risk.

#### **Executive Officers and Responsibilities**

(As of June 30, 2017)

Chief Executive Officer

Yuzuru Yamamoto President and Group CEO

Senior Managing Executive Officers

#### Hideyuki Sugishita

Company President of Chemicals Company

#### Tadashi Matsunami

Company President of Cement & Construction Materials Company and General Manager of Cement Dept. with responsibility for Technical Development Center

#### Tokuhisa Okada

Company President of Machinery Company

#### Managing Executive Officers

#### Charunya Phichitkul

General Manager of Asia Operational Unit of Chemicals Company

#### Junichi Misumi

With responsibility for Information System Dept. and Ube Corporate Service Dept.

#### Masato Izumihara

Vice President of Chemicals Company

#### Masahiko Nojima

General Manager of Engineering Plastics, Caprolactam and Industrial Chemicals Div., and General Manager of Atlantic Operational Unit, Chemicals Company

#### Masataka Ichikawa

President of Ube Material Industries. Ltd.

#### Executive Officers

#### Yukio Hisatsugu

President and Representative Director of Ube Machinery Corporation Ltd.

#### Makoto Aikawa

With responsibility for Environment & Safety Dept. and Intellectual Property Dept.

#### Morihisa Yokota

General Manager of Corporate Research & Development and Core Technology Laboratory

#### Genji Koga

General Manager of Production Division, with responsibility for Chemicals Environmental Safety & Quality Assurance Dept., Chemicals Company

#### Makoto Koyama

With responsibility for Group Company Dept. and General Manager of Resources & Production Dept.

#### Hideo Tamada

Group CCO, General Manager of General Affairs & Human Resources Office and Procurement & Logistics Div. with responsibility for Group CSR

#### Hiroshi Nishida

General Manager of Planning and Control Dept., with responsibility for Construction Materials Dept., Cement & Construction Materials Company

#### Masayuki Fujii

Group CFO, General Manager of Corporate Planning & Administration Office

#### Yasushi Konno

General Manager of Pharmaceutical Div.

#### Yuuki Nishida

General Manager of Battery Materials and Fine Chemicals Div.

#### Hidetsune Miura

General Manager of Ube Chemical Factory with responsibility for Ube Fujimagari Factory, Production Div., Chemicals Company

#### Yoshiaki Ito

General Manager of Production & Technology Div. with responsibility for Material Recycle Division, Cement & Construction Materials Company

#### Yuuzo Hanamoto

General Manager of Energy & Environment Div. and Coal Business Unit.

#### Hisaaki Yokoo

General Manager of Administration Dept., Chemicals Company

#### Masayoshi Ota

General Manager of Strategy & Business Planning Dept. with responsibility for Development Dept., Chemicals Company

CFO: Chief Financial Officer CCO: Chief Compliance Officer CSR: Corporate Social Responsibility

CEO: Chief Executive Officer

#### Mahito Kageyama

Apr. 1972 Joined The Sanwa Bank, Ltd. Jun. 1999

Executive Officer & Head of Investment Banking Group Global Finance & Investment Banking Division, The Sanwa Bank Ltd.

Jan. 2002 Senior Executive Officer & Head

of Global Banking & Trading Division, UFJ Bank Ltd.

Resigned (February 2003) Jun. 2003

Director and President, TOMEN ELECTRONICS CORPORATION

Apr. 2006 Representative Director and Executive Vice President, Toyota Tsusho Corporation Resigned (June 2008)

Jun. 2008 Chairman of the Board and Representative Director, TOMEN ELECTRONICS CORPORATION

Resigned (June 2010) Jun. 2010

Corporate Auditor, Toyota Tsusho Corporation Resigned (June 2013)

Jul. 2013 Advisor, Toyota Tsusho Corporation Resigned (June 2016)

Jun. 2015 Outside Director of the Company (current position)

Message from Outside Director Mahito Kageyama

and take advantage of the introduction of Japan's Corporate Governance Code to drive reforms, including by securing and practicing transparency. As an outside director, I am able to bring an external perspective to ensuring proper corporate governance as well as help maintain respect for the UBE Group and its proud traditions.



#### **Environmental Preservation and Social Contribution**

The UBE Group is fully conscious of its responsibilities for contributing to society, environmental preservation, and maintaining health and safety in undertaking business activities that support the realization of a sustainable society.



## Nylon Business Underpinning Social Prosperity While Continuing to Drive Environmental Improvements

We are building a global presence through operations in Japan, Thailand, and Spain. Our stable quality and advanced features make nylon essential in everything from food packaging to automobiles and mechanical components, electrical and electronics parts, and miscellaneous items. In the mobility field, developments of environmentally friendly automobiles such as electric vehicles (EVs) and fuel cell vehicles are under way. For example, Toyota Motor Corpo-

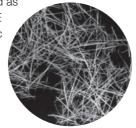
ration chose nylon to line the hydrogen tank of the Mirai, a hydrogen fuel cell car. We will continue to develop new materials and applications and pursue environmentally friendly manufacturing.



### Resin Additives Contributing to Lighter Automobiles

Ube Materials Industries uses hydrothermal synthesis to make MOS-HIGE

magnesium oxysulfate whiskers. This product is used as an additive for automotive polypropylene. MOS-HIGE delivers the same plastic reinforcement rigidity as talc but with around one-third the weight. Using less high-specific-gravity filler means that plastics weigh considerably less, helping to lighten automobiles further. MOS-HIGE will continue helping to suppress vehicular CO<sub>2</sub> emissions as part of measures to combat global warming, and we will endeavor to maintain stable supplies of this material.



MOS-HIGE magnesium oxysulfate whiskers

#### Initiatives for a Sustainable Society

The UBE Group is fully conscious of its responsibilities for contributing to society, environmental preservation, and maintaining health and safety in undertaking business activities that support the realization of a sustainable society. We therefore have environmental and safety principles for operational safety, process safety, environmental preservation, product safety, and health management. We also aim to improve the quality of Group environmental preservation by publicizing our successes and maintaining a dialogue with society.

#### Initiatives to Counter Global Warming

UBE prioritizes the reduction of greenhouse gas emissions, and has set the goal for fiscal 2021 of reducing emissions by 15% compared with fiscal 2005. In addition, we are reducing CO<sub>2</sub> emissions in product manufacturing at plants and in the use of end products that contain UBE products. We will continue to monitor CO<sub>2</sub> emissions throughout the entire supply chain of Group business activities.

#### Effective Use of Waste

UBE's cement plants actively use waste and by-products from within the Group and from external sources. We accepted 3.36 million tons of waste in fiscal 2016. Waste can be a source of both raw materials and fuel for cement, so our plants strongly support a recycling society by processing a wide range of waste.

#### **Environmental and Safety Initiatives**

The UBE Group makes operational safety a top priority in all aspects of its operations out of respect for human life, and endeavors to improve environmental safety in keeping with its mission as a manufacturer to ensure process safety. We strive to improve safety levels by employing occupational accident information, bolstering the activities of small safety groups, enhancing safety, security, and disaster prevention education, and undertaking audits and inspections.

#### Supporting Education

We conduct experimental shows for children to stimulate their interest in chemistry and deepen their understanding of the Company. At Summer Vacation Chemistry Experiment Show 2016 at the Japan Sci-

ence Museum in Tokyo in August 2016 and at an event in November at an elementary school in Saitama Prefecture, the theme was to make kaleidoscopes with transparent polyethylene film.



Experimental show at an elementary school

Women with the Flexibility to Excel in Their Own Way on the Front Lines



## Formulating medium-term management plans, following-up on PDCA cycles in Strategic Planning Unit

UBE Corporation Europe, S.A.U. (UCE), manufactures nylon, caprolactam, ammonium sulfate, and fine chemicals. We sell the offerings of Ube Industries and our company across the Atlantic through subsidiaries in Germany, Mexico, and Brazil.

I work in the Strategic Planning Unit. In the course of my work, I formulate medium-term management plans, follow-up on PDCA cycles, plan strategies for Atlantic Europe and North, Central, and South America, assist in streamlin-

ing communications between UCE and Japan, and undertake several internal projects.

I love my job, learning new things every day while getting guidance from my boss and other colleagues.

Yoko Tamura Strategic Planning Unit, UBE Corporation Europe, S.A.U.



## Fulfilling leisure time replenishes my mental energy so I can do great work every day

Last year, I began a master's program at a business school in Valencia. Taking part in Spanish means my effort is more than double that of local students, but I find it very encouraging to have so many opportunities to put my course knowledge to work.

Regardless of gender, UCE employees are aware of the importance of work–life balance, and can take advantage of flextime and other company programs. I study on the weekends and after work I get a boost from trail running, dining out, shopping, and spending time with my family. Using my leisure time well helps me to replenish my mental energy so I can do great work every day.



Trail running on the weekend

#### **Diversity Initiatives**

UBE respects diverse individuality and values and aims for a corporate culture that fosters creativity and the will to take on challenges. We recruit and employ people in a wide range of fields regardless of factors including background, nationality, and gender and make use of each employee's capabilities in creating an environment that enables success.

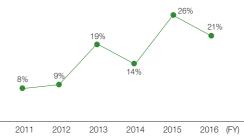
A key feature of UBE is its focus on heavy chemical businesses. Women only represent 7.0% of employees and 1.4% of managers. We are therefore concentrating on recruiting and promoting women with the targets for fiscal 2020 of increasing female employees to 20% of career-track employees and tripling the number of female managers compared with fiscal 2014. We raise employee consciousness through initiatives such as providing training for managers and female employees, expanding recruitment of and opportunities for women, and improving our workplace culture.

As globalization continues, we are expanding personnel exchanges with UBE Group companies overseas to benefit from different values and cultural experiences. We have also been recruiting foreign nationals in Japan annually.

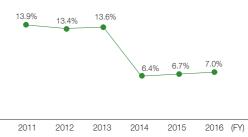
In addition, we have been rehiring as senior employees a majority of the employees who have reached mandatory retirement age, and have successfully leveraged their experience and skills.

We are also employing people with disabilities with a strategic emphasis on putting their unique skills to work by making use of the accumulated expertise and know-how of Libertas Kosan Co., Ltd.

#### Percentage of Women among New Career-Track Employees<sup>1</sup>



Percentage of Female Employees<sup>1,2</sup>
 (As of end of fiscal year)



Notes: 1. Figures are for Ube Industries, Ltd.

Figures for Ube-Kohsan Central Hospital Corp. are not included from fiscal 2014.

#### Special Feature: The UBE Group's Competitive Edge in Chemicals

Content descriptions

1. Applications 2. Year production started and/or features 3. Group production capacity and/or market share 4. Market scale and/or major players

## **Ammonia**

- Caprolactam, acrylonitrile, nitrogen fertilizer, and other raw materials
- 2. 1967
- 3. 360 kilotons; Ranking first in Japan
- 4. Domestic demand totaled 1,100 kilotons in fiscal 2016

## Caprolactam

- 1. Raw material for nylon
- 2. 1956; Supplying high-quality, highly competitive raw material for nylon in Japan, Thailand, and Spain
- 3. 315 kilotons
- 4. Global demand amounted to 5,300 kilotons in 2016



Caprolactam

This section showcases the UBE Group's achievements and current initiatives

in leveraging technology and innovation to create products

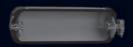
that deliver unique value, thereby maintaining the competitiveness

of its offerings and its corporate sustainability.

## What We Have Accomplished

## Nylon 6

- 1. Engineering plastics widely used in such applications as automotive parts and food packaging films
- Strengths in high-performance applications and high-quality automotive parts
  materials that have earned the trust of domestic and foreign automakers, and drive
  for global leadership in extruded materials (films and filaments)
- 3. 158 kilotons; One of the world's top manufacturers
- Global demand totaled 2,260 kilotons in 2015 First: BASF Second: DSM



Used in liner of high-pressure hydrogen tank of the Toyota Mirai



SPERREN co-extrusion multilayer film with excellent gas barrier and deodorizing properties



## Synthetic Rubber

- 1 Tires
- Mainly for specialty products; Supplies major global tire manufacturers
- 3. 320 kilotons; Ranking fifth worldwide
- 4. Global demand estimated 3,500 kilotons in 2016 Alan Seo (formerly named LANXESS), Sinopec, PetroChina, and KPC



Synthetic rubber

## Separators

- 1. Automotive and consumer LiB applications
- Mainly coatings; Particularly strong in markets where safety and high output are key priorities
- 3. Ranking fifth worldwide, with a 10% share of global market; One of the top suppliers for automotive applications
- 4. Other suppliers in this field are Asahi Kasei, SK Innovation, Toray, Sumitomo Chemical, Mitsubishi Chemical, and Teijin





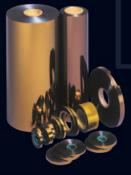
Polyurethane dispersion

## PCD, PUD, UA

Polycarbonate diol, polyurethane dispersion, urethane acrylate, and other advanced fine chemical coatings

- 1. Automotive paints and floor coverings
- 2. High margins from proprietary technologies
- 3. Ranking first in external sales market for polycarbonate diol, with shipments of 11 kilotons; Polyurethane dispersion shipments of 2 kilotons
- 4. No. 1 share in polycarbonate diol market

## as a Sustainable Entity



Polyimide film

## Polyimide Film

- 1. Electronic materials applications including flexible circuit boards and IC mount carrier tapes
- 2. The world's only integrated manufacturer of these films, starting with raw materials
- 3. Ranking fourth worldwide; 70% share of market for chip-on-films for LCD television panels
- First: DuPont Group Second: Kaneka Third: SKCKOLONPI

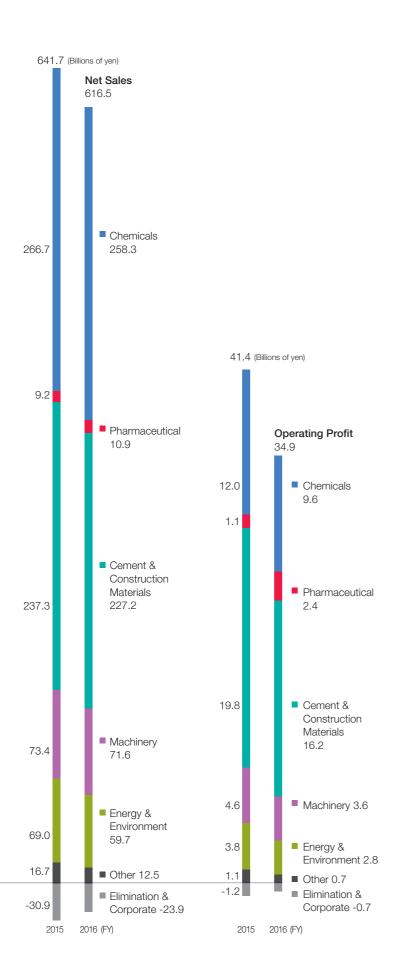
## Gas Separation Membranes

- 1. Explosion-preventing nitrogen separation membranes and dehumidification
- 2. Japan's sole gas separation membrane manufacturer; World's only company with specialty technology for removing water from alcohol with organic membranes
- 3. Produces 1,800,000 kilometers annually of polyimide hollow fibers and 80,000 modules annually
- 4. Air Liquide and Air Products and Chemicals





#### Segment Review and Strategy



#### Chemicals

Net sales ¥258.3 billion
\*(3.1)%
Operating profit ¥9.6 billion
\*(20.1)%
Segment assets ¥324.2 billion
\*7.4%
Depreciation and amortization ¥18.8 billion
\*(7.8)%
Capital expenditures ¥28.2 billion

\* Change from FY2015

#### Opportunities -

\*93.5%

- We cover a wide range of chemicals products, centered on our core nylon and caprolactam chain.
- We offer differentiated products and services that integrate diverse materials and technologies and operate globally.
- We cater to sophisticated customer needs and maintain solid technological innovation capabilities and quality standards as a joint development partner.

#### Challenges

- Rigorously cut costs and balance resources allocation so we can create new features and differentiate.
- Invest in large-scale facilities of our highly competitive caprolactam and ammonia chain to support the expansion of our nylon business.
- In battery materials, establish a supply structure so that we can properly accommodate surging demand for automotive applications.

#### Results of Fiscal 2016

Nylon resin shipments were steady, centered on packaging films. Although China continued to experience an oversupply of caprolactam—the raw material for nylon—the market began recovering. Declining prices overseas of ammonia and other secondary materials contributed to performance.

Ammonia product shipments were down from a year earlier because we undertook regular plant repairs. Shipments were generally solid for polybutadiene, a synthetic rubber used mainly in eco-friendly tires, although rising raw materials prices affected results. Shipments of separators and electrolytes used in LiB for eco-friendly cars and other automotive applications rose in the year under review. Shipments of polyimide films and fine chemical products were solid overall.

As a result of these factors, Chemicals segment sales declined 3.1%, to ¥258.3 billion. Operating profit was down 20.1%, to ¥9.6 billion.

Policies Under Our Medium-Term Management Plan

- Generate ¥20 billion in operating profit.
- Establish four active growth businesses (synthetic rubber, nylon, separators, and high-performance coatings).
- Create new functions by integrating materials and technologies.
- Strengthen and cultivate global marketing capabilities.
- · Quickly monetize development themes through research, development, technology, production, and business (RDTP-B) alliances.

#### **Business Strategies for Fiscal 2017**

The Chemicals segment aims to produce ¥20 billion in operating profit in the final year of our current medium-term management plan in fiscal 2018. It will ramp up efforts with a view to lifting operating profit to ¥18 billion in fiscal 2017. We will undertake the following steps:

- Steadily generate profits from large capital investments
- Strengthen profitability by passing on higher raw materials costs to prices.
- Increase earnings by leveraging production opportunities due to limited downtime for maintenance of the Ube ammonia factory.
- Shift to an organization that integrates production, sales, and technologies to accelerate a complete recovery of the Chemicals segment.

#### Active Growth Businesses

In the synthetic rubber business, we will reinforce collaboration with production sites in Thailand, Malaysia, and China and explore keys to matching customer needs as part of efforts to generate customer value by differentiating and specializing.

In the nylon business, we will lower costs as a result of changing our caprolactam manufacturing techniques by changing its materials from benzene to phenol and improving our processes. We will

accelerate efforts to create profits by setting up a global compound supply structure.

In separators, we will cater to steadily expanding automotive demand and overcome intensifying competition by launching production lines at the Sakai Factory with maximum production from the launch and moving forward with facilities' upgrade and expansion plans.

In high-performance coatings, we will accelerate business development by bolstering global expansion and reinforcing our business model of proposalbased development through collaboration with customers.

#### Restructuring Businesses

In the polyimide business, we will endeavor to lift film and varnish earnings by improving our stable production technologies and by thoroughly cutting costs. In the electrolyte business, we will fully harness benefits from a joint venture in China and accelerate development of automotive and power storage applications by drawing on our strengths in additive technology.

By achieving our objectives, we will grow as a valuecreating chemicals company, build customer trust, and materialize growth drivers for completely revitalizing the Chemicals segment.



Synthetic rubber



Caprolactam





Hideyuki Sugishita Company President, Chemicals Company

We will expand by creating value,

completely revitalizing our segment and materializing its potential as a growth driver.



#### **Pharmaceutical**

Policies Under Our Medium-Term Management Plan

• Bolster our in-house drug R&D pipeline and lifecycle management.

• Overhaul operational management to address changes in the manufacturing (in-house, contract, and generics) climate and needs.

Net sales ¥10.9 billion \*18.3%

Operating profit **¥2.4** billion \*125.9%

Segment assets ¥12.9 billion \*3.0%

Depreciation and amortization ¥0.8 billion \*0.1%

Capital expenditures ¥0.3 billion \*(46.6)%

\* Change from FY2015

#### Opportunities -

- Pharmaceuticals manufacturers have reinforced their ability to secure the seeds of future expansion including licensing from companies in other industries for boosting their creation of new drugs, and the importance of producers with drug discovery operations has grown.
- We can manufacture competitive active pharmaceutical ingredients and intermediates by leveraging the organic synthesis and manufacturing technologies we have accumulated through our chemistry, manufacturing, and control (CMC) development capabilities in in-house drug discovery and through our considerable experience in contract production.
- Regardless of development and commercial projects, we have amassed a strong track record
  through numerous contract manufacturing mandates from leading pharmaceuticals companies
  and have established a firm position as a maker
  of active pharmaceutical ingredients.

