

At Nippon Electric Glass, our corporate philosophy is a reflection of our founding mission, a statement of our devotion to creating products infused with the very best of human civilization for the betterment of society.

[Our corporate philosophy]

We strive to build a brighter future for the world by uncovering the unlimited possibilities of glass for more advanced creative manufacturing.

Firmly rooted in the traditions of our founding mission, the NEG corporate philosophy plots a path for our quest for sustainable growth. Thanks to material design, melting, forming, and processing technologies, glass can be infused with different properties for a broad range of functions. We are dedicated to unlocking glass's potential to make life better and more comfortable for people and communities the world over.

Our slogan

GLASS FOR FUTURE

(Our vision)

The world's leading manufacturer of special glass

Our goal is to become the world's leading manufacturer of special glass, with the best talent, the best technology, and the best creative manufacturing ability. At the same time, we strive to run our company in a way that inspires pride among our workers and enables us to make a genuine contribution to the community. The way we see it, creative manufacturing is achieved through state-of-the-art technological development, the highest quality standards, efficient production, and a steady supply of products, all underpinned by a fundamental dedication to environmental sustainability.

(Our values)

Customer first Everything is based on accurate understanding and complete satisfaction of

customers' requirements.

• Get the job done We are dedicated to completing every task properly.

• Broad minds and open communication We think beyond existing norms and encourage frank communication among

all departments and generations.

• High ethical standards We are bound to act ethically and in good faith in all situations.

• Consideration for the environment We are constantly aware of the need to be considerate of the environment, and

strive to reduce our footprint.

Contents

- 1 Message from the Management
- 2 Consolidated Financial Summary
- 4 Top Message

Performance Review, Progress on and Prospects for EGP2018, Medium-term Business Plan

- 8 Overview of Business
- 12 Striving to Uncover the Unlimited Possibilities of Glass
 - —Our History of Creating Value
- 14 Creating Corporate Value
- 16 Global Network
- 18 Research & Development
- 20 Products and Technology

G-Leaf™ Ultra-Thin Glass: Ultimately Thin and

Environmentally Friendly

- 22 Directors and Corporate Auditors
- 23 Corporate Governance
- 28 Communication with Stakeholders
- 30 Contributing to Local Communities
- 32 Environmental Conservation
- 36 Developing Human Resources and Diversity
- 38 Financial Review
- 41 Consolidated Financial Statements
- 67 Independent Auditor's Report
- 68 Corporate Information

Message from the Management

Fiscal year 2016 was the first year of our EGP2018 (Electric Glass Prospects 2018) medium-term business plan. Despite our efforts to achieve business growth, we ended up with results short of our targets in both income and profit. This was due to such factors as a decline in the price of glass for flat panel displays (FPD). However, we did succeed in putting into practice a number of tasks toward attainment of the goals set in EGP2018, such as strengthening our FPD glass business in China and acquiring glass fiber business in Europe, both of which are strategic moves for our future growth and development.

In fiscal year 2017, we will make steady progress not only on improving our business performance but also on tackling the many tasks facing us, such as preparation for the second phase investment in our FPD glass plant in Xiamen, China, which will commence operation in 2018, development of new investment strategies for glass fiber business, and commercialization of new products which will support our next-generation business development. We are determined to make fiscal year 2017—the second year of EGP2018—a key 12-month period in which we will advance our business to reap the benefits of the strategic arrangements made earlier and sow seeds for the third and final year of our medium-term business plan and beyond.

In light of rapid social and economic changes, our group will maintain efforts to achieve sustainable growth by supplying glass products with diverse shapes and functions to a wide range of industries. This portrays our corporate philosophy: "We strive to build a brighter future for the world by uncovering the unlimited possibilities of glass for more advanced creative manufacturing."

On behalf of our fellow board members, we wish to express our heartfelt gratitude for the warm support from our shareholders, customers, business partners, employees, and all other stakeholders. We look forward to your continued support for the future growth of our group.

May 2017



Masayuki Arioka Chairman of the Board Motoharu Matsumoto President

M. MATSUMOTO

Consolidated Financial Summary

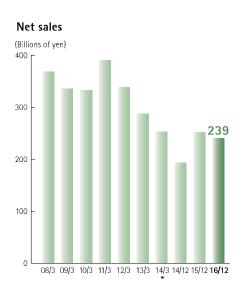
Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries for the ten most recent years *Fiscal year ended December 31, 2014 was a nine-month period due to a change in the company's fiscal year-end.

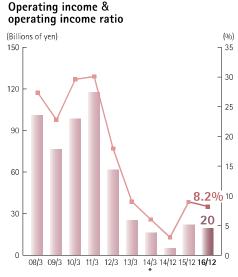
	2008/3	2009/3	2010/3	2011/3
For the year				
Net sales	¥368,267	¥335,662	¥332,388	¥390,196
Operating income	100,883	76,416	98,426	117,471
Profit attributable to owners of parent	50,669	21,832	54,927	68,609
Depreciation and amortization	38,843	46,134	48,167	52,699
Capital expenditures	107,283	102,050	93,079	110,025
Research and development	5,108	5,051	3,589	4,553
At year-end				
Total assets	¥588,031	¥588,414	¥646,444	¥692,622
Current assets	238,859	200,062	228,625	238,908
Net property, plant and equipment	318,527	362,860	385,170	417,423
Current liabilities	189,606	165,640	153,874	142,327
Interest-bearing debts	96,766	129,883	99,827	94,273
Net assets	347,785	352,744	406,307	468,038
Cash flows				
Net cash provided by operating activities	¥102,429	¥ 89,873	¥118,721	¥133,391
Net cash used in investing activities	(91,931)	(121,975)	(86,847)	(96,822)
Net cash provided by (used in) financing activities	5,525	27,438	(35,135)	(11,774)
Cash and cash equivalents at end of year	101,046	94,623	91,668	116,366
Per share of common stock (yen and dollars)				
Profit attributable to owners of parent	¥ 105.29	¥ 43.89	¥ 110.41	¥ 137.92
Net assets	691.27	701.62	808.75	932.17
Cash dividends	9.00	10.00	11.00	13.00
Operating income ratio (%)	27.4	22.8	29.6	30.1
Equity ratio (%)	58.5	59.3	62.2	66.9
Return on equity (%)	16.5	6.3	14.6	15.8

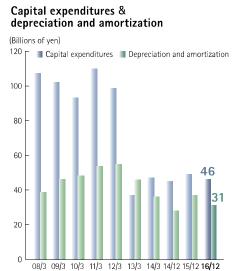
Notes: 1. Net income per share and net assets per share are calculated based on the average number of shares outstanding during each year and the number of shares outstanding at the end of each year, respectively.

2. As there was no dilutive stock outstanding during these years, diluted net income per share was not calculated.

^{3.} U.S. dollar amounts have been translated from Japanese yen solely for the convenience of the reader using the prevailing exchange rate at December 31, 2016 of ¥116 to US\$1.00.



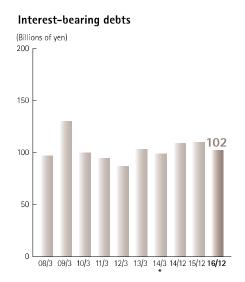


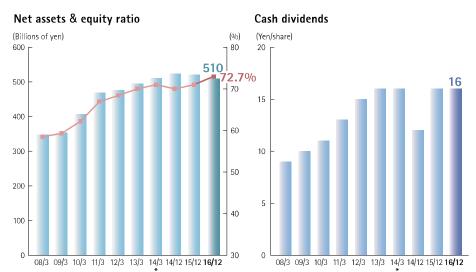


(Millions of yen and thousands of U.S. dollars, except per share figures)