#### Challenges

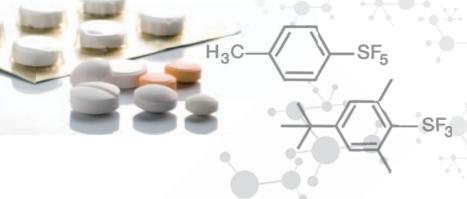
- Bolster our in-house drug discovery pipeline and maximize the value by generating quick results.
- Increase the number of contract manufacturing projects for pharmaceuticals manufacturers, drawing on an optimal production structure that combines in-house and contract manufacturing to expand profits from making and selling active pharmaceutical ingredients and intermediates.

#### Results of Fiscal 2016

Pharmaceutical segment sales rose 18.3%, to ¥10.9 billion. Operating profit was up 125.9%, to ¥2.4 billion.

#### **Business Strategies for Fiscal 2017**

In drug discovery research, we pursue efficiency and speed by selecting themes on the basis of value and differentiation, qualitative improvements in search recycling, and flexible human resource allocations. We set up a specialist organization to reinforce derivation initiatives, introduce our offerings and negotiate with pharmaceuticals manufacturers worldwide, and gather information around the globe. To manufacture and sell active pharmaceutical ingredients and intermediates, we created flexible production facilities with a supply chain structure that encompasses CMC development capabilities that we cultivated over many years and manufacturing equipment that can handle everything from general-purpose to high-value-added reactions. We will deploy flexible production schedules and strengthen the balance between high quality and price competitiveness, marketing to both existing business partners and new pharmaceuticals manufacturers.





Talion®

We will ensure seamless production, sales, technology, and research processes, accelerating PDCA cycles to become far more responsive.

Yasushi Konno General Manager of Pharmaceutical Div.

## Cement & Construction Materials

Policies Under Our Medium-Term Management Plan

• Maintain and strengthen the profitability of core businesses.

• Bolster and extend our growth strategies.

• Maintain and enhance our operational infrastructure.

Net sales ¥227.2 billion \*(4.3)%

Operating profit ¥16.2 billion \*(18.0)%

Segment assets ¥219.1 billion \*1.0%

Depreciation and amortization ¥8.8 billion

Capital expenditures ¥9.8 billion \*(32.8)%

\* Change from FY2015

#### Opportunities -

- We can respond swiftly to changes in the business climate by fully leveraging an infrastructure for stable, low-cost supplies of coal and electricity and our large port facilities.
- We operate in a wide range of businesses and can create businesses within the Group as a whole so that we can optimize Group synergies.
- Our advanced technological capabilities enable us to expand our use of diverse waste and contribute to a recycling-driven society.

#### Challenges

- Accelerate and strengthen efforts to address energy and environmental issues.
- Expand our business domains and areas.

#### Results of Fiscal 2016

Sales of cement and ready-mixed concrete were down slightly, reflecting a decline in domestic demand. Although export shipments of cement were steady, earnings deteriorated owing to flexible market conditions. From the third quarter, higher coal and other energy costs affected our operations. Shipments of calcia and magnesia were generally solid.

As a result of these factors, Cement & Construction Materials segment sales declined 4.3%, to ¥227.2 billion, while operating profit was down 18.0%, to ¥16.2 billion.



Ready-mixed concrete



Self-leveling

#### **Business Strategies for Fiscal 2017**

Although we do expect full-fledged construction related to the Tokyo 2020 Summer Olympics and Paralympics to generate some demand for cement and ready-mixed concrete in Japan, prices could stay low for exported cement amid declining demand in China and overcapacity in Southeast Asia. Also, energy costs have remained high, and could drive manufacturing costs higher. It is in this very adverse operating climate that Cement & Construction Materials segment management will reconfirm its objectives and achievements and pursue its goals under the medium-term management plan to fulfill its vision.

### Maintain and strengthen the profitability of core businesses

- Install waste heat power generation facilities at the Isa Factory to help cut costs and rationalize operations.
- Set up fourth-stage fuel waste treatment facilities at the lsa Factory to expand the use of waste products.
- Reinforce the profitability of the calcia and magnesia businesses by rationalizing production facilities at Ube Material Industries, Ltd., and by building a stable supply structure.
- Optimize Group synergies by expanding the limestone business transferred to Ube Material Industries.

#### 2. Bolster and extend our growth strategies

- Expand our business area by acquiring shares in Tokyo Cement Company (Sri Lanka) PLC and securing a stable buyer of cement exports while pushing forward in Indonesia with logistics and ship technology consulting businesses. We will also set up a company in Thailand to manufacture MOS-HIGE, an automotive resin filler, and boost production.
- Expand our business domains by increasing sales of environmental offerings, including neutral solidifying materials and heavy metal insolubilized materials, enter the gypsum board recycling business, and develop and commercialize new products and technologies.

# 3. Maintain and enhance our operational infrastructure In addition to strengthening R&D, cultivate human resources while building a management structure that remains robust in times of change, thereby enhancing our six operating fundamentals of earnings and finance, facilities, R&D, personnel development, information system, and environmental safety.



We will respond swiftly to changes in the business climate and maintain and reinforce profitability, establishing robust business foundations.

#### Machinery

MD850S-V Policies Under Our Medium-Term Management Plan Reinforce product competitiveness in the global market. Focus on overall product lifecycles and expand service and support. Maximize earnings by reinforcing integrated management for the segment.

Net sales ¥71.6 billion

Operating profit ¥3.6 billion \*(20.2)%

Segment assets ¥75.1 billion \*21.0%

Depreciation and amortization ¥1 4 hillion

Capital expenditures ¥1.9 billion \*20.9%

\* Change from FY2015

#### Opportunities -

- We offer products that can cater to the individual needs and specifications of customers.
- We have a strong track record in delivering numerous products for automotive, steelmaking, cement, electric power, and other key industries.
- We maintain many business sites in Japan and abroad and run a service and support structure that encompasses global markets.

#### Challenges

- Reinforce the profitability of product businesses.
- Generate synergies from integration of injection molding machine businesses with Mitsubishi Heavy Industries, Ltd.

#### Results of Fiscal 2016

#### **Business Climate**

Equipment demand generally stagnated and competition intensified. In the molding machine market, there was an increased investment appetite in Japan to lighten automobiles. In North America, however, a change of administration clouded a favorable business climate.

In the industrial machinery market, demand peaked for facilities for domestic independent power producers (IPP) and electric power companies, while capital investment in the cement, steelmaking, and other fields was sluggish in Japan and abroad. In the steelmaking market, demand remained steady domestically and internationally for billets. Demand for castings was up for generating facilities but languished for ships.

#### Results Summary

Machinery segment sales decreased 2.4%, to ¥71.6 billion, reflecting lower orders from intensified competition, and was below the medium-term management plan target. Operating profit was also off-target, declining 20.2%, to ¥3.6 billion. Factors were a reduction in orders and decreased profitability in molding and industrial machinery.

#### **Business Strategies for Fiscal 2017**

#### Molding Machinery Business

- Improve product profitability by cutting more costs while developing and expanding sales of machinery that can cater to demand for lighter automotive body parts.
- Swiftly materialize synergies from integration in the injection molding machinery business by building an optimal business infrastructure and commercializing models under the same brand.

#### Industrial Machinery Business

• Increase profitability by reducing the costs of large coal storage facilities already ordered by electric power companies and expand our licensing business.

#### Machinery Services Business

• Expand overseas service operations by integrating and reorganizing business units internationally while strengthening and streamlining service activities.

#### Steel Products Business

 Boost annual billet production capacity to 360 kilotons, shortening lead times in casting products for electric power facilities while expanding orders.

Bridges



Injection molding machines

Tokuhisa Okada Company President, Machinery Company

We will boost earnings by rolling

out new models, cutting costs, and expanding alliances.



#### **Energy & Environment**

TELEVIORE STREET Policies Under Our Medium-Term Management Plan • Help strengthen UBE Group earnings by maintaining stable supplies of competitive energy (coal and electricity). Strengthen and enhance our infrastructure to drive sustainable growth.

Net sales ¥59.7 billion \*(13.4)%

Operating profit ¥2.8 billion \*(26.0)%

Segment assets ¥48.6 billion

Depreciation and amortization ¥2.8 billion

Capital expenditures ¥1.4 billion \*43.5%

\* Change from FY2015

#### Opportunities -

- The coal business includes one of Japan's largest coal centers and the Technology Services Department.
- Our operations encompass the private, IPP, and renewable energy power generation business.
- Prospective growth in demand for the co-combustion of coal with biomass fuel presents emerging business opportunities.

#### Challenges

- Energy costs of the UBE Group have risen owing to a surge in coal prices in late fiscal 2016.
- The competitive environment remains adverse for coal re-sale and contract coal storage business.

#### Results of Fiscal 2016

Energy & Environment segment sales declined 13.4%, to ¥59.7 billion, while operating profit was down 26.0%, to ¥2.8 billion. In the coal business, consignment demand was down because of regular inspections at customers' power plants. We were unable to exceed the record of coal sales business volumes of a year earlier owing to intense competition. In the electricity business, we experienced a performance downturn because our prices were insufficient to absorb the impact of regular inspections by private power producers and surging coal costs.

#### **Business Strategies for Fiscal 2017**

Solar power plant

The Energy & Environment segment constitutes the energy infrastructure of the UBE Group. We will endeavor to maintain stable supplies of competitive coal and electricity to reinforce the Group's earnings base. We will take various steps to overcome coal price fluctuations while lowering costs at our coal center and running it more efficiently. Looking ahead, we will pursue progress with our international bulk terminal business to enhance operations at Ube ness. We look to upgrade aging private power plants to bolster efficiency in line with the business plans of

We will strengthen existing businesses to pave we will build an operational scheme to be implemented after an IPP contract ends in February generation of cutting greenhouse gas emissions by exploring the commercialization of biomass fuels as part of efforts to maintain a coal center business that will fit in with an emerging low-carbon economy.

Port, which is essential for strengthening our busiinternal users. the way for future growth. In the electricity business, 2019. We will tackle the challenge in coal-fired power



### Research and Development

### Research and Development Organization

#### Corporate Research

Corporate Research & Development	Strategic Core Technology Research Laboratory
	Frontier Technology Research Laboratory
	Hagihara Research Group
Company R&D	
Chemicals Company	Polyolefin and Rubber R&D Dept.
	Engineering Plastics R&D Dept.
	Polyimide and Specialty Products R&D Dept.
	Inorganic Products R&D Dept.
	Chemicals R&D Dept.
	Battery Materials R&D Dept.
	Osaka Research & Development Center
	Production Technology Center
Pharmaceutical Div.	Pharmaceuticals Research Laboratory
Cement & Construction Materials Company	Technical Development Center
Energy & Environment Div.	E&E Technology Center

## Components of R&D Expenditure during Medium-Term Management Plan Term



Total over three years: ¥45 billion

#### Policies Under Our Medium-Term Management Plan

- Strengthen fundamental technologies and strategic technology areas.
- Strengthen RDTP-B\* alliances and build a structure to foster R&D.
- Build and run a structure to cultivate human resources.
- \* Research, development, technology, production, and business

#### Opportunities

- We have an array of basic technologies for organic and inorganic, polymer chemistry, processing, and mass production that empower us to innovate new materials and components.
- We can resolve challenges by leveraging materials design and synthesis technology that employs the features of our unique materials.
- We use advanced high-order structural control, functional design, and evaluation technologies that empower us to develop high-performance materials that anticipate future customer needs.

#### Challenges

- We need to reinforce RDTP-B collaboration and establish a business model that anticipates future needs while creating a structure to foster R&D efficiency.
- Quickly create new businesses and accordingly bolster our R&D pipeline.
- Strengthen technology marketing and proliferate R&D themes.

#### Results of Fiscal 2016

In existing businesses, we progressed steadily in developing new grades of advanced coating materials, developing heat-resistant polyimide resin with users, evaluating new polymerization catalyst technologies for synthetic rubber, and developing applications for high-dispersion strontium carbonate nanoparticles.

In our drive to create businesses in the mobility, environment and energy, construction and infrastructure, and healthcare domains that we targeted under our new medium-term management plan, we have narrowed down themes based on market size and our technological edge and are rebuilding our R&D pipeline. We have already completed the preliminary





We will innovate to create new



assessments for some themes, which are now in the implementation stage.

We participated in several national projects from long-term perspectives for the UBE Group during the year under review, including to turn inedible biomass into raw chemical materials through an integrated chemical manufacturing process using cellulose and to use ammonia combustion to produce cement for next-generation energy carriers. Other projects were to create ultra-advanced materials and shorten development lead times through computational science, rapid prototyping, innovation processes, and selective measurement evaluations.

#### **Business Strategies for Fiscal 2017**

In R&D, the UBE Group has maintained a basic policy of driving manufacturing technology advances in existing operations and expanding peripheral areas while cultivating businesses in new fields through initiatives that emphasize creating customer value over the short and medium-to-long terms. We have reinforced collaboration between research, development, technology, and sales units and have put research related to existing operations under the control of existing businesses to clarify responsibilities and accelerate R&D. At the same time, we had Corporate Research & Development specialize in R&D to create new businesses.

We look to cultivate new businesses that target the four domains that we prioritized in our new medium-term management plan. In fiscal 2017, we are focus on creating new business in two domains. In the construction and infrastructure domain, we seek to create chemicals operations that leverage the materials design and compounding technology strengths we cultivated in organic functional materials. In the healthcare domain, we are innovating cell culture technology by drawing on our proprietary polyimide porous membrane for bioreactor elements for biopharmaceuticals production. We will collaborate with the Chemicals segment to swiftly commercialize the fruits of our R&D.

We will also prioritize strengthening and expanding existing businesses while enhancing our leading-edge technological capabilities and promoting open innovation in the strategic fields of functional design, high-order process control technologies, composite technologies, and functional evaluation.

#### Highlights of Fiscal 2016

## Creating Innovative Elements for Biopharmaceuticals Manufacturing

We are developing innovative cell culture technology that harnesses our proprietary polyimide porous membrane. While this technology could be deployed across various life science fields, we are currently exploring elements related to bioreactors used in manufacturing biopharmaceuticals, the market for which is expanding significantly. We are collaborating with the Chemicals segment to swiftly commercialize our technology.

#### Deploying N-Type Organic Semiconductor-Related Technology

The N-type organic semiconductor that we developed with Yamagata University delivers worldclass performance. We recently concluded an agreement to license the technology to Future Inc., a venture firm that originated at the university. Initial prospective applications are sensors and wireless tags, which have gained attention for their promise with the Internet of Things (IoT) and wearable sensing. Organic semiconductors should be able to supply these devices in flexible form and print production. Future Inc. plans to begin selling N-type organic semiconductor samples on a fee basis from May 2017.

businesses that represent the future for the UBE Group.

#### **Financial Section**

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Notes: 1. The Chemicals & Plastics segment and the Specialty Chemicals & Products segment were

- integrated into the Chemicals segment on April 1, 2015.

  2. The pharmaceutical business was included in the Specialty Chemicals & Products segment until fiscal 2009.
- 3. The Machinery & Metal Products segment changed its name to the Machinery segment on April 1, 2016.
- 4. Based on Japanese GAAP
- 5. ROA = (Operating profit + Interest and dividend income +
  Share of profit of entities accounted for using equity method) / Average total assets

Financial Section

#### Consolidated Ten-Year Financial Summary

Ube Industries, Ltd. and Consolidated Subsidiaries For the years ended March 31

For the years ended March 31
Results of Operations:
Breakdown of net sales by reportable segments:
Chemicals <sup>1</sup>
(Chemicals & Plastics)
(Specialty Chemicals & Products)
Pharmaceutical <sup>2</sup>
Cement & Construction Materials
Machinery <sup>3</sup>
Energy & Environment
Other
Adjustment
Net sales
Cost of sales
Selling, general and administrative expenses
Operating profit
Non-operating income <sup>4</sup>
Ordinary profit <sup>4</sup>
Extraordinary items <sup>4</sup>
Profit before income taxes
Profit attributable to owners of parent
Financial Position:
Assets:
Total current assets
Total property, plant and equipment, net
Total investments and other assets
Total assets
Liabilities and net assets:
Total current liabilities
Total long-term liabilities

(Non-controlling interests)

Total net assets

General:
Per share data (yen):
Net income, primary
Cash dividends applicable to the period
Net assets
Other data:
Operating margin (%)
Return on assets (ROA) <sup>5</sup> (%)
Shares of common stock issued (thousands)
Number of consolidated subsidiaries
Number of shareholders with voting rights
Number of employees

Millions of yen

				1711111011	10 01 9011				
2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
¥258,364	¥266,736	¥ –	¥ –	¥ –	¥ –	¥ –	¥ –	¥ –	¥ –
_	_	215,419	230,585	219,368	231,026	204,516	165,098	220,033	241,773
_	_	63,288	63,160	61,111	64,368	68,777	60,374	89,785	95,034
10,975	9,280	7,819	9,706	11,452	11,186	8,853	9,994		_
227,236	237,343	222,419	223,513	208,364	209,155	200,470	188,396	213,785	211,270
71,668	73,435	78,956	75,511	71,310	72,575	83,433	81,750	111,042	121,271
59,782	69,066	66,771	59,073	68,769	62,518	59,145	54,155	76,864	58,164
12,520	16,792	33,242	28,816	25,294	25,911	26,852	19,096	5,163	5,208
(23,982)	(30,902)	(46,155)	(39,854)	(39,646)	(38,086)	(35,984)	(29,307)	(31,969)	(28,436)
616,563	641,750	641,759	650,510	626,022	638,653	616,062	549,556	684,703	704,284
500,642	519,960	538,983	546,340	517,769	512,447	494,046	448,328	572,010	564,876
80,961	80,382	78,629	79,757	78,291	80,200	77,653	73,633	81,530	83,508
34,960	41,408	24,147	24,413	29,962	46,006	44,363	27,595	31,163	55,900
(1,612)	(1,788)	(919)	(5,722)	(1,917)	(5,198)	(5,263)	(8,600)	(10,766)	(9,193)
33,348	39,620	23,228	18,691	28,045	40,808	39,100	18,995	20,397	46,707
(415)	(11,967)	(4,737)	975	(12,203)	(3,213)	(10,353)	(3,403)	(6,887)	(5,817)
32,933	27,653	18,491	19,666	15,842	37,595	28,747	15,592	13,510	40,890
24,185	19,111	14,649	12,623	8,265	22,969	17,267	8,217	11,664	24,031
295,041	276,925	282,816	296,538	287,399	284,417	281,701	261,587	277,553	297,893
331,443	323,800	347,438	332,416	323,717	313,949	313,945	324,732	332,418	360,031
82,895	79,058	81,292	71,761	74,768	66,599	65,866	68,474	68,015	62,974
709,379	679,783	711,546	700,715	685,884	664,965	661,512	654,793	677,986	720,898
245,828	233,256	239,500	257,958	250,936	267,391	249,701	246,473	269,025	318,072
153,150	156,905	182,436	177,402	184,195	173,167	200,362	206,130	214,238	183,794
23,179	22,463	25,718	23,077	34,736	24,472	24,048	23,033	22,527	24,988
310,401	289,622	289,610	265,355	250,753	224,407	211,449	202,190	194,723	219,032
22.85	18.06	13.85	12.16	8.22	22.85	17.18	8.17	11.59	23.88
6.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00
270.76	251.90	248.89	228.51	214.35	198.41	186.02	177.88	170.92	192.72
5.7	6.5	3.8	3.8	4.8	7.2	7.2	5.0	4.6	7.9
5.5	6.5	3.8	3.6	4.8	7.2	7.2	4.4	4.8	8.2
1,062,001	1,062,001	1,062,001	1,062,001	1,009,165	1,009,165	1,009,165	1,009,165	1,009,165	1,008,996
1,002,001									
70	68	71	65	67	67	66	67	65	67
	68 52,977	71 64,449	65 58,873	67 57,243	67 55,407	66 57,537	67 59,232	65 60,202	56,834

#### Scope of Consolidation

The UBE Group had 70 consolidated subsidiaries as of March 31, 2017, up two from a year earlier. The new subsidiaries were injection molding machine companies U-MHI PLATECH CO., LTD. and U-MHI PLATECH AMERICA INC. The additional consolidations stemmed from acquiring Mitsubishi Heavy Industries Plastic Technology Co., Ltd., a consolidated subsidiary of Mitsubishi Heavy Industries, Ltd., and changing its company name and making it a subsidiary of Ube Machinery Corporation, Ltd. The number of equity-method affiliates was 25, unchanged from the previous term.