				,		1 1
2012/3	2013/3	2014/3	2014/12*	2015/12	201	6/12
¥338,214	¥287,304	¥252,548	¥192,692	¥251,178	¥239,412	\$2,063,896
61,639	24,968	16,171	5,224	22,035	19,571	168,716
19,409	10,603	12,432	5,938	9,637	4,969	42,836
54,785	46,105	35,891	28,420	37,154	31,256	269,448
98,788	37,487	46,962	45,214	49,212	46,429	400,250
6,464	6,833	6,920	5,527	6,183	6,658	57,397
¥687,070	¥697,386	¥707,021	¥731,185	¥726,938	¥693,918	\$5,982,052
224,416	243,577	247,502	264,001	267,430	254,870	2,197,155
420,311	395,376	393,751	397,273	386,013	367,399	3,167,233
135,200	88,038	86,970	82,701	105,400	86,025	741,595
86,812	102,604	99,492	109,141	109,731	101,997	879,285
475,736	495,295	510,807	522,577	519,801	509,564	4,392,793
¥ 83,737	¥ 55,111	¥ 46,700	¥ 38,837	¥ 46,797	¥ 48,261	\$ 416,043
(79,827)	(46,545)	(33,843)	(29,264)	(32,638)	(36,139)	(311,543)
(14,731)	7,667	(11,190)	1,699	(7,892)	(17,624)	(151,931)
105,210	121,741	123,888	129,823	133,856	126,167	1,087,647
¥ 39.02	¥ 21.32	¥ 24.99	¥ 11.94	¥ 19.38	¥ 9.99	\$ 0.09
945.47	982.97	1,011.46	1,032.66	1,031.86	1,013.92	8.74
15.00	16.00	16.00	12.00	16.00	16.00	0.14
18.2	8.7	6.4	2.7	8.8	8.2	
68.4	70.1	71.2	70.2	70.6	72.7	
4.2	2.2	2.5	1.2	1.9	1.0	

^{4.} As of December 31, 2016, Nippon Electric Glass Co., Ltd. had 26 consolidated subsidiaries.





^{5.} Capital expenditures for FY2014/12 are calculated based on the periods from April 1, 2014 to December 31, 2014 for the Company and its domestic consolidated subsidiaries and January 1, 2014 to December 31, 2014 for the Company's overseas consolidated subsidiaries.

Performance Review, Progress on and Prospects for EGP2018, Medium-term Business Plan



Although the business results for fiscal year 2016 fell below our targets, we made steady progress in establishing a foundation for attainment of the goals set in EGP2018. We are committed to accomplishing our objectives through increases in both sales and profits in fiscal year 2017, the second year of our medium-term business plan.

Motoharu Matsumoto, President

Performance Review for Fiscal Year 2016

While sales of glass fiber steadily grew mainly in key applications of reinforcement of engineering plastics, overall sales in fiscal year 2016 (the previous fiscal year) showed a decline against fiscal 2015, due to such factors as a drop in the price of FPD glass. In terms of profit and loss, despite an improvement in productivity and cost reductions in raw material and fuel, our performance resulted in decreased income and profits due to such factors as lower sales, price drops and the impact of a strong yen. That said, I appreciate that in fiscal year 2016, we were able to put progressive measures into practice from steps taken in the first year of our EGP2018 medium-term business plan and to move forward with establishment of a foundation for further growth and development.

Forecast for Fiscal Year 2017, Progress on and Prospects for Medium-term Business Plan

We see fiscal year 2017 (this fiscal year) as being extremely important for realizing EGP2018. Our performance estimates include net sales of ¥260 billion, operating income of ¥24 billion, ordinary income of ¥20 billion and profits attributable to owners of the parent of ¥17 billion, aiming at increases in both sales and profits (assuming exchange rates of ¥105 to the U.S. dollar and ¥115 to the Euro). The following are our anticipated business approaches based on progress on and prospects for EGP2018.



EGP2018 Outline

Basic policies and measures

- (1) Strengthen profitability of "displays" related business.
 - •Improve productivity and quality by honing the manufacturing process.
 - •Realize the smooth shift of production overseas.
 - •Conduct management based on controlling risk and prioritizing income and expenditures.
- (2) Expand business related to "performance materials, optical and electronic devices, medical care, and heat-resistant and building materials."
 - Provide specifics for the M&A alliance strategy to generate new business opportunities and growth synergy.
 - •Grow existing businesses through sales expansion and investment.
 - •Realize early commercialization of newly developed products.

(3) Reinforcement of R&D

- •Develop "materials, processes, and products" that take advantage of the superior features of glass.
- •Improve basic technologies in material design, manufacturing process technology, and evaluation technology.
- •Enhance intellectual property strengths and utilize licensing-in and cross-licensing to generate new businesses and expand existing businesses.

(4) Constructive investments

In addition to the usual capital investments, the company will set aside approximately 50 billion yen over a three-year period for strategic investments.

Management targets

Net sales ¥300 billion

Electronics and Information Technology: **¥170 billion** (Glass for displays, optical and electronic devices, etc.)

Performance Materials and Others: **¥130 billion** (Glass fiber, medical care, heat-resistant and building materials, etc.)

Operating income: **¥30 billion**Operating income ratio: **10 %**

Duration

January 1, 2016 to December 31, 2018

Strengthen Profitability of "Displays" Related Business

Reinforce business in China and extend lives of manufacturing facilities through equipment improvements

Today, the main competitive market for FPD business is China, which is expected to monopolize future growth in this sector. In the first quarter of last year, we constructed, in Xiamen, a plant for melting and forming FPD glass (first phase investment), which is a company first, in order to strengthen our business operations in that country. We also decided to boost the plant's production capacity (second phase investment) with the aim of commencing operations in the first quarter of fiscal 2018. In terms of

processing bases, we began operating a plant in Nanjing in the second quarter of fiscal 2016, following those in Shanghai and Guangzhou. In addition, a joint venture with a Chinese company is scheduled to commence operations in Fuqing, Fujian province, in the summer of this year. Through these operations, we will enlarge our customer base and enhance our presence in the Chinese market. We have also been making progress since last year on making our production equipment more robust by strengthening our production facilities and extending equipment life. Going forward, we expect this will bring about benefits for us, such as reductions in repair costs, less frequent production interruptions, and decreases in restarting losses. We will endeavor to enhance our profitability through these initiatives.

Performance Review, Progress on and Prospects for EGP2018, Medium-term Business Plan

Expand Business Related to "Performance Materials, Optical and Electronic Devices, Medical Care, Heat-resistant, and Building Materials"

Acquisition of PPG's European glass fiber business and future prospects

The European glass fiber business, which we acquired from the U.S. company PPG Industries in October 2016, began contributing to sales from the fourth quarter of fiscal 2016. This acquisition brought us an increase in global market share, from a little over 30% to slightly less than 40%, in sales of chopped strands used in engineering plastics for automotive parts, the key product within our glass fiber business. Furthermore, it added new businesses to our portfolio, such as roving for wind turbine blades. While the acquisition resulted in an increase in costs in terms of profit and loss, including depreciation expenses associated with goodwill and asset reevaluation, we will ramp up efforts, such as improving productivity, so that the acquired business will contribute to profits as soon as possible.

Being the birthplace of the chemical industry, Europe still leads the world in industry scale and technological strength. In the automotive industry, too, European manufacturers often lead the world in new technologies, making Europe an extremely important market for engineering plastic materials for automotive parts. The significance of this acquisition, therefore, lies not only in its contribution to performance on a short-term basis but also in the fact that we successfully secured a production base and strengthened our presence in Europe.

Under EGP2018, we aim to achieve sales of ¥130 billion in the "Performance Materials and Others" sector, of which we plan to realize ¥100 billion through glass fiber sales. However, we need to increase our sales by some ¥20 billion even after achieving the target set for this financial year. Accordingly, we are developing new investment strategies, the directions of which we want to determine within the current fiscal year.

Development and commercialization of new products mainly for optical and electronic devices

The market for glass used in optical and electronic devices is characterized by rapid product turnover due to changes in market conditions as well as technological innovation, where marketing of new products is required for continued growth. Against this background, sales are growing in some new products, including phosphor-composite glass for LED lighting and glass for supporting semiconductor wafers used in the manufacturing process for next-generation

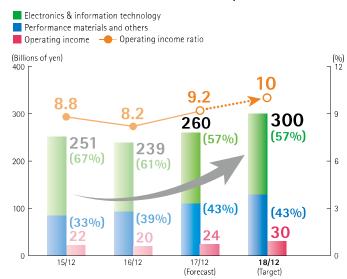
semiconductor packages. Progress is also being made on commercialization of some other newly developed products.