#### **Operating Performance**

#### Results for Fiscal 2016

The global economy continued to recover moderately in fiscal 2016. This was because a slowdown in China's economy became more pronounced, partly offsetting an ongoing turnaround of the U.S. economy and modest recoveries in Europe. Despite some delays, Japan experienced a mild economic upturn.

The Japanese yen averaged ¥120.1 to the dollar, up 9.7%, to ¥108.4, from a year earlier. Naphtha traded at ¥34,500 to the kiloliter, down 19.0%. The price of Australian coal was down slightly, at ¥8,748 per metric ton.

It was against this backdrop that the UBE Group launched "Change & Challenge 2018," a three-year management plan, the basic strategies of which are to strengthen the business foundation to enable sustainable growth and address and be part of the solution for resource, energy, and global environment issues. In keeping with this, the Group is endeavoring to enhance profitability in each segment and tackle each business challenge.

The yen appreciated overall during the year under review, with costs rising owing to higher prices of some raw materials in the Chemicals segment and as a result of periodical repairs at domestic ammonia facilities. The Cement & Construction Materials segment experienced lower demand in Japan for cement and a downturn in the export climate. While consolidated operating profit declined as a result, profit attributable to owners of parent rose because the impairment loss was smaller than that of a year earlier.

As a result of these factors, consolidated net sales decreased 3.9%, or ¥25,187 million, to ¥616,563 million. Operating profit was down 15.6%, or ¥6,448 million, to ¥34,960 million, while profit attributable to owners of parent advanced 26.6%, or ¥5,074 million, to ¥24,185 million. Net income per share was up ¥4.79, to ¥22.85.

#### **Net Sales**

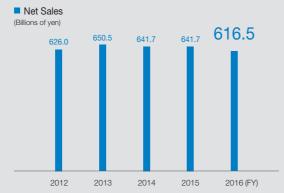
Net sales decreased 3.9%, or ¥25,187 million, to ¥616,563 million. While sales were up in the Pharmaceutical segment, overall they were down due to the yen's appreciation and lower material prices. By segment, there was a decrease in the Chemicals segment owing to drops in nylon and lactam chain demand that offset favorable shipments of lithium-ion battery (LiB) materials. Other downside factors were lower sales of cement and ready-mixed concrete in the Cement & Construction Materials segment, declines in sales of molding machines and industrial machinery in the Machinery segment and lower coal and power business revenues in the Energy & Environment segment.

Overseas sales were down 4.2%, or ¥7,673 million, to ¥175,979 million, accounting for 28.5% of net sales, down 0.1 percentage point.

# Cost of Sales and Selling, General and Administrative Expenses

The cost of sales decreased 3.7%, or ¥19,318 million, to ¥500,642 million, and accounted for 81.2% of net sales.

Selling, general and administrative expenses rose 0.7%, or ¥579 million, to ¥80,961 million.





Research and development expenses, which are part of selling, general and administrative expenses, were basically unchanged at ¥13,624 million and represented 2.2% of net sales, from 2.1% a year earlier.

## **Operating Profit**

Operating profit decreased 15.6%, or ¥6,448 million, to ¥34,960 million. The operating margin dropped 0.8 percentage point, to 5.7%. Pharmaceutical segment earnings rose on greater sales. Operating profit declined, however, in the other segments. In the Chemicals segment, for example, sales declined due to regular repairs of ammonia plants in Japan and costs rose owing to higher prices of raw synthetic rubber materials. The prime factors in an earnings downturn for the Cement & Construction Materials segment were lower domestic sales of cement and ready-mixed concrete. Profits were down in the Machinery segment owing to falls in shipments of molding machines and industrial machinery. In the Energy & Environment segment, lower volumes of coal sales and contract coal storage resulted in an earnings drop.

#### Other Income (Expenses)

Net other expenses decreased 85.3%, or ¥11,728 million, to ¥2,027 million. Net interest expense, calculated as interest and dividend income less interest expense, was ¥704 million, a decrease of 40.0%, or ¥470 million, reflecting a ¥513 million drop in interest expense.

Share of profit of entities accounted for using equity method decreased 31.5%, or ¥929 million, to ¥2,021 million.

Others, net, which is disclosed in greater detail in note 13 to the consolidated financial statements, decreased 77.8%, or ¥12,182 million, to a net expense of ¥3,482 million. This was primarily because loss on foreign currency exchange, net improved ¥891 million and in the previous term the

Company posted ¥9,080 million in loss on impairment of fixed assets and a ¥5,814 million loss on disposal of property, plant and equipment, while it recorded a ¥1,611 million gain on bargain purchase in the year under review.

As a result of these factors, profit before income taxes increased 19.1%, or ¥5,280 million, to ¥32,933 million.

#### Profit Attributable to Owners of Parent

Income taxes decreased 5.8%, or ¥513 million, to ¥8,383 million. The effective tax rate for the year under review was 25.5%, down 6.7 percentage points.

Profit attributable to owners of parent therefore increased 26.6%, or ¥5,074 million, to ¥24,185 million. Net income per share was ¥22.85, from ¥18.06 a year earlier.

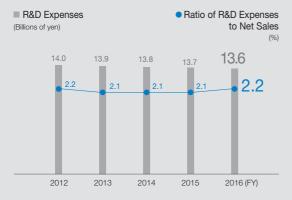
Return on equity climbed by 1.5 percentage point, to 8.7%. Return on assets, calculated as the sum of operating profit, interest and dividend income, and share of profit of entities accounted for using equity method divided by average total assets, declined 1.0 percentage point, to 5.5%.

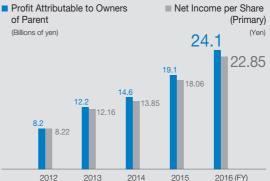
#### **Financial Position**

#### Cash Flow

#### Cash flows from operating activities

Net cash provided by operating activities was ¥53,418 million, down 22.2%, or ¥15,210 million, from a year earlier. Key factors were ¥32,933 million in profit before income taxes, ¥34,490 million in depreciation and amortization, and ¥10,227 million in income taxes payment. This decrease was notwithstanding a rise in profit before income taxes, and reflected an increase of ¥6,714 million in expenses owing to changes in working capital (total changes in trade receivables, inventories, and trade payables).





#### Cash flows from investing activities

Net cash used in investing activities was ¥40,829 million, from ¥33,726 million a year earlier, the main factor being ¥41,867 million in purchase of property, plant and equipment and intangible assets.

#### Free cash flow

Free cash flow was thus ¥12,589 million, from ¥34,902 million a year earlier.

#### Cash flows from financing activities

Net cash used in financing activities was ¥17,686 million, compared with ¥31,000 million a year earlier. Prime factors were ¥20,562 million in proceeds from long-term borrowings, set against ¥21,306 million in repayments of long-term borrowings and ¥15,020 million in repayments of long-term bonds.

Cash and cash equivalents at end of the year were down 13.1%, or ¥5,382 million, at ¥35,806 million.

# Assets, Liabilities and Net Assets Assets

Total assets at March 31, 2017, were ¥709,379 million, up 4.4%, or ¥29,596 million, from a year earlier.

Total current assets increased 6.5%, or ¥18,116 million, to ¥295,041 million. This was due largely to increases of ¥18,339 million in trade notes and accounts receivable and ¥6,719 million in inventories. Total non-current assets rose 2.8%, or ¥11,480 million, to ¥414,338 million, mainly because of a ¥7,643 million rise in total property, plant and equipment.

### Liabilities

At March 31, 2017, total liabilities were up 2.3%, or \$8,817 million, from 12 months earlier, at \$398,978 million.

Total current liabilities increased 5.4%, or ¥12,572 million, to ¥245,828 million. This was despite a ¥13,436 million decrease in short-term

loans payable, which was offset by an ¥18,062 million rise in trade notes and accounts payable. The current ratio was 120.0%, from 118.7% a year earlier. Interest-bearing debt (including short-term loans payable, commercial paper, current portion of bonds, long-term loans payable, and lease obligations) dropped 2.9%, or ¥6,227 million, to ¥210,464 million.

Certain modifications have been made to the accompanying financial statements to present them in a format that is more familiar to readers outside Japan. As a result, lease obligations totaling ¥1,848 million that are a component of total interest-bearing liabilities are included in other current liabilities and other long-term liabilities instead of being presented separately.

#### Net Assets

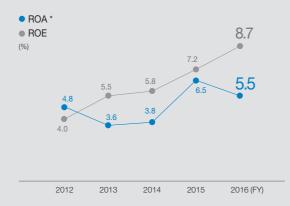
Total net assets advanced 7.2%, or ¥20,779 million, from the close of the previous term, to ¥310,401 million. This was due mainly to an increase of retained earnings, which was the result of profit attributable to owners of parent of ¥24,185 million that offset dividends payments of ¥5,287 million.

Shareholders' equity increased 7.5%, or ¥20,037 million, to ¥286,599 million. The equity ratio therefore rose 1.2 percentage points, to 40.4%.

#### Forecasts for Fiscal 2017

Although the Japanese economy will likely continue to recover moderately in fiscal 2017, such factors as foreign exchange and raw materials and fuel price prospects as well as political, economic, and monetary policy trends in the United States and Europe will probably continue to drive significant uncertainty.

In view of this situation, for the year ahead management assumes an exchange rate of ¥110 to the U.S. dollar, a domestic naphtha price of ¥41,800 per kiloliter, and an Australian coal price of ¥10,932 per metric ton.





\* ROA = (Operating profit + Interest and dividend income + Share of profit of entities accounted for using equity method) / Average total assets

We forecast ¥700,000 million in consolidated net sales for the year on higher sales volume and improved prices in the Chemicals segment and sales gains in all the other segments. We project ¥40,000 million in operating profit on higher sales volume in the Chemicals segment and ¥24,500 million in profit attributable to owners of parent.

Free cash flow should rise on higher profit before income taxes. Interest-bearing debt should be \$200,000 million at year-end, down \$10,400 million from the end of the fiscal year under review.

#### **Business and Other Risks**

Among risks inherent to the UBE Group's business and other risks, the following may exert an important influence on the decisions of investors. The UBE Group is fully dedicated to a policy of recognizing these risks, avoiding and preventing their actualization, and minimizing and dealing with related problems should they arise. Statements below concerning the future represent the judgment of the UBE Group as of March 31, 2017. Business and other risks not covered here may arise.

#### 1. Fluctuations in the Raw Material and Fuel Markets

Purchase costs of raw materials used in the main products of the UBE Group's Chemicals segment are influenced by factors including international market conditions and fluctuations in crude oil and naphtha prices. Depending on supply and demand conditions for products, increases in prices of these raw materials may exert a material impact on the performance and financial position of the UBE Group if increased costs cannot be reflected in selling prices in a timely manner. In addition, increases in the procurement costs of overseas coal, which the UBE Group purchases for use in cement production and for in-house power generation, may also exert a material impact on the performance and financial position of the Group.

## 2. Earnings in the Chemical Business

Earnings in the chemical business are highly dependent on demand trends and supply and demand conditions in Japan, Asia, and Europe, the primary markets for this business's main products. Consequently, a substantial decrease in demand in these regions due to economic fluctuations, or worsening supply and demand conditions due to expansion of production capacity by other companies, an influx of products from other regions, or other factors could result in stagnant market prices or a significant narrowing of price spreads, which may exert a material impact on the performance and financial position of the Group.

In addition, timely development of materials that meet customer needs is paramount in supplying materials for use in products with quick turnovers, particularly in the core information technology (IT) and digital home appliance fields. Failure to meet customer needs due to delayed development or other factors may exert a material impact on the performance and financial position of the Group, and may decrease demand for IT-related products, which are particularly susceptible to market fluctuations.

# 3. Earnings in the Active Pharmaceutical Ingredients and Intermediates Business

The active pharmaceutical ingredients and intermediates business comprises a contract manufacturing business through which the UBE Group manufactures pharmaceutical bulk ingredients and intermediates under contract for pharmaceutical companies and the drug discovery and co-development business through which the Group conducts R&D for new drugs either independently or jointly with pharmaceutical companies. The contract manufacturing business requires forward expenditures including those for production facilities of a certain scale that meet standards, though R&D expenditures are limited. New drugs handled by the contract manufacturing business may be unable to be commercialized due to the long lead time needed by the pharmaceutical companies to obtain production approval and to the possibility of delays in full-scale launch should approval be revoked after completion of contract manufacturing due to side effects or other factors. In addition, factors including the launch of generic drugs due to intensified competition in the market for pharmaceuticals manufactured from pharmaceutical bulk ingredients and intermediates under contract and lapsed patents may lead to sluggish sales.

The drug discovery and co-development business is broadly divided into independent research and joint research with pharmaceutical companies. Although the UBE Group minimizes the risk of large clinical trial outlays and low success rates through a basic strategy of licensing out research in the final stages regardless of drug type, necessary R&D costs before that stage entail risk associated with possible failure of the research and market launch. In addition, authorization may be revoked and launch delayed, as is the case of development for new drugs by pharmaceutical companies. Materialization of these risks in the contract manufacturing and drug discovery and co-development businesses may exert a material impact on the performance and financial position of the Group.

#### 4. Cement Export Prices

Construction related to the Tokyo 2020 Summer Olympics and Paralympics has already begun, and domestic demand for cement, a main product of the Cement & Construction Materials segment, is forecast to increase to a certain extent. However, demand in China for exports of cement has decreased, and cement production capacity has increased in Southeast Asian countries. These factors have quickly upset the balance between supply and demand, which has caused export prices and earnings to decrease. UBE Group initiatives in this area include expanding capability for fee-based treatment of waste in the cement production process and overall cost cuts. However, a decline in export prices for cement may exert a material impact on the performance and financial position of the Group.

#### 5. Earnings in the Machinery Business

The UBE Group is strengthening and enhancing the linkage between products and services in the Machinery segment in working to expand earnings in global markets with a focus on emerging countries that are growing. However, the materialization of risks such as a decline in sales prices due to intensifying competition or a sudden rise in prices for raw materials and construction may exert a material impact on the performance and financial position of the Group.

## 6. Exchange Rate Fluctuations

The UBE Group minimizes exchange rate risk related to exports paid for in foreign currencies through hedge transactions such as balancing of debts and credits and foreign currency contracts. However, short- and medium-term exchange rate fluctuations that exceed forecasts may exert a material impact on the performance and financial position of the Group.

UBE Group overseas subsidiaries record financial statements in local currencies, leading to exposure to the influence of exchange rates when these amounts are converted into yen. In addition, losses on exchange rate fluctuations may occur at the time of conversion into local currencies for redemption, interest payment and settlement of liabilities of U.S. dollar-denominated interest-bearing liabilities held by Group production companies in Thailand.

### 7. Fluctuations in Financial Markets

Fluctuations in financial markets at the time of capital procurement exert a material impact on the performance and financial position of the UBE Group. The UBE Group minimizes risk related to interest rate

fluctuations through interest swaps and other hedges, but short- and medium-term interest rate fluctuations that exceed forecasts may exert a material impact on the performance and financial position of the Group.

#### 8. Overseas Business Activities

The UBE Group manufactures and sells products in Asia, North America, Central America, South America, and Europe. Overseas operations entail economic risks related to factors including unforeseen changes to laws and regulations, weakening of the industrial base, the ability to secure personnel and acquire technical proficiency, and labor union issues, in addition to social and political confusion resulting from terrorism, war, and/or other factors. Emergence of these risks may impede overseas operations and exert a material impact on the performance and financial position of the Group.

#### 9. Intellectual Property/Product Liability

The UBE Group recognizes the importance of intellectual property and works to protect it, but failure to do so properly and/or violation of UBE's intellectual property rights, or inability to cover costs of product recalls or damages in the event that these risks materialize in connection with product flaws may impede operations and exert a material impact on the performance and financial position of the Group.

## 10. Industrial Accidents and Disasters

In the event that a large-scale industrial accident, earthquake, windstorm, or flood should occur and cause substantial damage to the production facilities at any of the UBE Group plants that handle hazardous materials or high-pressure gas, factors including compensation and other costs, loss of opportunities caused by cessation of production activities, compensation for customers, and erosion of public trust may exert a material impact on the performance and financial position of the Group. In addition, factors including accidents or disasters affecting the suppliers of crucial raw materials to the UBE Group may impede operations and exert a material impact on the performance and financial position of the Group.

## 11. Public Regulations

The UBE Group conducts its businesses according to the laws, rules, and other regulations of the countries and regions where it operates. However, any modification or strengthening of these regulations may exert a material impact on the performance and financial position of the Group due to restrictions on the Group's business activities, increased costs of

regulatory compliance, accounting and tax responses to the regulations, or other effects.

#### 12. Asbestos

In the past, the UBE Group manufactured and sold products containing asbestos, and used construction materials containing asbestos in plant facilities. In order to eliminate asbestos from plant facilities, the UBE Group plans to institute a series of complete or partial changes of facilities, for which certain expenditures are expected until the changes are complete. Moreover, in the event that employees (including retired employees) or residents in the vicinity of the plants face health hazards, an increase in employees receiving workers' compensation, lawsuits, efforts to further strengthen regulations, and other factors may exert a material impact on the performance and financial position of the Group.

#### 13. Lawsuits

The UBE Group strives for strict legal compliance, but the possibility exists that lawsuits may be brought against the Group in any of its various business operations. Pending lawsuits are as follows. No prediction of the final outcome of these lawsuits or the time required for resolution is possible at this time. Since May 2008, the Japanese government and 40 building material manufacturers, including Ube Board Co., Ltd. (formerly a consolidated subsidiary of UBE that has been dissolved), have been defendants in lawsuits brought jointly and severally by construction workers and their survivors alleging that the defendants are responsible for asbestos-related disease that affected the plaintiffs because they inhaled asbestos particles from asbestos building materials used at construction sites. This initial ruling rejected all of the claims against Ube Board.

The plaintiffs' claims were dismissed. Subsequently, five plaintiff appeals were filed in the Tokyo High Court, the Osaka High Court, and the Sapporo High Court, and similar lawsuits were filed in the Sapporo District Court, the Tokyo District Court, the Yokohama District Court, and the Kyoto District Court. A total of 10 lawsuits seek damages totaling ¥24,200 million.

# 14. Write-Down Due to Decreased Profitability of Inventories

Under the current Accounting Standard for Measurement of Inventories, inventories held for sale in the ordinary course of business are carried at their original cost on the balance sheets, but are judged to have decreased in profitability if the net realizable value falls below the original cost at the end of the period. In such cases, the balance sheet value is written down to the net realizable value, and the difference between the original cost and the net realizable value is charged against income for the period in which the loss occurs. If the UBE Group judges inventories to have decreased in profitability because the net realizable value has fallen below original cost as a result of a rise in fuel and raw material purchase prices, a rise in manufacturing costs, an increase in fixed manufacturing costs, a decrease in production volume, or a drop in product selling prices, this may exert a material impact on the performance and financial position of the Group.