One such product, being developed jointly with the Saint-Gobain Group, is a glass substrate incorporating an internal extraction layer, which improves OLED lighting efficiency. Product evaluation is currently underway in cooperation with lighting manufacturers, and we will investigate additional investment toward full-scale production while observing market trends. Another product with good future prospects is glass frit for laser-sealing of ceramic packages used in image sensors and LEDs. Heat resistance, strength and air-tightness are the essential properties required of a sealing material that improves reliability and extends the lives of devices. In this regard, glass is superior to resin which is a conventional sealing material for ceramic packages in semiconductor elements. In addition to glass frit sealing materials, we manufacture and supply lids and casings. With particular emphasis placed on the advantage of one-stop procurement of lid, casing, and sealing materials, we are working to expand sales of these products by promoting their merits.

Increase in production of glass tubing for pharmaceutical and medical use

Last autumn, a new production line for glass tubing for pharmaceutical and medical use started operations at our Malaysian plant. In the global market for glass tubing for pharmaceutical and medical use such as ampoules and vials, accelerating medical advances in newly emerging countries, including China, have brought about an increase in demand for Type 1 glass tubing, which is made of highgrade, low alkaline dissolution, low expansion glass. Sales

Progress on EGP2018 medium-term business plan





of our Type 1 products are also increasing, centering on the China market. We will continue our efforts to expand sales of these products in growth markets such as China and India by fully utilizing the production capacity of our Malaysian plant.

Human Resources Development and Work-style Reform

For us to achieve sustainable growth, it is essential that we maintain capable human resources in such fields as M&A, collaboration, and R&D. Accordingly, we are working to recruit personnel in an organized manner, according to a new manpower plan which we have developed with a view to medium- to long-term growth. Another approach that we will be adopting is delegation of greater authority and responsibility to young employees than has been the case to date. They will be asked to carry out a diverse range of jobs with a "first, I'll try" attitude. In this way, we will encourage them to further develop their abilities, thereby improving our overall corporate strength.

As regards work-style reform, we launched an initiative in February this year to specifically address this issue. We will

have our employees create time through analyzing and streamlining their tasks, and use that time for mental and physical revitalization and self-education. We will continue to inspire our employees to remain vigorous in body and mind, to come up with ideas and to bring about change.

■ Policy on Shareholder Returns

We regard returns on profits to shareholders as a key management issue and view ongoing and stable provision of dividends over the long term as our fundamental policy. The annual dividend for fiscal year 2016 was ¥16 per share (Interim: ¥8; Year-end: ¥8), which was the same level as that for fiscal year 2015. For the current financial year, we will maintain our policy regarding stable payment of dividends and consider increasing them depending on the business performance.

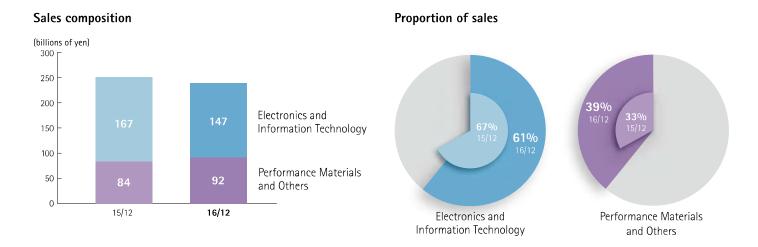
We are committed to steadily advancing toward attainment of the goals set in EGP2018, and we look forward to your ongoing support.