#### 15. Impairment of Fixed Assets

The UBE Group adopted accounting standards for impairment of fixed assets in fiscal 2003. Impairment losses in the event of depreciation in the market value of unused land and/or significant deterioration of the operating environment may exert a material impact on the performance and financial position of the Group.

#### 16. Marketable Securities

The UBE Group holds marketable securities, the majority of which are shares of listed stocks. For this reason, a decline in the stock market may exert a material impact on the performance and financial position of the Group.

## 17. Retirement Benefit Liabilities

The UBE Group calculates its retirement benefit liabilities and retirement benefit payments based on discount and retirement rates used in pension calculations, and on conditions including rate of salary increases and year-end working income ratios for pension assets. For this reason, deterioration of operating interest rates for pension assets, decreases in the discount rate, and other factors may exert a material impact on the performance and financial position of the Group.

#### 18. Deferred Tax Assets

The UBE Group recognizes deferred tax assets resulting from temporary differences and operating loss carryforwards for tax purposes, which will reduce taxable income in future periods. Deferred tax assets are recognized in consideration of their probability of recovery based on forecasts of future income and other factors. In the event that actual taxable income should differ from projections, reversal of deferred tax assets may become necessary and exert a material impact on the performance and financial position of the Group.

## **Consolidated Balance Sheet**

Ube Industries, Ltd. and Consolidated Subsidiaries March 31, 2017 and 2016

٨	_	_	_	4	_

	Million	Millions of yen			
	2017	2016	2017		
Current assets:					
Cash and cash equivalents (Note 4)	¥ 35,806	¥ 41,188	\$ 319,696		
Time deposits (Note 4)	828	1,275	7,393		
Receivables (Notes 4 and 23):					
Notes and accounts - trade	157,845	139,506	1,409,330		
Others	6,245	6,029	55,759		
Allowance for doubtful accounts	(523)	(637)	(4,669)		
Inventories (Note 6)	82,802	76,083	739,304		
Deferred tax assets (Note 15)	6,834	7,809	61,018		
Other current assets	5,204	5,672	46,464		
Total current assets	295,041	276,925	2,634,295		

Property, plant and equipment (Notes 8, 14 and 21):							
Land	84,100	84,468	750,893				
Buildings and structures	265,505	259,958	2,370,580				
Machinery and equipment	681,135	673,192	6,081,562				
Construction in progress	19,715	9,661	176,027				
Accumulated depreciation	(719,012)	(703,479)	(6,419,750)				
Total property, plant and equipment, net	331,443	323,800	2,959,312				

Investments and other assets:			
Investment securities (Notes 4 and 5)	51,615	48,167	460,848
Long-term loans receivable	326	421	2,911
Long-term deferred tax assets (Note 15)	7,521	8,263	67,152
Net defined benefit asset (Note 20)	7,806	7,006	69,696
Other non-current assets	16,292	15,739	145,464
Allowance for doubtful accounts	(665)	(538)	(5,937)
Total investments and other assets	82,895	79,058	740,134
Total assets	¥ 709,379	¥ 679,783	\$ 6,333,741

	Millions	Thousands of U.S. dollars (Note		
	2017	2016	2017	
current liabilities:				
Short-term loans payable (Notes 4, 7 and 8)	¥ 47,713	¥ 58,370	\$ 426,009	
Commercial paper (Note 4)	10,000		89,286	
Current portion of long-term debt (Notes 4, 7 and 8)	33,238	36,017	296,768	
Payables (Note 4):				
Notes and accounts - trade	92,342	74,280	824,482	
Others	26,813	32,225	239,402	
Provision for bonuses	6,944	7,118	62,000	
Income taxes payable (Note 4)	4,546	6,766	40,589	
Other current liabilities	24,232	18,480	216,357	
Total current liabilities	245,828	233,256	2,194,893	
ong-term liabilities:				
Long-term debt less current portion (Notes 4, 7 and 8)	117,665	120,869	1,050,580	
Net defined benefit liability (Note 20)	6,850	6,727	61,161	
Long-term deferred tax liabilities (Note 15)	2,271	2,142	20,277	
Other long-term liabilities	26,364	27,167	235,393	
Total long-term liabilities	153,150	156,905	1,367,411	
Contingent liabilities (Note 9)				
let assets (Note 10):				
Capital stock, without par value:				
	58,435	58,435	521,741	
Capital stock, without par value: Authorized — 3,300,000,000 shares	58,435 38,091	58,435 38,536		
Capital stock, without par value:  Authorized — 3,300,000,000 shares  Issued —1,062,001,076 shares at March 31, 2017 and 2016			340,098	
Capital stock, without par value:  Authorized — 3,300,000,000 shares Issued —1,062,001,076 shares at March 31, 2017 and 2016  Capital surplus	38,091	38,536	521,741 340,098 1,658,455	
Capital stock, without par value: Authorized — 3,300,000,000 shares Issued —1,062,001,076 shares at March 31, 2017 and 2016 Capital surplus Retained earnings Treasury shares 3,506,575 shares at March 31, 2017 and	38,091 185,747	38,536 166,862	340,098 1,658,455	
Capital stock, without par value: Authorized — 3,300,000,000 shares Issued —1,062,001,076 shares at March 31, 2017 and 2016 Capital surplus Retained earnings Treasury shares 3,506,575 shares at March 31, 2017 and 3,813,962 shares at March 31, 2016	38,091 185,747 (726)	38,536 166,862 (801)	340,098 1,658,455 (6,482	
Capital stock, without par value: Authorized — 3,300,000,000 shares Issued —1,062,001,076 shares at March 31, 2017 and 2016 Capital surplus Retained earnings Treasury shares 3,506,575 shares at March 31, 2017 and 3,813,962 shares at March 31, 2016 Valuation difference on available-for-sale securities	38,091 185,747 (726) 4,893	38,536 166,862 (801) 3,514	340,098 1,658,458 (6,482 43,688	
Capital stock, without par value: Authorized — 3,300,000,000 shares Issued —1,062,001,076 shares at March 31, 2017 and 2016 Capital surplus Retained earnings Treasury shares 3,506,575 shares at March 31, 2017 and 3,813,962 shares at March 31, 2016 Valuation difference on available-for-sale securities Deferred gains (losses) on hedges	38,091 185,747 (726) 4,893 11	38,536 166,862 (801) 3,514 (13)	340,098 1,658,455 (6,482 43,688	
Capital stock, without par value: Authorized — 3,300,000,000 shares Issued —1,062,001,076 shares at March 31, 2017 and 2016 Capital surplus Retained earnings Treasury shares 3,506,575 shares at March 31, 2017 and 3,813,962 shares at March 31, 2016 Valuation difference on available-for-sale securities Deferred gains (losses) on hedges Foreign currency translation adjustment	38,091 185,747 (726) 4,893 11 2,378	38,536 166,862 (801) 3,514 (13) 3,674	340,098 1,658,455 (6,482 43,688 98 21,232	
Capital stock, without par value: Authorized — 3,300,000,000 shares Issued —1,062,001,076 shares at March 31, 2017 and 2016 Capital surplus Retained earnings Treasury shares 3,506,575 shares at March 31, 2017 and 3,813,962 shares at March 31, 2016 Valuation difference on available-for-sale securities Deferred gains (losses) on hedges Foreign currency translation adjustment Remeasurements of defined benefit plans	38,091 185,747 (726) 4,893 11 2,378 (2,230)	38,536 166,862 (801) 3,514 (13) 3,674 (3,645)	340,098 1,658,458 (6,483 43,688 98 21,232 (19,91	

Total liabilities and net assets

¥709,379

¥679,783

Liabilities and Net Assets

\$6,333,741

## **Consolidated Statement of Income**

Ube Industries, Ltd. and Consolidated Subsidiaries For the years ended March 31, 2017 and 2016

	Millions			
	2017	2016	2017	
Net sales (Note 23)	¥616,563	¥641,750	\$5,505,027	
Cost of sales	500,642	519,960	4,470,018	
Gross profit	115,921	121,790	1,035,009	
Selling, general and administrative expenses (Notes 11, 12 and 22)	80,961	80,382	722,866	
Operating profit	34,960	41,408	312,143	
Other income (expenses):				
Interest and dividend income	893	936	7,973	
Amortization of negative goodwill	138	133	1,232	
Interest expense	(1,597)	(2,110)	(14,259)	
Share of profit of entities accounted for using equity method	2,021	2,950	18,045	
Others, net (Note 13)	(3,482)	(15,664)	(31,089)	
	(2,027)	(13,755)	(18,098)	
Profit before income taxes	32,933	27,653	294,045	
Income taxes (Note 15):				
Current	7,989	9,400	71,330	
Deferred	394	(504)	3,518	
	8,383	8,896	74,848	
Profit	24,550	18,757	219,197	
Profit (loss) attributable to non-controlling interests	365	(354)	3,259	
Profit attributable to owners of parent	¥ 24,185	¥ 19,111	\$ 215,938	
	Y	en	U.S. dollars (Note 1)	
	2017	2016	2017	
Per share:				
Net income:				
Primary	¥22.85	¥18.06	\$0.204	
Diluted	22.78	18.01	0.203	
Cash dividends applicable to the period	6.00	5.00	0.054	

See accompanying notes.

## Consolidated Statement of Comprehensive Income

Ube Industries, Ltd. and Consolidated Subsidiaries For the years ended March 31, 2017 and 2016

	Millions	of yen	Thousands of U.S. dollars (Note 1)
	2017	2016	2017
Profit	¥24,550	¥ 18,757	\$219,197
Valuation difference on available-for-sale securities	1,337	(1,369)	11,938
Deferred gains (losses) on hedges	24	84	214
Foreign currency translation adjustment	(605)	(10,522)	(5,402)
Remeasurements of defined benefit plans, net of tax	1,248	(1,028)	11,143
Share of other comprehensive income of entities accounted			
for using equity method	(177)	(477)	(1,580)
Total other comprehensive income (loss)	1,827	(13,312)	16,313
Comprehensive income (loss)	¥26,377	¥ 5,445	\$235,510
Attributable to:			
Owners of parent	¥25,707	¥ 8,159	\$229,527
Non-controlling interests	670	(2,714)	5,983

## Consolidated Statement of Changes in Net Assets

Ube Industries, Ltd. and Consolidated Subsidiaries

	_					M	lillions of yen				
For the year ended March 31, 2017	Number of shares issued (thousands)	Capital stock	Capital surplus	Retained earnings	Treasury shares	Valuation difference on available - for- sale securities	Deferred e gains (losses) on hedges		Remeasurements of defined benefit plans	Subscription rights to shares	n Non-controlling interests
Opening balance	1,062,001	¥58,435	¥38,536	¥166,862	¥(801)	¥ 3,514	¥(13)	¥3,674	¥(3,645)	¥597	¥22,463
Cash dividends at ¥5.00 per share	-	_	_	(5,300)	_	_	-	_	_	_	_
Profit attributable to owners of parent	_	_	_	24,185	_	_	_	_	_	_	_
Purchase of treasury shares	_	_	_	_	(63)	_	_	_	_	_	_
Disposal of treasury shares	_	_	(18)	_	138	_	_	_	_	_	_
Purchase of shares of consolidated subsidiaries	_	_	(427)	_	_	_	_	_	_	_	_
Net changes of items other than shareholders' equit	y –	_	_	_	_	1,379	24	(1,296)	1,415	26	716
Closing balance	1,062,001	¥58,435	¥38,091	¥185,747	¥(726)	¥ 4,893	¥ 11	¥2,378	¥(2,230)	¥623	¥23,179

		Millions of yen									
For the year ended March 31, 2016	Number of shares issued (thousands)	Capital stock	Capital surplus	Retained earnings	Treasury shares	Valuation difference on available - for- sale securities	(losses) on		of defined		n Non-controllinç interests
Opening balance	1,062,001	¥58,435	¥38,413	¥153,368	¥(850)	¥ 4,924	¥(97)	¥11,581	¥(2,447)	¥565	¥25,718
Cash dividends at ¥5.00 per share	-	_	-	(5,300)	_	-	_	-	_	_	_
Profit attributable to owners of parent	_	_	_	19,111	_	_	_	_	_	_	_
Purchase of treasury shares	_	_	_	_	(16)	_	_	_	_	_	_
Disposal of treasury shares	_	_	11	_	65	_	_	_	_	_	_
Change of scope of consolidation	_	_	_	(317)	_	_	_	_	_	_	_
Purchase of shares of consolidated subsidiaries	_	_	112	_	_	_	_	_	_	_	_
Net changes of items other than shareholders' equit	у –	_	_	_	_	(1,410)	84	(7,907)	(1,198)	32	(3,255)
Closing balance	1,062,001	¥58,435	¥38,536	¥166,862	¥(801)	¥ 3,514	¥(13)	¥ 3,674	¥(3,645)	¥597	¥22,463

		Thousands of U.S. dollars (Note 1)									
For the year ended March 31, 2017	Number of shares issued (thousands)	Capital stock	Capital surplus	Retained earnings	Treasury shares	Valuation difference on available - for- sale securities			Remeasurements of defined benefit plans	Subscriptio rights to shares	n Non-controlling interests
Opening balance	1,062,001	\$521,741	\$344,071	\$1,489,838	\$(7,152)	\$31,375	\$(116)	\$ 32,804	\$(32,545)	\$5,330	\$200,563
Cash dividends at ¥5.00 per share	_	_	_	(47,321)	_	_	_	-	_	_	_
Profit attributable to owners of parent	_	_	_	215,938	_	_	_	_	_	_	_
Purchase of treasury shares	_	_	_	_	(562)	_	_	_	_	_	_
Disposal of treasury shares	_	_	(161)	_	1,232	_	_	_	_	_	_
Purchase of shares of consolidated subsidiaries	_	_	(3,812)	_	_	_	_	_	_	_	_
Net changes of items other than shareholders' equity	_	_	_	_	_	12,313	214	(11,572)	12,634	233	6,392
Closing balance	1,062,001	\$521,741	\$340,098	\$1,658,455	\$(6,482)	\$43,688	\$ 98	\$ 21,232	\$(19,911)	\$5,563	\$206,955

## Consolidated Statement of Cash Flows

Ube Industries, Ltd. and Consolidated Subsidiaries For the years ended March 31, 2017 and 2016

	Millions	Thousands of U.S. dollars (Note 1)	
	2017	2016	2017
Cash flows from operating activities:			
Profit before income taxes	¥ 32,933	¥ 27,653	\$ 294,045
Depreciation and amortization	34,490	35,574	307,946
Loss on impairment of fixed assets	586	9,080	5,232
Interest and dividend income	(893)	(936)	(7,973
Interest expense	1,597	2,110	14,259
Gain on sales of property, plant and equipment	(142)	(515)	(1,268
Gain on sales of investment securities	_	(40)	_
Decrease (increase) in notes and accounts receivable - trade	(19,026)	10,233	(169,87
Decrease (increase) in inventories	(6,743)	126	(60,20
Increase (decrease) in notes and accounts payable - trade	16,961	(12,453)	151,43
Loss on business restructuring	_	466	
Reversal of accrued expenses on business withdrawal	_	(1,596)	
Increase (decrease) in defined benefit asset and defined benefit liability	(686)	1,405	(6,12
Other, net	3,723	2,898	33,24
Subtotal	62,800	74,005	560,71
Interest and dividend income received	1,736	1,449	15,500
Interest payment	(1,615)	(2,130)	(14,420
Proceeds from subsidy income	724	1,829	6,464
Income taxes payment	(10,227)	(6,525)	(91,312
Net cash provided by operating activities	53,418	68,628	476,946
Cash flows from investing activities:			
Proceeds from sales of property, plant and equipment	488	1,023	4,35
Purchase of property, plant and equipment and intangible assets	(41,867)	(34,485)	(373,81
Proceeds from sales of investment securities	132	58	1,17
Purchase of investment securities	(448)	(404)	(4,00
Proceeds from sales of shares of subsidiaries and associates	56	51	50
Purchase of shares of subsidiaries and associates	(595)	(166)	(5,31
Proceeds from purchase of shares of subsidiaries resulting in	(555)	(100)	(0,0.1
change in scope of consolidation	309		2,75
Net decrease in loans receivable	57	457	509
Other, net	1,039	(260)	9,27
Net cash used in investing activities	(40,829)	(33,726)	(364,54
Cash flows from financing activities:			
Proceeds from long-term borrowings	20,562	10,841	183,589
Proceeds from issuance of bonds	9,950	_	88,839
Repayments of long-term borrowings	(21,306)	(28,409)	(190,23
Repayments of long-term bonds	(15,020)	(20)	(134,10
Net decrease in short-term loans payable	(15,046)	(3,769)	(134,33
Increase (decrease) in commercial paper	10,000	(3,000)	89,280
Cash dividends paid	(5,287)	(5,288)	(47,20
Dividends paid to non-controlling interests	(354)	(306)	(3,16
Proceeds from share issuance to non-controlling shareholders	465		4,15
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	(884)	(346)	(7,89
Other, net	(766)	(703)	(6,84)
Net cash used in financing activities	(17,686)	(31,000)	(157,91
Effect of exchange rate change on cash and cash equivalents	(285)	(51,000)	(2,54
Net increase (decrease) in cash and cash equivalents	(5,382)	3,318	(48,05
Cash and cash equivalents at beginning of the year	41,188	36,964	367,75
ncrease in cash and cash equivalents resulting from change	71,100		001,100
in the scope of consolidation		906	
Cash and cash equivalents at end of the year	¥ 35,806	¥ 41,188	\$ 319,696

#### **Notes to Consolidated Financial Statements**

Ube Industries, Ltd. and Consolidated Subsidiaries For the year ended March 31, 2017 and 2016

1

# Basis of presenting consolidated financial statements

(a) Ube Industries, Ltd. (the "Company") and its consolidated subsidiaries (collectively, the "Group") maintain their accounting records and prepare their financial statements in accordance with accounting principles generally accepted in Japan. The accompanying consolidated financial statements have been compiled from the consolidated financial statements prepared by the Company as required under the Financial Instruments and Exchange Act of Japan and, accordingly, have been prepared in accordance with accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards.

Certain modifications have been made to the accompanying financial statements in order to present them in a form which is more familiar to readers outside Japan.

(b) The accompanying financial statements are expressed in Japanese yen and, solely for the convenience of the reader, have been translated into U.S. dollars at ¥112=US\$1, the approximate rate of exchange on March 31, 2017. The translation should not be construed as a representation that Japanese yen have been, could have been, or could in the future be converted into U.S. dollars at the above or any other rate.

2

## Significant accounting policies

#### (a) Basis of consolidation and accounting for investments in unconsolidated subsidiaries and affiliates

The accompanying consolidated financial statements include the accounts of the Company and significant companies controlled directly or indirectly by the Company (70 and 68 companies for the years ended March 31, 2017 and 2016, respectively). Significant companies over which the Company exercises significant influence in terms of their operating and financial policies are included in the consolidated financial statements by the equity method (25 and 25 companies for the years ended March 31, 2017 and 2016, respectively). All significant intercompany balances and transactions are eliminated in consolidation.

Certain subsidiaries are consolidated using their financial statements as of their respective fiscal year end, which falls on December 31, and necessary adjustments are made to their financial statements to reflect any significant transactions occurring during the January 1 to March 31 period.

In the initial consolidation, assets and liabilities of subsidiaries including those attributable to non-controlling interests are recorded based on fair value in the consolidated financial statements.

The difference between acquisition cost and the underlying net assets at fair value at the date of acquisition is amortized over a period of 20 years on a straight-line basis. Negative goodwill in the amounts of ¥808 million (US\$7,214 thousand) and ¥958 million is included in "Other long-term liabilities" on the consolidated balance sheet at March 31, 2017 and 2016, respectively.

Investments in subsidiaries and affiliates which are not consolidated or accounted for by the equity method are carried at cost.

#### (b) Accounting for income taxes

Deferred tax assets and liabilities are recognized in the consolidated financial statements with respect to the differences between the financial reporting and the tax bases of the assets and liabilities.

Deferred tax assets and liabilities are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse.

Valuation allowance is provided for the deferred tax assets that are not realizable within a reasonable period.

#### (c) Securities

Securities other than equity securities issued by subsidiaries and affiliates are classified into three categories: "Trading," "Held-to-maturity" and "Others." The Company and its consolidated subsidiaries have no trading securities. Held-to-maturity securities are carried at amortized cost. Marketable securities classified as other securities are carried at fair value with changes in the valuation difference, net of the applicable income taxes, included directly in net assets. Non-marketable securities classified as other securities are carried at cost. Cost of securities sold is determined by the moving-average method.

#### (d) Derivatives and hedge accounting

All derivatives are stated at fair value, with changes in fair value recorded as gain or loss for the period in which they arise.

If derivative financial instruments are used as hedges and meet certain hedging criteria, the Group defers the recognition of gains or losses resulting from changes in the fair value of the derivative financial instruments until the related losses or gains on the hedged items are recognized.

If interest rate swap contracts meet certain hedging criteria, the net amount to be paid or received under these swap contracts is added to or deducted from the interest on the assets or liabilities for which the swap contracts were executed ("Short-cut method").

Summarized in the table below are hedging instruments and items hedged.

Hedging instruments	Items hedged
Interest rate swaps	Loans
Interest rate options	Loans
Forward foreign exchange contracts	Foreign currency receivables and payables Forecasted foreign currency transactions
Currency options	Foreign currency receivables and payables Forecasted foreign currency transactions
Currency swaps	Foreign currency loans
Coal price swaps	Coal purchased at market linked price

The Company and its consolidated subsidiaries use hedging instruments for the purpose of reducing the fluctuation risk of interest rates, foreign exchange and coal prices in accordance with company policies.

The effectiveness of hedging activities is assessed by confirming whether each hedging instrument corresponds to the item hedged.

Additional information on derivatives is presented in Note 17. Derivative financial instruments.

#### (e) Retirement and pension plan

The Company attributes projected benefits based on a flat benefit formula.

Actuarial gain or loss is amortized in the following year in which the gain or loss is incurred mainly by the declining-balance method over 10-14 years, which are shorter than the average remaining service years of employees.

Prior service cost is amortized as incurred mainly by the straight-line method over 5-14 years, which are shorter than the average remaining service years of the employees.

Many consolidated subsidiaries adopt a simplified method to calculate net defined benefit liability and retirement benefit expenses based on the assumption that the benefits payable, which are calculated as if all eligible employees voluntarily terminate their employment at fiscal year end, approximates the retirement benefit obligations at year end.

#### (f) Allowance for doubtful accounts

Allowance for doubtful accounts is provided at an amount estimated with reference to individual uncollectible accounts plus an amount calculated using a historical rate determined based on the actual uncollectible amounts incurred in prior years.

## (g) Inventories

Inventories are stated at the lower of cost or market, cost being determined principally by the weighted-average method.

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

Property, plant and equipment is stated at cost. Depreciation of property, plant and equipment is computed principally by the straight-line method for the Company and by the declining-balance method for some consolidated subsidiaries, except for certain buildings of domestic consolidated subsidiaries acquired on or after April 1, 1998, and except for certain building facilities and structures of domestic consolidated subsidiaries acquired on or after April 1, 2016, which are depreciated by the straight-line method, at rates based on the estimated useful lives of the respective assets.

The estimated useful lives of the assets are as follows:

Buildings and structures: 2 to 75 years Machinery and equipment: 2 to 30 years

## (i) Intangible assets (except for leased assets)

Mining rights are amortized by the unit-of-production method and patent rights, software and others are amortized by the straight-line method over their estimated useful lives.

#### (i) Leased assets

Leased property under finance leases which does not transfer ownership of the leased property to lessees is depreciated or amortized by the straight-line method over the lease terms assuming no residual value.

#### (k) Research and development costs

Research and development costs are charged to income when incurred.

## (I) Net income per share

Basic net income per share is computed based on net income available for distribution to stockholders of common stock and the weighted average number of shares of common stock outstanding during each year (1,058,420 thousand shares and 1,058,045 thousand shares for the years ended March 31, 2017 and 2016, respectively). Diluted net income per share is computed based on net income available for distribution to the stockholders and the weighted average number of shares of common stock outstanding during each year assuming full exercise of share subscription rights (3,326 thousand shares and 3,075 thousand shares for the years ended March 31, 2017 and 2016, respectively).

#### (m) Provision for bonuses

Provision for bonuses is provided for payments to employees at the estimated amount incurred attributable to the current fiscal year.

#### (n) Provision for directors' bonuses

Provision for directors' bonuses is provided in certain subsidiaries at the estimated amount incurred attributable to the current fiscal year.

These provision for directors' bonuses in the amounts of ¥75 million (US\$670 thousand) and ¥51 million are included in "Other current liabilities" on the consolidated balance sheet at March 31, 2017 and 2016, respectively.

#### (o) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, demand deposits and short-term investments. Short-term investments included here are readily convertible into cash, exposed to insignificant risk of changes in value and mature or become due within three months of the date of acquisition.

#### (p) Provision for loss on order received

Provision for loss on order received is provided to cover the losses that are highly likely to be incurred and the amounts of which can be reasonably estimated.

These provision for loss on order received in the amounts of ¥465 million (US\$4,152 thousand) and ¥401 million are included in "Other current liabilities" on the consolidated balance sheet at March 31, 2017 and 2016, respectively.

#### (q) Provision for directors' retirement benefits

Consolidated subsidiaries provide for retirement allowances for directors and audit & supervisory board members at the necessary amount at the year end based on their internal policies.

Retirement allowances of ¥727 million (US\$6,491 thousand) and ¥807 million are included in "Other long-term liabilities" on the consolidated balance sheet at March 31, 2017 and 2016, respectively.

#### (r) Provision for loss on business restructuring

Provision for loss on business restructuring is provided to cover the losses, which are highly likely to be incurred and the amounts of which can be reasonably estimated, related to certain businesses of the Company and its consolidated subsidiaries.

These provision for losses on business restructuring in the amounts of ¥199 million (US\$1,777 thousand) and ¥267 million are included in "Other long-term liabilities" on the consolidated balance sheet at March 31, 2017 and 2016, respectively.

#### (s) Provision for special repairs

Provision for special repairs is provided for payments of routine maintenance mainly for ammonia plants at the estimated amount.

These provision for special repairs in the amounts of ¥1,428 million (US\$12,750 thousand) and ¥157 million are included in "Other long-term liabilities" on the consolidated balance sheet at March 31, 2017 and 2016, respectively.

#### 3

## **Accounting changes**

## (a) Practical solution on a change in depreciation method due to Tax Reform 2016

As a result of revisions to the Corporation Tax Law of Japan, the Company and its domestic consolidated subsidiaries adopted "Practical Solution on a change in depreciation method due to Tax Reform 2016" (Accounting Standards Board of Japan Practical Issues Task Force ("ASBJ PITF") No. 32 issued on June 17, 2016).

Accordingly, the depreciation method for both facilities attached to buildings and other non-building structures acquired on or after April 1, 2016 has been changed from the declining-balance method to the straight-line method. The impact of this accounting change on the consolidated financial results for the year ended March 31, 2017 was immaterial.

#### 4

## Financial instruments

## (a) Policy for financial instruments

The Group manages funds by utilizing short-term deposits, etc. subject to an insignificant risk of change in value. The Group raises money by borrowing from financial institutions and by issuing commercial paper, straight bonds and bonds with warrants. The Group uses derivatives for the purpose of reducing risk and does not hold or issue derivative financial instruments for speculative purposes.

#### (b) Types of financial instruments and related risk

Trade receivables—Notes and accounts receivables-trade—are exposed to credit risk in relation to customers. In addition, the Group is exposed to foreign currency exchange risk arising from receivables and payables denominated in foreign currencies. The foreign currency exchange risks deriving from those receivables and payables are hedged by forward foreign exchange contracts, currency options and currency swaps.

Investment securities are exposed to market risk and credit risk in relation to issuers. Those securities are composed of the shares of common stock of other companies.

Trade payables - Notes and accounts payables-trade - have payment due dates within one year.

Short-term loans payable are raised and commercial paper is issued mainly in connection with business activities, and long-term debt is taken out principally for the purpose of making capital investments. Short-term loans payable and long-term debt with variable interest rates are exposed to interest rate fluctuation risk. However, to reduce such risk and fix interest expense for those bearing interest at variable rates, the Group utilizes interest rate swap or option transactions as a hedging instrument.

Regarding derivatives, the Group enters into derivative transactions in order to manage certain risks arising from adverse fluctuations in foreign currency exchange rates, interest rates and commodity prices.

#### (c) Risk management for financial instruments

#### 1. Monitoring of credit risk (the risk that customers or counterparties may default)

In accordance with the internal policies of the Group for managing credit risk arising from receivables, each related division monitors the credit worthiness of their main customers periodically, and monitors due dates and outstanding balances by individual customer. In addition, the Group is making efforts to identify and mitigate risks of bad debts from customers who are having financial difficulties.

The Group also believes that the credit risk of derivatives is insignificant as it enters into derivative transactions only with financial institutions which have a sound credit profile.

# 2. Monitoring of market risks (the risks arising from fluctuations in foreign exchange rates, interest rates and others)

For trade receivables and payables denominated in foreign currencies, the Group identifies the foreign currency exchange risk for each currency and enters into forward foreign exchange contracts, currency options and currency swaps to hedge such risk. In order to mitigate the interest rate risk for loans payable bearing interest at variable rates, the Group may also enter into interest rate swap transactions and interest rate option transactions.

For investment securities, the Group periodically reviews the fair values of such financial instruments and the financial position of the issuers.

In conducting derivative transactions, the division in charge of derivative transactions follows the internal policies, which set forth delegation of authority and maximum upper limit on positions.

# 3. Monitoring of liquidity risk (the risk that the Group may not be able to meet its obligations on scheduled due dates)

Based on a report from each division, the Group prepares and updates its cash flow plans on a timely basis to manage liquidity risk.

## (d) Supplementary explanation of the estimated fair value of financial instruments

The fair value of financial instruments is based on their quoted market price, if available. When there is no quoted market price available, fair value is reasonably estimated. The notional amounts of derivatives in Note 17. Derivative financial instruments are not necessarily indicative of the actual market risk involved in derivative transactions.

Summarized in the table below are the carrying amounts and the estimated fair values of financial instruments outstanding at March 31, 2017 and 2016. Financial instruments for which it is extremely difficult to determine the fair value are not included in the table below.

	Millions of yen			Thouse	Thousands of U.S. dollars		
		2017		2017			
	Carrying amount	Fair value	Difference	Carrying amount	Fair value	Difference	
Assets							
Cash and cash equivalents	¥ 35,806	¥ 35,806	¥ —	\$ 319,696	\$ 319,696	\$ <b>-</b>	
Time deposits	828	828	_	7,393	7,393	_	
Notes and accounts receivable-trade	157,845	157,845	_	1,409,330	1,409,330	_	
Investment securities	13,606	13,606	_	121,482	121,482	_	
Total assets	¥208,085	¥208,085	¥ —	\$1,857,901	\$1,857,901	<b>\$</b> -	
Liabilities							
Notes and accounts payable-trade	¥ 92,342	¥ 92,342	¥ —	\$ 824,482	\$ 824,482	\$ -	
Short-term loans payable	47,713	47,713	_	426,009	426,009	_	
Commercial paper	10,000	10,000	_	89,286	89,286	_	
Other payables	26,813	26,813	_	239,402	239,402	_	
Income taxes payable	4,546	4,546	_	40,589	40,589	_	
Long-term debt*	150,903	151,327	424	1,347,348	1,351,134	3,786	
Total liabilities	¥332,317	¥332,741	¥424	\$2,967,116	\$2,970,902	\$3,786	
Derivative financial transactions**	¥ (143)	¥ (143)	¥ —	\$ (1,276)	\$ (1,276)	\$ -	

<sup>\*</sup> Current portions of long-term borrowings of ¥18,218 million (US\$162,661 thousand) and bonds of ¥15,020 million (US\$134,107 thousand) are included in long-term debt.

<sup>\*\*</sup> The value of assets and liabilities arising from derivatives is shown at net value with amounts in parentheses representing net liability position.

Note: Methods to determine the estimated fair value of financial instruments and other matters related to securities and derivative transactions Assets

(a) "Cash and cash equivalents," "Time deposits" and "Notes and accounts receivable-trade"

These are settled in a short period of time, therefore their carrying amounts approximate fair value.

(b) "Investment securities"

The fair values of marketable securities are based on quoted market prices.

The fair values of debt securities are based on either quoted market prices or quotes provided by the financial institutions. For information on securities classified by holding purpose, please refer to Note 5. Securities in these notes to the consolidated financial statements. Liabilities

(c) "Notes and accounts payable-trade," "Short-term loans payable," "Commercial paper," "Other payables" and "Income taxes payable"
These are settled in a short period of time, therefore their carrying amounts approximate fair value.

(d) "Long-term debt"

The fair value of bonds is estimated based on either market price, when available, or present value of the total of principal and interest discounted by the interest rate that would be applied if similar new bonds were issued. The fair value of long-term borrowings is estimated based on present value of the total of principal and interest discounted by the interest rate that would be applied if similar new borrowings were entered into. Long-term borrowings with variable rates are hedged by interest rate swap contracts that are accounted for by the short-cut method and the fair value is estimated based on the total of principal and interest under the short-cut method discounted by the interest rate that would be applied if similar new borrowings were entered into.

Derivative financial transactions

Please refer to Note 17. Derivative financial instruments in these notes to the consolidated financial statements.

		Millions of yen 2016			
	Carrying amount	Fair value	Difference		
Assets					
Cash and cash equivalents	¥ 41,188	¥ 41,188	¥ —		
Time deposits	1,275	1,275	_		
Notes and accounts receivable-trade	139,506	139,506	_		
Investment securities	11,396	11,396	_		
Total assets	¥193,365	¥193,365	¥ —		
Liabilities					
Notes and accounts payable-trade	¥ 74,280	¥ 74,280	¥ —		
Short-term loans payable	58,370	58,370	_		
Commercial paper	_	_	_		
Other payables	32,225	32,225	_		
Income taxes payable	6,766	6,766	_		
Long-term debt*	156,886	158,260	1,374		
Total liabilities	¥328,527	¥329,901	¥1,374		
Derivative financial transactions**	¥ (51)	¥ (51)	¥ –		

<sup>\*\*</sup> Current portions of long-term borrowings of ¥20,997 million and bonds of ¥15,020 million are included in long-term debt.

Financial instruments for which it is extremely difficult to determine the fair value at March 31, 2017 and 2016 consist of the following:

Consider and remaining.	Millions of yen		Thousands of U.S. dollars
	2017	2016	2017
Unconsolidated subsidiaries and affiliates securities	¥33,160	¥31,559	\$296,071
Non-listed equity securities	4,546	4,909	40,589
Others	303	303	2,706

<sup>\*\*</sup> The value of assets and liabilities arising from derivatives is shown at net value with amounts in parentheses representing net liability position.

Redemption schedules for financial assets and investment securities with contractual maturities subsequent to March 31, 2017 and 2016 are as follows:

March 31, 2017 and 2016 are as follows:	Millions of yen					
		20	)17			
	Within one year	After one year through five years	After five years through ten years	After ten years		
Cash and cash equivalents	¥ 35,766	¥—	¥—	¥—		
Time deposits	828	_	_	_		
Notes and accounts receivable-trade	157,845	_	_	_		
Debt securities	_	_	_	_		
	¥194,439	¥—	¥—	¥—		
	Thousands of U.S. dollars					
	2017					
	Within one year	After one year through five years	After five years through ten years	After ten years		
Cash and cash equivalents	\$ 319,339	<b>\$</b> —	<b>\$</b> -	<b>\$</b> -		
Time deposits	7,393	_	_	_		
Notes and accounts receivable-trade	1,409,330	_	_	_		
Debt securities	_			_		
	\$1,736,062	\$-	<b>\$</b> -	<b>\$</b> -		
	Millions of yen					
	2016					
	Within one year	After one year through five years	After five years through ten years	After ten years		
Cash and cash equivalents	¥ 41,157	¥—	¥—	¥—		
Time deposits	1,275	_	_	_		
Notes and accounts receivable-trade	139,506	_	_	_		
Debt securities		5				
	¥181,938	¥ 5	¥—	¥—		

Redemption schedules for long-term debt and other interest-bearing debt subsequent to March 31, 2017 and 2016 are as follows:

2016 are as follows:			Million	s of yen		
				017		
	Within one year	After one year through two years	After two years through three years	After three years through four years	After four years through five years	After five years
Short-term loans payable	¥47,713	¥ –	¥ –	¥ –	¥ –	¥ –
Commercial paper	10,000	_	_	_	_	_
Long-term debt	33,238	37,627	26,293	12,234	17,302	24,209
	¥90,951	¥37,627	¥26,293	¥12,234	¥17,302	¥24,209
			Thousands	of U.S. dollars		
			20	017		
	Within one year	After one year through two years	After two years through three years	After three years through four years	After four years through five years	After five years
Short-term loans payable	\$426,009	\$ -	\$ -	\$ -	\$ -	\$ -
Commercial paper	89,286	_	_	_	_	_
Long-term debt	296,768	335,955	234,759	109,232	154,482	216,152
	\$812,063	\$335,955	\$234,759	\$109,232	\$154,482	\$216,152
			Million	s of yen		
			20	016		
	Within one year	After one year through two years	After two years through three years	After three years through four years	After four years through five years	After five years
Short-term loans payable	¥58,370	¥ —	¥ —	¥ —	¥ —	¥ –
Commercial paper	_	_	_	_	_	_
Long-term debt	36,017	32,454	36,857	25,496	8,498	17,564
	¥94,387	¥32,454	¥36,857	¥25,496	¥8,498	¥17,564

## **Securities**

Investment securities at March 31, 2017 and 2016 consist of the following:

	Millions	Millions of yen	
	2017	2016	2017
Investment securities:			
Unconsolidated subsidiaries and affiliated companies	¥33,160	¥31,559	\$296,071
Others	18,455	16,608	164,777
	¥51,615	¥48,167	\$460,848

Marketable securities classified as other securities at March 31, 2017 and 2016 are as follows:

	Millions of yen				Thousa	ands of U.S.	dollars		
		2017			2016		2017		
	Carrying value	Acquisition costs	Unrealized gain (loss)	Carrying value	Acquisition costs	Unrealized gain (loss)	Carrying value	Acquisition costs	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost:									
Stock	¥12,750	¥5,681	¥7,069	¥ 9,607	¥4,288	¥5,319	\$113,839	\$50,723	\$63,116
Debt securities	_	_	_	_	_	_	_	_	_
Others	_	_	_	_	_	_	_	_	_
Subtotal	12,750	5,681	7,069	9,607	4,288	5,319	113,839	50,723	63,116
Securities whose acquisition cos exceeds their carrying value:	t								
Stock	856	906	(50)	1,784	1,988	(204)	7,643	8,089	(446)
Debt securities	_	_	_	5	5	(O)	_	_	_
Others	_	_	_	_	_	_	_	_	_
Subtotal	856	906	(50)	1,789	1,993	(204)	7,643	8,089	(446)
Total	¥13,606	¥6,587	¥7,019	¥11,396	¥6,281	¥5,115	\$121,482	\$58,812	\$62,670

There were no sales of securities classified as other securities for the year ended March 31, 2017.

Acquisition costs in the tables above represent the amounts after deduction of impairment losses. Impairment losses in the amount of ¥320 million were recognized for the year ended March 31, 2016. Impairment losses are recognized for securities whose fair values at the year end are less than 50% of the acquisition costs, or are more than 50% but less than 70% and deemed to be unrecoverable.