Overview of Business

Sales by Product and Introduction of Businesses

Comprehensive efforts are being made toward achieving the EGP2018 medium-term business plan. Major progress made and issues faced by each business segment are described below. (See page 5 for details about EGP2018)



Introduction of Businesses (key products)

Category	Product	Characteristics and applications		
Electronics and Glass for Flat Panel Displays (FPDs Information Technology		Glass substrates manufactured by the overflow process have extremely flat and smooth surfaces. This type of glass is used as a substrate for displays, such as liquid crystal displays (LCDs) for televisions and mobile terminals.		
	Glass for Chemical Strengthening, Dinorex™	Dinorex [™] is a glass for chemical strengthening which was developed for use as cover glass for mobile terminals such as smartphones and tablets. It protects display surfaces against scratches and impact.		
	Glass for Optical Devices	Our glass products for optical devices play important roles in data transmission, such as separating a particular wavelength from optical signals and branching optical signals.		
	Glass for Electronic Devices	Our glass for electronic devices takes various forms, including image sensor cover glass for devices such as digital cameras; powdered glass, glass paste, and precision glass tubes used in electronic parts for household appliances, automobiles, and industrial equipment.		
Glass for Solar Cells, SS-1		Our glass for solar cells, SS-1, has higher strain and softening points than conventional window glass. It is used as substrates for chemical compound solar cells.		
Performance Materials and Others	Glass Fiber	Glass fibers are glass formed into filaments each of which is around several to a dozen micrometers in diameter. It is used to create excellent composite materials due to its high mechanical strength. It is used in various applications, such as for strengthening resins and cement products.		
	Glass for Building Materials	We provide glass products for construction use in various shapes with a variety of properties, such as fire-rated glass, glass-ceramic building materials, and glass blocks.		
	Heat-resistant Glass	With excellent thermal shock resistance and mechanical strength, our heat-resistant glass is widely used in household appliances such as oven and fireplace windows and topplates for cooking appliances. We also provide glass used in carriers for thermal treatment processing of electronic components, making good use of the fact that the glass has a thermal expansion coefficient close to zero.		
	Glass for Medical Care	Glass tubing made of borosilicate glass for pharmaceutical and medical use has excellent acid and chemical resistance and high strength. It is used as a material for medical applications such as ampoules and vials. LX Premium, with a high lead content and excellent radiation shielding properties, protects medical personnel from radiation exposure in medical facilities.		

Electronics and Information Technology

Sales in Fiscal Year 2016

Glass for FPDs	Shipments increased due to market recovery, but sales were lower than projected. Prices continued to fall slightly.
Glass for Chemical Strengthening, Dinorex™	Sales were sluggish due to slower growth of demand, such as from smartphones.
Glass for Optical Devices	Sales decreased due to the slow-down in certain areas of the telecommunication infrastructure market.
Glass for Electronic Devices	While sales of image sensor cover glass were weak, increases in sales of new products supported overall performance in this field.
Glass for Solar Cells, SS-1	Sales trended steadily.

EGP2018: Progress and Issues

Glass for FPDs

Efforts are being made to strengthen profitability in the display segment.

In terms of sales, we are expanding business in China, which is a growing market. In addition to implementing measures to enhance productivity and reduce costs, we are endeavoring to extend the life of manufacturing equipment. Through such efforts, we expect to see favorable results, such as reductions in repair costs and start-up losses.

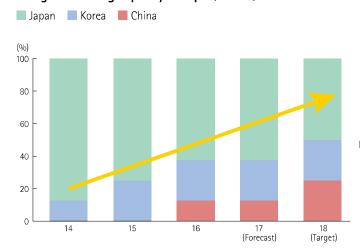
Progress

- Melting and forming facility in Xiamen started production (first phase investment)
- Processing facility in Nanjing commenced operations
- Decision to increase production capacity in Xiamen (second phase investment)
- Agreement reached on a processing joint venture in Fuging, Fujian province
- Repairs and capital investment for making production equipment more robust (extension of life)
- Improvement in productivity across the entire group

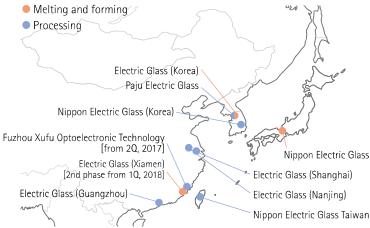
Issues

- Efforts focused on sales expansion in China
- Plan actions to respond to LCD panel manufacturers' production increases
- Prepare for boosting production capacity in Xiamen (starts in 1Q of 2018)
- Prompt establishment of the Fuqing joint venture (starts in 20 of 2017)
- Extending facility life and enhancing production yield