#### 6

#### **Inventories**

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

	Millions	Millions of yen	
	2017	2016	2017
Finished goods	¥35,922	¥34,389	\$320,732
Work in process	19,587	15,360	174,884
Raw materials and supplies	27,293	26,334	243,688
	¥82,802	¥76,083	\$739,304

Thousands of

Short-term loans payable and long-term debt

Short-term loans payable represent bank loans, with average interest rates of 0.64% and 0.55% per annum at March 31, 2017 and 2016, respectively.

Long-term debt at March 31, 2017 and 2016 consists of the following:

	Millions of yen		Thousands of U.S. dollars	
	2017	2016	2017	
0.63% to 0.77% unsecured bonds due FY 2016	¥ _	¥ 15,020	\$ -	
0.58% to 0.63% unsecured bonds due FY 2017	15,020	15,020	134,107	
0.60% to 0.63% unsecured bonds due FY 2018	10,010	10,010	89,375	
0.33% unsecured bonds due FY 2019	10,000	10,000	89,286	
0.53% unsecured bonds due FY 2021	10,000	10,000	89,286	
0.43% unsecured bonds due FY 2026	10,000	_	89,286	
Loans principally from banks and insurance companies:				
Secured, at 0.42% to 1.65%, maturing through FY 2021	3,153	_	28,151	
Secured, at 0.47% to 1.65%, maturing through FY 2021	_	3,686	_	
Unsecured, at 0.00% to 3.8%, maturing through FY 2026	_	93,150	_	
Unsecured, at 0.00% to 2.27%, maturing through FY 2033	92,720	_	827,857	
	150,903	156,886	1,347,348	
Less current portion	33,238	36,017	296,768	
	¥117,665	¥120,869	\$1,050,580	

The Company and certain consolidated subsidiaries have entered into loan commitment agreements amounting to ¥22,895 million (US\$204,420 thousand) with certain banks. Loans payable outstanding at March 31, 2017 under these loan commitment agreements amounted to ¥0 million (US\$0 thousand).

The aggregate annual maturities of the noncurrent portion of long-term debt are as follows:

Years ending March 31	Millions of yen	U.S. dollars
2019	¥ 37,627	\$ 335,955
2020	26,293	234,759
2021	12,234	109,232
2022	17,302	154,482
2023 and thereafter	24,209	216,152
	¥117,665	\$1,050,580

8

## Pledged assets

The assets pledged as collateral for short-term and long-term borrowings, guarantees and borrowings of affiliated companies at March 31, 2017 and 2016 are as follows:

	Millions	Millions of yen	
	2017	<b>2017</b> 2016	
Assets pledged as collateral:			
Property, plant and equipment, at net book value	¥109,189	¥117,040	\$974,902
Others	175	177	1,562

q

## **Contingent liabilities**

At March 31, 2017 and 2016, the Company and its consolidated subsidiaries are contingently liable as follows:

Millions of yen			ands of dollars		
20	17	20	116	20	17
¥	26	¥	426	\$	233
	62		114		554
3	,258	3	3,190	2	9,089
	20° ¥	2017 ¥ 26	2017 20 ¥ 26 ¥ 62	2017 2016 ¥ 26 ¥ 426 62 114	Millions of yen     U.S. of       2017     2016       ¥ 26     ¥ 426       62     114

#### Net assets

The Corporation Law of Japan provides that an amount equal to 10% of the amount to be distributed as distributions of capital surplus (other than the capital reserve) and retained earnings (other than the legal reserve) shall 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, but neither the capital reserve nor the legal reserve is available for distributions.

At the general shareholders' meeting of the Company held on June 29, 2017, the distribution of retained earnings for the year ended March 31, 2017 was approved as follows:

	Millions of yen	U.S. dollars
Cash dividends (¥6.00 per share)	¥6,362	\$56,804

#### 11

# Selling, general and administrative expenses

Major components of selling, general and administrative expenses for the years ended March 31, 2017 and 2016 are as follows:

	Millions	Millions of yen	
	2017	<b>2017</b> 2016	2017
Freight and storage	¥19,769	¥21,309	\$176,509
Salaries and benefits	19,875	18,885	177,455
Research and development costs	13,502	13,639	120,554

#### 12

# Research and development costs

Research and development costs, all of which are included in "Selling, general and administrative expenses" and "Cost of sales" for the years ended March 31, 2017 and 2016 are as follows:

	Millions of yen		U.S. dollars	
	2017	2016	2017	
Research and development costs	¥13,624	¥13,705	\$121,643	

#### 13

# Other income (expenses)

"Other income (expenses) – Others, net" for the years ended March 31, 2017 and 2016 consists of the following:

	Millions of yen		U.S. dollars
	2017	2016	2017
Gain on sale of investment securities, net	¥ –	¥ 40	\$ -
Gain on sale of property, plant and equipment, net	142	515	1,268
Loss on disposal of property, plant and equipment	(2,963)	(5,814)	(26,455)
Loss on impairment of fixed assets (Note 14)	(586)	(9,080)	(5,232)
Write-down of investment securities	_	(589)	_
Loss on business restructuring	_	(466)	_
Loss on foreign currency exchange, net	(183)	(1,074)	(1,634)
Gain on bargain purchase	1,611	_	14,384
Others, net	(1,503)	804	(13,420)
	¥(3,482)	¥(15,664)	\$(31,089)

## 14

# Loss on impairment of fixed assets

Fixed assets of the Company and its consolidated subsidiaries are grouped at the business unit or department level for impairment testing.

Loss on impairment of fixed assets for the year ended March 31, 2017 consists of the following:

	Millions of yen	Thousands of U.S. dollars
	2017	2017
Idle property and assets held for sales:		
Land, machinery and equipment	¥(299)	\$(2,670)
Business assets in use:		
Plastic cling film manufacturing plant (Ube Film Co., Ltd.)	(287)	(2,562)
	¥(586)	\$(5,232)

Thousands of

#### (a) Idle property and assets held for sales

Among idle property and assets held for sales owned by the Company and its consolidated subsidiaries, there were certain assets whose book values exceeded their recoverable amounts. These assets were written down to their recoverable amounts and an impairment loss of ¥299 million (US\$2,670 thousand) was recognized for the year ended March 31, 2017. This impairment loss consisted of ¥211 million (US\$1,884 thousand) for land and ¥88 million (US\$786 thousand) for machinery and equipment.

The recoverable amounts for land in the idle property were determined at net selling price based on appraisal and those for machinery and equipment in the idle property were determined at their memorandum prices. The recoverable amounts of land classified as assets held for sales were determined based on their contract prices.

#### (b) Business assets in use

Ube Film Co., Ltd. decided to close a plastic cling film manufacturing plant and reduced the book value of the related facilities to their recoverable amounts.

The recoverable amounts for buildings and structures were determined at their memorandum prices and those for land were determined at net selling price based on appraisal.

This impairment loss consisted of ¥223 (US\$1,991 thousand) million for land, ¥61 million (US\$544 thousand) for buildings, and ¥3 million (US\$27 thousand) for others.

Loss on impairment of fixed assets for the year ended March 31, 2016 consists of the following:

	Millions of yen
	2016
Idle property and assets held for sales:	
Land, buildings and structures	¥ (115)
Business assets in use:	
Polymide film manufacturing plant (Ube Industries, Ltd.)	(5,861)
Recycling compound manufacturing plant (Ube Industries, Ltd.)	(255)
Electrolyte manufacturing plant (AET Electrolyte Technologies (Zhangjiagang) Co., Ltd.)	(2,759)
Fine materials manufacturing plant (Ube Material Industries, Ltd.)	(90)
	¥(9,080)

## (a) Idle property and assets held for sales

Among idle property and assets held for sales owned by the Company and its consolidated subsidiaries, there were certain assets whose book values exceeded their recoverable amounts. These assets were written down to their recoverable amounts and an impairment loss of ¥115 million was recognized for the year ended March 31, 2016. This impairment loss consisted of ¥113 million for land and ¥2 million for buildings and structures.

The recoverable amounts for land were determined at net selling price based on appraisal and those for buildings and structures were determined at their contract prices.

#### (b) Business assets in use

The Company wrote down the book value of the polymide film manufacturing plant to its recoverable amount due to a decline in profitability and recorded an impairment loss of ¥5,861 million. This impairment loss consisted of ¥2,740 million for machinery and equipment, ¥2,636 million for buildings and structures, and ¥485 million for others.

The recoverable amount of the asset group was measured based on value in use. That amount was calculated by discounting future cash flows by 3.9%.

The Company decided to withdraw from the recycling compound business. The book value of the related plant was written down to its memorandum price and an impairment loss of ¥255 million was recorded. This impairment loss consisted of ¥207 million for machinery and equipment, ¥34 million for buildings and structures, and ¥14 million for others.

One consolidated subsidiary, AET Electrolyte Technologies (Zhangjiagang) Co., Ltd., wrote down the book value of an electrolyte manufacturing plant to its recoverable amount due to a decline in profitability and recorded an impairment loss of ¥2,759 million. This impairment loss consisted of ¥1,612 million for machinery and equipment, ¥486 million for buildings and structures, and ¥661 million for others.

The recoverable amount of the asset group was measured based on value in use. That amount was calculated by discounting future cash flows by 13.33%.

Ube Material Industries, Ltd. wrote down the book value of the fine materials manufacturing plant to its recoverable amount due to a decline in profitability and recorded an impairment loss of ¥90 million. This impairment loss consisted of ¥63 million for machinery and equipment, ¥16 million for buildings and structures, and ¥11 million for others

The recoverable amount of the asset group was measured based on value in use, but the discount rate is not disclosed because undiscounted cash flows were negative.

#### Income taxes

Income taxes applicable to the Company comprise corporation, enterprise and inhabitants' taxes which, in the aggregate, resulted in statutory tax rate of approximately 30.7% and 32.8% for the years ended March 31, 2017 and 2016, respectively.

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

and 2010 differ from the statutory tax rates for the following reasons.	Percer	ntage
	2017	2016
Statutory tax rate	30.7%	32.8%
Effect of:		
Permanently nondeductible expenses	0.5	0.6
Permanently nontaxable items including dividend income	(5.2)	(5.8)
Loss carried forward without deferred tax assets	1.8	3.5
Deducted amount of loss without deferred tax assets	(0.2)	(0.3)
Effect of elimination of dividend income through consolidation procedures	5.1	5.8
Investment profit of affiliated companies by equity method	(1.9)	(3.5)
Tax rate difference of overseas consolidated subsidiaries	(1.1)	0.1
Gain on bargain purchase	(1.5)	_
Modification of net deferred tax assets and liabilities caused by a change in effective statutory tax rates	_	0.2
Retained earnings of foreign subsidiary companies	1.6	0.4
Deductible research and development expenses	(3.1)	(4.5)
Others	(1.2)	2.9
Effective tax rate	25.5%	32.2%

The significant components of deferred tax assets and liabilities at March 31, 2017 and 2016 are as follows:

	Millions of yen		U.S. dollars
	2017	2016	2017
Deferred tax assets:			
Provision for bonuses	¥ 2,148	¥ 2,209	\$ 19,178
Net defined benefit liability	2,413	2,366	21,545
Allowance for doubtful accounts	305	628	2,723
Loss carried forward	5,127	3,991	45,777
Intercompany profit	11,746	11,761	104,875
Depreciation and amortization	3,322	3,690	29,661
Write-down of investment securities	620	140	5,536
Disposal of fixed assets without dismantlement	3,510	3,824	31,339
Accrual for losses on business restructuring	168	209	1,500
Others	5,327	4,585	47,562
Gross deferred tax assets	34,686	33,403	309,696
Valuation allowance	(6,338)	(4,506)	(56,589)
Total deferred tax assets	28,348	28,897	253,107
Deferred tax liabilities:			
Reserve for advanced depreciation of non-current assets	(2,690)	(2,857)	(24,018)
Valuation difference on available-for-sale securities	(2,133)	(1,570)	(19,044)
Net defined benefit asset	(2,242)	(1,891)	(20,018)
Revaluation surplus on assets	(2,174)	(2,336)	(19,411)
Retained earnings of foreign subsidiary companies	(3,423)	(2,900)	(30,562)
Others	(3,602)	(3,413)	(32,161)
Total deferred tax liabilities	(16,264)	(14,967)	(145,214)
Net deferred tax assets	¥ 12,084	¥ 13,930	\$ 107,893

Note: Net deferred tax assets in the preceding table are classified as follows in the accompanying consolidated balance sheet.

	Millions of yen		U.S. dollars
	2017	2016	2017
Current assets – Deferred tax assets	¥ 6,834	¥ 7,809	\$ 61,018
Investments and other assets – Long-term deferred tax assets	7,521	8,263	67,152
Long-term liabilities – Long-term deferred tax liabilities	(2,271)	(2,142)	(20,277)

#### **Business combinations**

### (a) Common control transactions

Additional acquisition of shares of subsidiary

#### 1. Outline of transaction

- (1) Name of combined company
  Advanced Electrolyte Technologies LLC (AET)
- (2) Business description

  Production and sales of electrolytes for lithium-ion batteries
- (3) Date of business combination August 30, 2016
- (4) Legal form of business combination

  Acquisition of shares from non-controlling shareholders in exchange for cash
- (5) Company name after business combination Unchanged
- (6) Other matters concerning transaction summary A wholly-owned subsidiary of the Company acquired the shares in AET, from the Dow Chemical Company, because the Company is going to expand its advanced battery business by managing AET along with its own business unit. As a result, AET became a wholly-owned subsidiary of the Company.

#### 2. Overview of accounting treatment

The transaction was treated as a transaction with non-controlling shareholders from among the common control transactions based on the "Revised Accounting Standard for Business Combinations" (ASBJ Statement No. 21 of September 13, 2013) and the "Revised Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures" (ASBJ Guidance No.10 of September 13, 2013)

#### 3. Information relating to additional acquisition of shares

Acquisition cost and its breakdown Cash ¥771 million (US\$6,884 thousand)

## 4. Information relating to changes in equity attributable to parent

- (1) Main reason for changes in capital surplus Additional acquisition of shares in subsidiary
- (2) Decrease in capital surplus arising from transaction with non-controlling shareholders ¥562 million (US\$5,018 thousand)

#### (b) Business combination through acquisitions

#### 1. Outline of business combination

(1) Name of acquired company

Mitsubishi Heavy Industries Plastic Technology Co., Ltd. and its subsidiary

## (2) Business description

Design, manufacture, sales and servicing of injection molding machines, auxiliary equipment, dies and parts Engineering, retrofitting, repair, technical guidance and consulting for the above products

## (3) Main reason for business combination

Mitsubishi Heavy Industries Plastic Technology possesses outstanding technology and sales strengths in injection molding machines, a main type of plastics processing machinery, and it also has a robust track record in deliveries of many models worldwide. Under the newly concluded agreement, Ube Machinery Corporation, Ltd., a wholly-owned subsidiary of the Company, acquired a majority interest in Mitsubishi Heavy Industries Plastic Technology. By pooling the respective strengths of the two companies, Ube Machinery Corporation, Ltd. will strengthen its sales and servicing capabilities through the enhancement of its product lineup and sales network, reduction of production costs, and strengthening of development capabilities by integrating the two companies' technologies in a quest to cope with the increasingly severe environment surrounding the injection molding machine business environment both in Japan and abroad. The Company's aim is to achieve business expansion within the global market for injection molding machines by providing new value and anticipating customers' increasingly diversified needs.

- (4) Date of business combination January 1, 2017
- (5) Legal form of business combination Acquisition of shares in exchange for cash
- (6) Company name after business combination U-MHI Platech Co., Ltd. (U-MHIPT)
- (7) Percentage of voting rights acquired
   Percentage of voting rights before business combination: -%
   Percentage of voting rights after business combination: 85%
- (8) Basis for determining acquiring company

  Because a wholly-owned subsidiary of the Company acquired shares of Mitsubishi Heavy Industries

  Plastic Technology Co., Ltd. in exchange for cash

# 2. Period for which acquired company's operating results are included in consolidated statement of income

From January 1, 2017 to March 31, 2017

#### 3. Acquisition cost

Advisory fees

	Millions of yen	Thousands of U.S. dollars
Cash	¥234	\$2,089
Total acquisition cost	¥234	\$2,089
4. Acquisition-related cost		

## 5. Amount and reason for gain on bargain purchase

- (1) Amount for gain on bargain purchase ¥1,611 million (US\$14,384 thousand)
- (2) Reason for gain on bargain purchase

  The gain resulted from the difference between the net fair value of assets acquired and liabilities assumed and the acquisition cost of the shares.

## 6. Details on assets acquired and liabilities assumed

	Millions of yen	U.S. dollars
Current assets	¥8,691	\$77,589
Non-current assets	1,073	9,580
Total assets	¥9,764	\$87,169
	Millions of yen	Thousands of U.S. dollars
Current liabilities	¥7,386	\$65,946
Non-current liabilities	108	964
Total liabilities	¥7,494	\$66,910

# 7. Effects on the consolidated statement of income for the fiscal year assuming the business combination was completed at the beginning of the fiscal year and accounting method

A pro forma disclosure relating to the business combination is omitted because the impact on the consolidated financial statements was immaterial.

Furthermore, this impact was unaudited.

Thousands of

U.S. dollars

\$420

Millions of yen

¥47

# Derivative financial instruments

Summarized below are the notional amounts and the estimated fair values of the derivative transactions outstanding at March 31, 2017 and 2016.

## (a) Derivative financial instruments for which deferred hedge accounting has not been applied

Currency-related transactions:

			Millions	s of yen			Thousa	Thousands of U.S. dollars		
		2017			2016					
	Notional amount	Fair value	Unrealized gain (loss)	Notional amount	Fair value	Unrealized gain (loss)	Notional amount	Fair value	Unrealized gain (loss)	
Forward exchange contracts:										
Sell:										
USD	¥7,173	¥(176)	¥(176)	¥ 121	¥ O	¥ O	\$64,045	\$(1,571)	\$(1,571)	
Buy:										
USD	1,374	16	16	1,450	(47)	(47)	12,268	142	142	
EUR	17	(0)	(0)	44	(1)	(1)	152	(0)	(0)	
AUD	22	1	1	23	0	0	196	9	9	
Total	¥8,586	¥(159)	¥(159)	¥1,638	¥(48)	¥(48)	\$76,661	\$(1,420)	\$(1,420)	

Note: Calculation of fair value is based on the forward rate.

## (b) Derivative financial instruments for which deferred hedged accounting has been applied

#### 1. Currency-related transactions

Main items hedged by forward foreign exchange contracts are trade accounts receivable and payable.

				N	/lillions	of yea	n			Thou	usands o	f U.S. dollars
		2017			2016			2017		17		
			tional ount	Fair v	alue		ional ount	Fair va	alue		otional nount	Fair value
Principle method	Forward exchange contracts:											
	Sell:											
	USD	¥	786	¥	23	¥	2	¥	0	\$	7,018	\$205
	Buy:											
	EUR		256		(7)		236		(3)		2,286	(62)
Short-cut method	Forward exchange contracts:											
	Sell:											
	USD		998		(11)		523	(	38		8,910	(98)
	Currency swap contracts:											
	Receive/USD											
	Pay/JPY	7,	,952		*	7,	952		*	7	71,000	*
	Total	¥9,	,992	¥	5	¥8,	713	¥	35	\$8	39,214	\$ 45

<sup>\*</sup> The fair value of currency swaps accounted for by the short-cut method is included in the fair value of long-term debt, which is designated as the hedged item.

Note: Calculation of fair value is based on the forward rate.

#### 2. Interest-related transactions

Main items hedged by interest-rate swap and interest-cap contracts are short-term loans payable and long-term debt.

long tom dobt.			Million		Thousand	ls of U.S. dollars	
		20	017	2016			2017
		Notional amount	Fair value	Notional amount	Fair value	Notiona amoun	
Principle method	Interest-rate cap:						
	Buy	¥ _	¥—	¥ 2,000	¥O	\$	- \$-
Short-cut method	Interest-rate swaps:						
	Receive/floating and pay/fixed	12,123	*	17,757	*	108,24	<b>11</b> *
	Total	¥12,123	¥—	¥19,757	¥0	\$108,24	11 \$—

<sup>\*</sup>The fair value of interest-rate swaps accounted for by the short-cut method is included in the fair value of long-term debt, which is designated as the hedged item.

Note: Calculation of fair value is based on the prices provided by financial institutions.

## **Segment information**

Reportable segments of the Company consist of the business units for which independent financial information is available. They are regularly monitored by the Board of Directors in order to decide the distribution of business resources and evaluate the business results.

The Company classifies its products and services into six reportable segments: "Chemicals," "Pharmaceutical," "Cement & Construction Materials," "Machinery," "Energy & Environment" and "Other."

The segment name "Machinery and Metal Products" has been changed to the "Machinery" from April 1, 2016. Such change is only for the sake of the segment name and has no affect on the segment information. The new segment name is also used in the section of the segment information of the previous consolidated fiscal year.

The operations of the Company and its consolidated subsidiaries for the years ended March 31, 2017 and 2016 are summarized by reportable segment as follows:

2010 are surnmanzed by rep		griioni as io	iiovv3.	Millior	ns of yen			
			Cement & Construction		Energy &		Elimination &	
Year ended March 31, 2017	Chemicals F	Pharmaceutical		Machinery	Environment	Other	Corporate	Consolidated
Sales:								
Outside customers	¥254,963	¥10,975	¥221,432	¥69,289	¥49,477	¥10,427	¥ –	¥616,563
Intersegment sales and transfers	3,401	_	5,804	2,379	10,305	2,093	(23,982)	_
Total	258,364	10,975	227,236	71,668	59,782	12,520	(23,982)	616,563
Segment operating profit (loss)	¥ 9,657	¥ 2,496	¥ 16,264	¥ 3,671	¥ 2,855	¥ 754	¥ (737)	¥ 34,960
Segment assets	¥324,232	¥12,915	¥219,126	¥75,121	¥48,613	¥14,824	¥14,548	¥709,379
Depreciation and amortization	18,873	838	8,831	1,455	2,825	649	1,019	34,490
Equity method investments	19,323	_	8,778	_	1,219	1,903	_	31,223
Capital expenditures	28,282	375	9,884	1,959	1,438	904	1,225	44,067
					(110 1 11			
			Cement &	Inousands	of U.S. dollars			
			Construction		Energy &		Elimination &	
Year ended March 31, 2017	Chemicals	Pharmaceutica	l Materials	Machiner	y Environment	Other	Corporate	Consolidated
Sales:	¢0.070.455	·	¢4 077 076	0 0010 05	0 0444 750	¢ 00 000	•	ФЕ <u>БОБ 007</u>
Outside customers	\$2,276,455	\$ 97,991	\$1,977,072	2 \$618,65	52 \$441,759	\$ 93,098	5 –	\$5,505,027
Intersegment sales and transfers	30,366	<u> </u>	51,821	1 21,24	11 92,009	18,688	(214,125)	
Total	2,306,821	97,991	2,028,893	3 639,89	3 533,768	111,786	(214,125)	5,505,027
Segment operating profit (loss)	\$ 86,223	\$ 22,286	\$ 145,214	4 \$ 32,77	7 \$ 25,491	\$ 6,732	\$ (6,580)	\$ 312,143
Segment assets	\$2,894,929	\$115,312	\$1,956,482	2 \$670,72	23 \$434,045	\$132,357	\$129,893	\$6,333,741
Depreciation and amortization	168,509	7,482	78,848	8 12,99	25,223	5,795	9,098	307,946
Equity method investments	172,527	_	78,375	5 -	- 10,884	16,991	_	278,777
Capital expenditures	252,518	3,348	88,250	0 17,49	12,839	8,071	10,938	393,455
				Millior	ns of yen			
			Cement &					
Year ended March 31, 2016	Chemicals F	Pharmaceutical	Construction Materials	Machinery	Energy & Environment	Other	Elimination & Corporate	Consolidated
Sales:								
Outside customers	¥258,661	¥ 9,221	¥231,051	¥71,367	¥56,616	¥14,834	¥ –	¥ 641,750
Intersegment sales and transfers	8,075	59	6,292	2,068	12,450	1,958	(30,902)	
Total	266,736	9,280	237,343	73,435	69,066	16,792	(30,902)	641,750
Segment operating profit (loss)	¥ 12,083	¥ 1,105	¥ 19,841	¥ 4,600	¥ 3,856	¥ 1,142	¥ (1,219)	¥ 41,408
Segment assets	¥301,784	¥12,533	¥216,948	¥62,039	¥49,014	¥16,246	¥21,219	¥679,783
Depreciation and amortization	20,491	837	8,309	1,415	2,870	609	1,043	35,574
Equity method investments	18,407	_	8,322		1,199	2,270		30,198
Capital expenditures	14,610	703	14,716	1,620	1,002	570	1,208	34,429
	,- ,-		, ,	,	,		,	, <u>-</u>

Leases

Sales and amounts of property, plant and equipment of the Company and its consolidated subsidiaries as of and for the years ended March 31, 2017 and 2016 by geographic area are as follows:

				ivillions of yen					
Year ended March 31, 2017		Japan	Asia	Europe	Other area	Consolidated			
Sales		¥440,584	¥113,837	¥32,881	¥29,261	¥616,563			
			Thou	sands of U.S. o	lollars				
Year ended March 31, 2017		Japan	Asia	Europe	Other area	Consolidated			
Sales		\$3,933,786	\$1,016,402	\$293,580	\$261,259	\$5,505,027			
			Millions	of yen					
As of March 31, 2017	Japan	Thailand	Other Asia	Europe	Other area	Consolidated			
Property, plant and equipment	¥263,106	¥49,700	¥1,065	¥16,622	¥950	¥331,443			
		Thousands of U.S. dollars							
As of March 31, 2017	Japan	Thailand	Other Asia	Europe	Other area	Consolidated			
Property, plant and equipment	\$2,349,161	\$443,750	\$9,509	\$148,411	\$8,481	\$2,959,312			
				Millions of yen					
Year ended March 31, 2016		Japan	Asia	Europe	Other area	Consolidated			
Sales		¥458,098	¥117,297	¥36,459	¥29,896	¥641,750			
			Millions	of yen					
As of March 31, 2016	Japan	Thailand	Other Asia	Europe	Other area	Consolidated			
Property, plant and equipment	¥255,944	¥50,243	¥1,460	¥15,130	¥1,023	¥323,800			

## (a) Finance leases

Finance leases commencing on or before March 31, 2008 continue to be accounted for in the same manner as operating leases.

The following amounts represent the acquisition costs (including the interest portion thereon), accumulated depreciation and amortization and net book value of the leased property at March 31, 2017 and 2016. These amounts would have been reflected in the consolidated balance sheet if finance lease accounting had been applied to the finance leases currently accounted for as operating leases:

Million	s of yen	U.S. dollars
2017	2016	2017
¥7	¥17	\$63
¥7	¥17	\$63
¥5	¥14	\$45
¥5	¥14	\$45
¥2	¥ 3	\$18
¥2	¥ 3	\$18
	2017 ¥7 ¥7 ¥5 ¥5 ¥5	¥7 ¥17 ¥7 ¥17 ¥5 ¥14 ¥5 ¥14

Lease payments relating to finance leases accounted for as operating leases amounted to ¥1 million (US\$9 thousand) and ¥8 million for the years ended March 31, 2017 and 2016, respectively. They are equal to the depreciation and amortization expenses of the leased assets computed by the straight-line method over the lease terms.

Future minimum lease payments (including the interest portion thereon) subsequent to March 31, 2017 for finance leases accounted for as operating leases are summarized as follows:

Years ending March 31	Millions of yen	U.S. dollars
2018	¥1	\$ 9
2019 and thereafter	1	9
	¥2	\$18

## (b) Operating leases

Future minimum lease payments subsequent to March 31, 2017 and 2016 for non-cancelable operating leases are summarized as follows:

	Millions of yen	Thousands of U.S. dollars
Years ending March 31	2017	2017
2018	¥ 655	\$ 5,848
2019 and thereafter	4,516	40,322
	¥5,171	\$46,170

	Millions of yen
Years ending March 31	2016
2017	¥ 705
2018 and thereafter	303
	¥1,008

#### **Retirement benefits**

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The Company and certain domestic consolidated subsidiaries have funded and unfunded defined benefit company pension plans. Certain domestic consolidated subsidiaries have defined contribution pension plans.

Under the defined benefit pension plans, employees terminating their employment are entitled to retirement benefits determined based on the rate of pay and years of service. The retirement benefit trusts have been established for some defined benefit pension plans.

Under the lump-sum retirement benefit of defined pension plans, benefits are determined based on the rate of pay and years of service.

Defined contribution plans are mainly defined contribution pension plans.

#### (a) Defined benefit plans

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

	Millions	Millions of yen	
	2017	2016	2017
Opening balance of retirement benefit obligation	¥51,097	¥52,037	\$456,223
Service cost	2,933	2,849	26,188
Interest cost	292	322	2,607
Actuarial loss	(856)	330	(7,643)
Benefit paid	(4,597)	(4,441)	(41,045)
Closing balance of retirement benefit obligation	¥48,869	¥51,097	\$436,330

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

	Millions of yen		
	2017	2016	2017
Opening balance of plan assets	¥55,709	¥57,877	\$497,402
Expected return on pension assets	1,215	1,229	10,848
Actuarial loss	(29)	(1,747)	(259)
Contributions by the employer	1,739	2,627	15,527
Benefit paid	(4,477)	(4,277)	(39,973)
Closing balance of plan assets	¥54,157	¥55,709	\$483,545

The reconciliation of the retirement benefit obligations and plan assets to the liabilities and assets for retirement benefits recognized in the consolidated balance sheet as of March 31, 2017 and 2016 is as follows:

	Millions	Thousands of U.S. dollars	
	2017	2016	2017
Funded retirement benefit obligations	¥ 46,418	¥ 48,760	\$ 414,446
Plan assets	(54,157)	(55,709)	(483,545)
	(7,739)	(6,949)	(69,099)
Unfunded retirement benefit obligations	2,451	2,337	21,884
Net amount of liabilities and assets for retirement benefits in the consolidated balance sheet	¥ (5,288)	¥ (4,612)	\$ (47,215)
Net defined benefit liability	¥ 2,459	¥ 2,337	\$ 21,955
Net defined benefit asset	(7,747)	(6,949)	(69,170)
Net amount of liabilities and assets for retirement benefits in the consolidated balance sheet	¥ (5,288)	¥ (4,612)	\$ (47,215)

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

ionowo.	Millions of yen		Thousands of U.S. dollars	
	2017	2016	2017	
Service cost	¥ 2,933	¥ 2,849	\$ 26,188	
Interest cost	292	322	2,607	
Expected return on plan assets	(1,215)	(1,229)	(10,848)	
Amortization of actuarial loss	795	505	7,098	
Amortization of prior service cost	181	181	1,616	
Retirement benefit expenses	¥ 2,986	¥ 2,628	\$ 26,661	

Thousands of

The components of remeasurements of defined benefit plans in other comprehensive income (before tax effect) for the years ended March 31, 2017 and 2016 are as follows:

	Millions	Millions of yen	
	2017	2016	2017
Prior service cost	¥ 181	¥ 181	\$ 1,616
Actuarial gain (loss)	1,622	(1,572)	14,482
Total	¥1,803	¥(1,391)	\$16,098

The components of remeasurements of defined benefit plans in accumulated other comprehensive income (before tax effect) as of March 31, 2017 and 2016 are as follows:

	Millions	Millions of yen	
	2017	2016	2017
Unrecognized prior service cost	¥ 362	¥ 543	\$ 3,232
Unrecognized actuarial loss	2,846	4,468	25,411
Total	¥3,208	¥5,011	\$28,643

The breakdown of pension assets by major category as a percentage of total plan assets as of March 31, 2017 and 2016 is as follows:

	Hallo	
	2017	2016
Bonds	35%	38%
Equities	23	21
Insurance assets (General account)	26	27
Other	16	14
Total	100%	100%

The above total includes 13% and 11% of the retirement benefit trusts of company pension plans at March 31, 2017 and 2016, respectively.

The expected return rate on plan assets is estimated based on the current and anticipated allocations to each asset class and current and anticipated long-term returns on assets held in each category.

The items of actuarial assumptions for the years ended March 31, 2017 and 2016 are as follows:

	Rat	tio
	2017	2016
Discount rate	0.3~1.2%	0.2~1.2%
Expected long-term return on plan assets:		
Pension assets	2.0~2.5	2.0~2.5
Retirement benefit trusts	0.0	0.0

The schedule of the defined benefit obligation and pension assets accounted for by simplified method for the years ended March 31, 2017 and 2016 is as follows:

	Millions of yen		U.S. dollars	
	2017	2016	2017	
Opening balance of net defined benefit asset and liability	¥4,333	¥4,072	\$38,688	
Benefit expenses	457	575	4,080	
Benefit paid	(402)	(354)	(3,589)	
Contributions to the plans	(87)	(87)	(777)	
Others	31	127	277	
Closing balance of net defined benefit asset and liability	¥4,332	¥4,333	\$38,679	

The reconciliation of the retirement benefit obligations and plan assets to the liabilities and assets for retirement benefits for simplified method recognized in the consolidated balance sheet as of March 31, 2017 and 2016 is as follows:

	Millions of yen		Thousands of U.S. dollars	
	2017	2016	2017	
Funded retirement benefit obligations	¥ 1,285	¥1,203	\$11,473	
Plan assets	(1,051)	(977)	(9,384)	
	234	226	2,089	
Funded retirement benefit obligations	4,098	4,107	36,589	
Net amount of liabilities and assets for retirement benefits in the consolidated balance sheet	¥ 4,332	¥4,333	\$38,678	
Net defined benefit liability	¥ 4,391	¥4,390	\$39,205	
Net defined benefit asset	(59)	(57)	(527)	
Net amount of liabilities and assets for retirement benefits in the consolidated balance sheet	¥ 4,332	¥4,333	\$38,678	

(b) Defined contribution plans

¥575 million for the years ended March 31, 2017 and 2016, respectively.

The retirement benefit expenses under the simplified method were ¥457 million (US\$4,080 thousand) and

The contributions by consolidated subsidiaries paid to defined contribution pension plans were  $\pm$ 42 million (US\$375 thousand) and  $\pm$ 43 million for the years ended March 31, 2017 and 2016, respectively.

# Investment and rental property

The Company and its consolidated subsidiaries own idle property and rental property in Yamaguchi prefecture, Japan and other areas. The carrying amount, net changes and fair value of investment and rental property for the years ended March 31, 2017 and 2016 are as follows:

		Millions of ye	en	
		2017		
		Carrying amount		
	Opening balance	Net change during the year	Closing balance	Fair value at March 31, 2017
Idle property	¥8,634	¥(347)	¥8,287	¥24,649
Rental property	9,227	(92)	9,135	18,328
		Thousands of U.S.	. dollars	
		2017		_
		Carrying amount		Fair value at
	Opening balance	Net change during the year	Closing balance	March 31, 2017
Idle property	\$77,089	\$(3,098)	\$73,991	\$220,080
Rental property	82,384	(821)	81,563	163,643

Notes: Carrying amounts represent the acquisition costs less accumulated depreciation and impairment losses.

Net change for the year ended March 31, 2017 is mainly impairment loss of ¥(211) million (US\$(1,884) thousand).

Fair value of main property at March 31, 2017 is based on external appraisal, and fair value of other property is estimated based on the index prices deemed to reflect the market price accurately.

		Millions of ye	en	
		2016		
		Carrying amount		Fair value at
	Opening balance	Net change during the year	Closing balance	March 31, 2016
Idle property	¥10,013	¥(1,379)	¥8,634	¥23,302
Rental property	8,915	312	9,227	18,682

Notes: Carrying amounts represent the acquisition costs less accumulated depreciation and impairment losses.

Net change for the year ended March 31, 2016 is mainly loss on sale of ¥(1,135) million.

Fair value of main property at March 31, 2016 is based on external appraisal, and fair value of other property is estimated based on the index prices deemed to reflect the market price accurately.

The amount of income and expenses related to investment and rental property for the years ended March 31, 2017 and 2016 are as follows:

Millions of ven

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		201	17	
	Rental income	Rental expenses	Net income	Others
Idle property	¥ –	¥ —	¥ —	¥(280)
Rental property	1,086	529	557	_
		Thousands of	U.S. dollars	
		201	17	
	Rental income	Rental expenses	Net income	Others
Idle property	\$ -	\$ <b>-</b>	\$ <b>-</b>	\$(2,500)
Rental property	9,696	4,723	4,973	_

Notes: Others in the above table for idle property consist of taxes and dues of ¥(179) million (US\$ (1,598) thousand), impairment loss of ¥(211) million (US\$(1,884) thousand), gain on sale of ¥110 million (US\$982 thousand).

		Millions	of yen	
		2016		
	Rental income	Rental expenses	Net income	Others
Idle property	¥ —	¥ —	¥ —	¥(243)
Rental property	1,068	554	514	(63)

Notes: Others in the above table for idle property consist of taxes and dues of Y(193) million, impairment loss of Y(23) million and loss on sale of Y(27) million.

Others for rental property is impairment loss of ¥(75) million and gain on sale of ¥12 million.

## Stock options

Stock option expenses in the amounts of ¥65 million (US\$580 thousand) and ¥88 million were recognized as "Selling, general and administrative expenses" on the consolidated statement of income for the years ended March 31, 2017 and 2016, respectively.

The contents of stock options at March 31, 2017 are as follows:

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Fiscal year 2013 stock options	Position and number of grantees	Directors of the Company: 4 Executive officers of the Company: 19
	Type and number of shares	Common stock of the Company: 377,000 shares
	Date of grant	July 13, 2012
	Settlement of rights	After providing service for the period
	Period of providing service for stock option	Directors of the Company: For 1 year (From July 1, 2012 to June 30, 2013) Executive officers of the Company: For 1 year (From April 1, 2012 to March 31, 2013)
	Exercise period of rights	For 25 years from grant date (From July 13, 2012 to July 12, 2037)
	Condition of exercise of rights	A holder of share subscription rights may only exercise rights within a maximum of 8 years, within the exercise period of rights described above, from the next day when such holder no longer holds a position as a director and/or an executive officer.
Fiscal year 2014 stock options	Position and number of grantees	Directors of the Company: 4 Executive officers of the Company: 20
	Type and number of shares	Common stock of the Company: 481,000 shares
	Date of grant	July 12, 2013
	Settlement of rights	After providing service for the period
	Period of providing service for stock option	Directors of the Company: For 1 year (From July 1, 2013 to June 30, 2014) Executive officers of the Company: For 1 year (From April 1, 2013 to March 31, 2014)
	Exercise period of rights	For 25 years from grant date (From July 12, 2013 to July 11, 2038)
	Condition of exercise of rights	A holder of share subscription rights may only exercise rights within a maximum of 8 years, within the exercise period of rights described above, from the next day when such holder no longer holds a position as a director and/or an executive officer.
Fiscal year 2015 stock options	Position and number of grantees	Directors of the Company: 4 Executive officers of the Company: 19
	Type and number of shares	Common stock of the Company: 430,000 shares
	Date of grant	July 14, 2014
	Settlement of rights	After providing service for the period
	Period of providing service for stock option	Directors of the Company: For 1 year (From July 1, 2014 to June 30, 2015) Executive officers of the Company: For 1 year (From April 1, 2014 to March 31, 2015)
	Exercise period of rights	For 25 years from grant date (From July 14, 2014 to July 13, 2039)
	Condition of exercise of rights	A holder of share subscription rights may only exercise rights within a maximum of 8 years, within the exercise period of rights described above, from the next day when such holder no longer holds a position as a director and/or an executive officer.
Fiscal year 2016 stock options	Position and number of grantees	Directors of the Company: 4 Executive officers of the Company: 19
	Type and number of shares	Common stock of the Company: 500,000 shares
	Date of grant	July 13, 2015
	Settlement of rights	After providing service for the period
	Period of providing service for stock option	Directors of the Company: For 1 year (From July 1, 2015 to June 30, 2016) Executive officers of the Company: For 1 year (From April 1, 2015 to March 31, 2016)
	Exercise period of rights	For 25 years from grant date (From July 13, 2015 to July 12, 2040)
	Condition of exercise of rights	A holder of share subscription rights may only exercise rights within a maximum of 8 years, within the exercise period of rights described above, from the next day when such holder no longer holds a position as a director and/or an executive officer.
Fiscal year 2017 stock options	Position and number of grantees	Directors of the Company: 4 Executive officers of the Company: 19
	Type and number of shares	Common stock of the Company: 395,000 shares
	Date of grant	July 14, 2016
	Settlement of rights	After providing service for the period
	Period of providing service for stock option	Directors of the Company: For 1 year (From July 1, 2016 to June 30, 2017) Executive officers of the Company: For 1 year (From April 1, 2016 to March 31, 2017)
	Exercise period of rights	For 25 years from grant date (From July 15, 2016 to July 14, 2041)
	Condition of exercise of rights	A holder of share subscription rights may only exercise rights within a maximum of 10 days, within the exercise period of rights described above, from the next day when such holder no longer holds a position as a director and/or an executive officer.

	Exercise price	Average stock price at exercise	Fair value at grant date
Fiscal year 2007 stock options	¥1	¥221	¥388
Fiscal year 2008 stock options	¥1	¥259	¥351
Fiscal year 2009 stock options	¥1	¥276	¥326
Fiscal year 2010 stock options	¥1	¥273	¥223
Fiscal year 2011 stock options	¥1	_	¥186
Fiscal year 2012 stock options	¥1	¥267	¥227
Fiscal year 2013 stock options	¥1	_	¥136
Fiscal year 2014 stock options	¥1	_	¥156
Fiscal year 2015 stock options	¥1	_	¥135
Fiscal year 2016 stock options	¥1	_	¥181
Figure 2017 stock entions	¥1	_	¥161
Fiscal year 2017 stock options	US\$0.01	_	US\$1.44

Assumptions used in estimation of the fair value of stock options were as follows:

	Fiscal year 2017 stock options
Method of estimation	Black-Scholes model
Volatility*	27.436%
Expected remaining period**	4 years
Expected dividend ***	¥5 (US\$ 0.04)
Risk-free interest rate ****	(0.358)%

- \* Volatility is calculated based on the monthly closing prices of common stock of the Company for 4 years prior to the last month ahead of each date of grant. \*\* Mid-term between date of grant and estimated exercisable
- period
  \*\*\*\* Actual dividend per share for each year
  \*\*\*\* Interest rate for a government bond with 4 years remaining

#### Related parties

#### (a) Related party transactions

The Company sold cement and related products for resale in the amounts of ¥34,487 million (US\$307,920 thousand) and ¥37,830 million to Ube-Mitsubishi Cement Corporation (UMCC) for the years ended March 31, 2017 and 2016, respectively. The capital stock of UMCC is ¥8,000 million (US\$70,796 thousand), and it is accounted for by the equity method. The balances of accounts receivable were ¥12,688 million (US\$113,286 thousand) and ¥12,966 million as of March 31, 2017 and 2016, respectively.

Selling prices are negotiated based on the amount of goods sold after deducting UMCC's selling costs and logistics costs from its net sales.

#### (b) Condensed financial information of significant affiliates

UMG ABS, Ltd. was a significant affiliate for the year ended March 31, 2016.

As of March 31, 2016, total current assets were ¥14,906 million and total non-current assets were ¥13,554 million. Also, total current liabilities were ¥13,229 million and total non-current liabilities were ¥1,973 million. Therefore, total net assets were ¥13,258 million. Furthermore, for the year ended March 31, 2016, net sales were ¥43,130 million, profit before income taxes was ¥5,913 million and profit was ¥3,989 million.

However, condensed financial information relating to UMG ABS, Ltd. for the year ended March 31, 2017 was omitted because the amount was immaterial.

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#### Subsequent events

## (a) Change of the number of share to constitute one unit and consolidation of shares

The Company's Board of Directors resolved at its meeting held on May 11, 2017 to change the number of shares to constitute one unit and partial amendments to the Articles of Incorporation. It also resolved to submit a proposal for consolidation of shares to the 111th Ordinary General Meeting of shareholders to be held on June 29, 2017.

#### 1. Purpose of change of the number of shares to constitute one unit and consolidation of shares

Japanese Stock Exchanges have announced the Action Plan for Consolidating Trading Units, aiming to consolidate one hundred (100) shares of common stock of domestic companies listed on Japanese Stock Exchanges into one (1) trading unit. As a company listed on the Tokyo Stock Exchange (TSE), the Company supports the intention of this plan and has decided to change the number of shares to constitute one unit from one thousand (1,000) to one hundred (100) shares. Together with this change, the Company decided to consolidate the Company's shares (10 shares to 1 share) in order to maintain the level of investment unit considered desirable by stock exchanges (50,000 yen or more and less than 500,000 yen) and reduce its total number of authorized shares from 3,300,000,000 to 330,000,000.

#### 2. Particulars of consolidation

# (1) Type of shares to be consolidated Common shares

#### (2) Consolidation ratio

On October 1, 2017, shares held by shareholders recorded in the latest shareholder Registry as of September 30, 2017 will be consolidated at the ratio of 10 shares to 1 share.

## (3) Number of shares reduced through consolidation

Total number of issued shares before consolidation (as of March 31, 2017)	1,062,001,076 shares
Number of shares reduced through consolidation	955,800,969 shares
Total number of issued shares after consolidation	106.200.107 shares

Note: The "Number of shares reduced through consolidation" and "Total number of issued shares after consolidation" are theoretical values calculated based on the total number of issued shares before consolidation of shares, and on the consolidation ratio.

#### (4) Treatment of fractional shares

If any fractional shares arise as a result of consolidation of shares, pursuant to the provisions of the Companies Act, the Company will sell all such fractional shares and distribute the proceeds to shareholders having fractional shares in proportion to their respective fractions.

#### 3. Effective date of Changes

October 1, 2017

## 4. Impact on per share information

Assuming that the consolidation of shares was conducted at the beginning of the year ended March 31, 2016, per share information for the years ended March 31, 2017 and 2016 are as follows:

	Ye	Yen	
	2017	2016	2017
Net assets per share	¥2,707.61	¥2,519.04	\$24.18
Net income per share	228.50	180.63	2.04
Diluted net income per share	227.78	180.10	2.03

#### (b) Share exchange agreements

The Company's Board of Directors resolved at its meeting held on May 11, 2017 to implement share exchanges in which its consolidated subsidiaries, Ube Shipping and Logistics, Ltd. (Ube Shipping & Logistics) and Hagimori Industries, Ltd. (Hagimori Industries), will become wholly-owned subsidiaries of the Company through share exchanges. The Company entered into the share exchange agreements with Ube Shipping & Logistics and Hagimori Industries on the same day.

## 1. Business description of Ube Shipping & Logistics and Hagimori Industries

Ube Shipping & Logistics and Hagimori Industries are consolidated subsidiaries of the Company. Ube Shipping & Logistics conducts coastal shipping and port transport business operations in Japan, and distribute the products made by the cement business, the core business of the Company. In addition, Ube Shipping & Logistics has actively expanded its business outside Japan, including chartering ocean-going vessels, trading, engineering and the container business. Hagimori Industries operates a building materials and concrete repair business with a focus on the manufacture and sale of ready-mixed concrete, which is a downstream business for cement.

#### 2. Purpose of share exchanges

The Company has decided to make Ube Shipping & Logistics and Hagimori Industries into wholly-owned subsidiaries to respond flexibility to changes in the business environment and to achieve sustained business growth and enhance corporate value by utilizing the management resources within the UBE Group.

By making these two companies, which are both included in the Company's Cement & Construction Materials segment, into wholly-owned subsidiaries, the Company aims to integrate business strategy and management resources and speed up decision making to further enhance the corporate value of the UBE Group.

#### 3. Outline of share exchanges

(1) Effective date August 1, 2017

#### (2) Legal form of transaction

Under the share exchanges, the Company will become the parent company owning all shares of Ube Shipping & Logistics and Hagimori Industries, and Ube Shipping & Logistics and Hagimori Industries will therefore become wholly-owned subsidiaries of the Company. The Company plans to conduct the share exchanges by means of a simple share exchange procedure pursuant to Article 796, Paragraph 2 of Japan's Companies Act (the "Companies Act") without obtaining the approval of the General Meeting of Shareholders. Ube Shipping & Logistics and Hagimori Industries plan to conduct their respective share exchanges upon obtaining approval for the share exchange agreement at their ordinary general shareholders' meetings to be held on June 27, 2017 and June 28, 2017, respectively.

#### (3) Details of share allotment

Name of the company	Ube Industries, Ltd. (parent company)	Ube Shipping & Logistics, Ltd. (consolidated subsidiary)	Hagimori Industries, Ltd (consolidated subsidiary)
Allotment ratio for the share exchange	1	2.4	4.0
Number of shares to be delivered in the share exchange	Common stock of	Ube Industries, Ltd.: 10,014,	613 shares (tentative)

2.4 shares of common stock of the Company will be delivered by allotment for 1 share of Ube Shipping & Logistics. However, shares will not be allotted in the share exchange for the shares of Ube Shipping & Logistics already owned by the Company.
4.0 shares of common stock of the Company will be delivered by allotment for 1 share of Hagimori Industries. However, shares will not be allotted in the share exchange for the shares of Hagimori Industries already owned by the Company.

## (4) Calculation of share exchange ratio

The share price of the Company as a listed company was calculated by employing the market share method. The share prices of Ube Shipping & Logistics and Hagimori Industries, as non-listed companies, were calculated by a third-party entity independent from these three companies, by using the discounted cash flow (DCF) method and comparable company analysis. The share exchange ratio was determined based on the above calculation results after a careful deliberation between the Company and Ube Shipping & Logistics and Hagimori Industries.

## 4. Summary of accounting procedures

The share exchange is accounted for as a business combination of entities under common control based on the "Revised Accounting Standard for Business Combinations" (ASBJ Statement No. 21 of September 13, 2013) and the "Revised Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures" (ASBJ Guidance No.10 of September 13, 2013).

#### (c) Purchase of treasury shares

The Company's Board of Directors resolved at its meeting held on May 11, 2017 to repurchase common stock pursuant to Article 156 of the Companies Act of Japan as applied pursuant to Article 165, Paragraph 3 of the Companies Act. Details of the repurchase of shares of common stock are as follows:

#### 1. Reason for share repurchase

The Company intends to repurchase its own shares to improve capital efficiency and carry out an agile capital policy to respond to changes in the business environment. Some repurchased shares will be allotted to shareholders of Ube Shipping & Logistics and Hagimori Industries in executing the above mentioned share exchanges.

#### 2. Class of shares to be repurchased

Common stock

#### 3. Total number of shares to be repurchased

Up to 28,000,000 shares

#### 4. Total amount of shares to be repurchased

Up to ¥5 billion (\$44,643 thousand)

#### 5. Repurchase period

From May 12, 2017 to July 18, 2017

#### (d) Issuance of unsecured bonds

The Company decided to issue the 13th and 14th domestic unsecured bonds at the Board of Directors' Meeting held on March 30, 2017. Details of the bond issuances are as follows.

## 1. 13th domestic unsecured bond

(1) Total amount ¥10,000 million (\$89,286 thousand) (2) Issued price ¥100 (\$0.89) with a par value of ¥100

(3) Interest rate

0.150% May 25 and November 25, every year (4) Payment dates

(5) Due date for payment May 25, 2017 (6) Maturity date May 25, 2022 (7) Method of redemption Bullet payment

(8) Utilization of funds Payment of unsecured bond and long-term borrowings

### 2. 14th domestic unsecured bond

¥10,000 million (\$89,286 thousand) (1) Total amount (2) Issued price ¥100 (\$0.89) with a par value of ¥100

(3) Interest rate 0.375%

(4) Payment dates May 25 and November 25, every year

(5) Due date for payment May 25, 2017 (6) Maturity date May 25, 2027 (7) Method of redemption Bullet payment

Payment of unsecured bond and long-term borrowings (8) Utilization of funds



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## Independent Auditor's Report

The Board of Directors Ube Industries, Ltd.

We have audited the accompanying consolidated financial statements of Ube Industries, 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 Ube Industries, 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 I Young Shin Nihan LLC

June 29, 2017 Tokyo, Japan

A member firm of Ernst & Young Global Limited

(As of March 31, 2017)

#### Overseas Offices

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Spain

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#### UBE CHEMICALS (ASIA) PUBLIC COMPANY LIMITED

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Thailand

Phone: +66-2206-9300

## THAI SYNTHETIC RUBBERS COMPANY LIMITED

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# UBE INDUSTRIES INDIA PRIVATE LTD.

Office No. 304, 3rd Floor, Times Tower, M.G Road, Sector-28, Gurgaon, 122001, Haryana,

Net Sales

India

Phone: +91-124-422-7801~03

### Major Consolidated Subsidiaries

				Net Sale	75	
Company Name	Business	Country	Currency	2017/3	2016/3	2015/3
UBE CORPORATION EUROPE, S.A.U.*	Manufacture and sales of caprolactam, ammonium sulfate, nylon, and fine chemical products	Spain	EUR million	314.6	350.4	371.5
UBE CHEMICALS (ASIA) PUBLIC COMPANY LIMITED	Manufacture and sales of caprolactam, ammonium sulfate, and nylon	Thailand	THB billion	11.6	11.6	12.4
THAI SYNTHETIC RUBBERS COMPANY LIMITED	Manufacture and sales of polybutadiene rubber	Thailand	THB billion	4.3	3.5	4.4
UBE EXSYMO CO., LTD.	Manufacture and sales of polypropylene molded products, fibers, and fiber-reinforced plastics	Japan	JPY billion	12.7	12.4	11.2
UBE FILM, LTD.	Manufacture and sales of plastic film products	Japan	JPY billion	9.5	9.2	9.0
UBE AMMONIA INDUSTRY, LTD.	Manufacture and sales of ammonia and industrial gases	Japan	JPY billion	13.7	13.0	15.4
UBE FINE CHEMICALS (ASIA) CO., LTD.	Manufacture and sales of 1,6-Hexanediol (HDL) and 1,5-Pentanediol (PDL)	Thailand	THB billion	0.9	0.7	0.6
UBE MATERIAL INDUSTRIES, LTD.	Manufacture and sales of magnesia clinker, quicklime, slaked lime, etc.	Japan	JPY billion	44.1	38.9	38.9
UBE CONSTRUCTION MATERIALS SALES CO., LTD.	Sales of cement, ready-mixed concrete, building materials, etc.	Japan	JPY billion	55.9	56.2	54.1
UBE SHIPPING & LOGISTICS, LTD.	Domestic shipping, harbor transportation, shipping-agent services, and customs clearing	Japan	JPY billion	20.6	21.2	21.5
KANTO UBE HOLDINGS CO., LTD. (and 4 other subsidiaries)	Manufacture and sales of ready-mixed concrete	Japan	JPY billion	12.7	14.6	15.4
SANSHIN TSUSHO CO., LTD.	Sales of building materials, public works materials, etc.	Japan	JPY billion	17.4	19.6	_
HAGIMORI INDUSTRIES, LTD.	Manufacture and sales of ready-mixed concrete, concrete piles, and self-leveling materials	Japan	JPY billion	3.2	3.3	3.7
UBE MACHINERY CORPORATION, LTD.	Manufacture, sales, and service of metal and resin molding machines, extrusion presses, vertical mills, water screening equipment, etc.	Japan	JPY billion	40.6	45.0	47.5
UBE MACHINERY (SHANGHAI) LTD.	Sales, assembly, and service for metal processing and injection-molding machinery	China	RMB million	120.3	109.8	135.5
UBE STEEL CO., LTD	Manufacture and sales of cast iron and steel products and rolled steel billets	Japan	JPY billion	17.4	16.7	20.5
UBE MACHINERY INC.	Sales, assembly, and service for metal processing and injection-molding machinery	U.S.A.	USD million	60.0	64.7	60.7
UBE C&A CO., LTD.	Sales of imported coal from Australia, Indonesia, and Russia	Japan	JPY billion	23.5	29.6	33.4

<sup>\*</sup> Ube Corporate Europe, S.A.U., Ube Chemical Europe, S.A.U., and Ube Engineering Plastics, S.A.U. merged at the end of March 2016. Figures are a simple aggregation of the three companies.

#### Major Equity-Method Affiliates

Company Name	Business	Country
UMG ABS, LTD.	Manufacture, processing, and sales of ABS resins and ABS polymer alloys	Japan
UBE-MARUZEN POLYETHYLENE CO., LTD.	Development, production, and sales of low-density polyethylene and HAO-LLDPE	Japan
CHIBA BUTADIENE INDUSTRY CO., LTD.	Manufacture and sales of butadiene	Japan
UBE-MITSUBISHI CEMENT CORPORATION	Sales of cement, soil-stabilizing cement, slag, etc.	Japan
LOTTE UBE SYNTHETIC RUBBER SDN. BHD.	Manufacture and sales of polybutadiene rubber (synthetic rubber)	Malaysia
SUMATERIALS CO., LTD.	Production of polyimide for substrates to be used in next-generation displays	Korea

#### Ube Industries, Ltd.

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	Ube Head Office	9 1978-96, Kogushi, Ube, Yamaguchi 755-8633, Japan Phone: +81-836-31-2111 Fax: +81-836-21-2252			
Establishment		1897			
Employees		10,928 (consolidated) 3,612 (non-consolidated)			
Consolidated Companies		95 (70 consolidated subsidiaries and 25 equity-method affiliates)			
Fiscal Year		April 1 to March 31			
Common Stock		Outstanding: 1,062,001,076 shares			
Paid-in Capital		¥58,435 million			
Number of Sharehole	ders with Voting Rights	51,769			
Annual General Shar	reholders' Meeting	June			
Stock Exchange Listings		Tokyo Stock Exchange (Code: 4208) Fukuoka Stock Exchange			
Transfer Agent and Share Registrar		Mitsubishi UFJ Trust and Banking Corporation, 1-4-5, Marunouchi, Chiyoda-ku, Tokyo 100-8212			
Independent Auditors		Ernst & Young ShinNihon LLC			

#### Major Shareholders

Shareholder	Share Units Owned (Thousand Shares	Percentage of Total Shares Issued ) (%)
Japan Trustee Services Bank, Ltd. (Trust Account)	66,185	6.24
The Master Trust Bank of Japan, Ltd. (Trust Account)	55,511	5.24
Trust & Custody Services Bank, Ltd. (Investment Trust Collateral Account)	30,029	2.83
Japan Trustee Services Bank, Ltd. (Trust Account No.9)	23,587	2.22
Nippon Life Insurance Company	20,000	1.89
SUMITOMO LIFE INSURANCE COMPANY	20,000	1.89
Japan Trustee Services Bank, Ltd. (Trust Account No.5)	19,385	1.83
BNYML - NON TREATY ACCOUNT	17,816	1.68
Japan Trustee Services Bank, Ltd. (Trust Account No.4)	16,126	1.52
THE YAMAGUCHI BANK, Ltd.	15,482	1.46

## **Shareholder Composition**



The UBE Group publishes information for its stakeholders on its website.

Please refer to the websites on the right for additional data and information on activities and products not covered in this report.

## Corporate Information http://www.ube-ind.co.jp/english/



## - Shareholder and Investor Information

Management policies, finances, results, and shareholder information and IR materials are available in the Investor Relations section of our website:

http://www.ube-ind.co.jp/english/ir/

#### **Product Information**

UBE Group product information is available in the Products section of our website.

http://www.ube-ind.co.jp/english/products/

### **CSR Activities**

Environment & safety, corporate social responsibility (CSR), and compliance information are available in the CSR Activities section of our website.

http://www.ube-ind.co.jp/english/eco/











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