FPD glass forming capacity in Japan, Korea, and China



FPD glass manufacturing subsidiaries



Glass for Optical and Electronic Devices

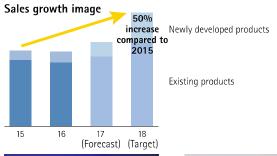
We will expand sales of new products and accelerate our approach toward commercialization of newly developed products. We will seize on the opportunity of growth in various fields including home appliance and automobile markets and expand our business.

Progress

- Progress in development and commercialization of new products
 - Glass for supporting semiconductor wafers Infrared absorbing filters Glass frit for laser-sealing of ceramic packages Black copper mesh touch sensor sheet Glass substrates with IEL for OLED lighting
- Equity participation in NS Materials Inc.

Issues

- Expansion of new product sales
- Promotion of new product development and commercialization of products under development
- Promote development to prepare for entering the quantum dot (QD) phosphor-composite device market

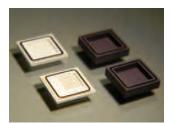




Glass for supporting semiconductor wafers



Infrared absorbing filters



Glass frit for laser-sealing of ceramic packages



Glass substrates with IEL for **OLED** lighting

Performance Materials and Others

Sales in Fiscal Year 2016

Glass Fiber	Despite a decrease in sales due to the strong yen, the market remained robust, resulting in an increase in shipments. Overall sales benefited from a contribution made, starting from the fourth quarter, by the glass fiber business in Europe acquired from PPG Industries Inc., in October 2016.		
Medical, Heat-resistant, Building Materials	Despite contrasts in the ups and downs of the market for each product, overall sales fell short of expectations.		



EGP2018: Progress and Issues

Glass Fiber

With the addition of the recently acquired European production base to our existing operations in Japan and Malaysia, we intend to develop a global supply infrastructure. We will pursue all kinds of synergy possible with our new European subsidiaries. We will promote our business through further expanding sales of chopped strands, our key product, and reinforce other product areas, including roving.

Progress

- Expansion of sales in existing business areas and an increase in market share
- Acquisition of PPG's glass fiber business in Europe (U.K. and the Netherlands) resulted in a 30% increase in production capacity

Issues

- Achievement of ¥100 billion sales (new investments to be considered)
- Product development and search for new sales channels for products such as roving
- Pursuit of synergy with our newly acquired European subsidiaries



Roving

Sales growth image 80% increase compared to 2015 (Forecast) (Target)

Chopped strands

Glass Tubing for Pharmaceutical and Medical Use

Advancement of the medical market in newly emerging nations, such as China, has led to an increase in demand for glass tubing for pharmaceutical and medical use called "Type 1," which has excellent properties, including high chemical resistance, less alkaline dissolution, and low thermal expansion. We will further promote business in this area through sales expansion in the growing China and India markets.

Heat-resistant Glass and Glass for Building Materials

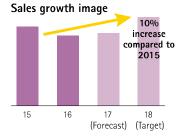
Promote sales mainly in overseas markets.

Progress

- Reinforced production capacity in Malaysia
- Sales of heat-resistant glass and glass for building materials were sluggish

Issues

- Sales expansion of glass tubing for pharmaceutical and medical use in China and India
- Expand sales of heat-resistant glass and glass building materials overseas





and medical use

Heat-resistant glass (window panels for stoves)

Striving to Uncover the Unlimited Possibilities of Glass

—Our History of Creating Value

Amid the chaos following the Second World War, Nippon Electric Glass (NEG) was established in 1949 in Otsu, Shiga prefecture, with a total of some 90 employees. We started out with the production of vacuum tube bulbs for radios, and then our product line-up expanded to glass tubing for fluorescent lamps and pharmaceutical and medical use, glass for cathode-ray tubes (CRTs), glass fiber for reinforcing high-function engineering plastics, glass for optical and electronic devices, and glass for flat-panel displays (FPDs). Over the years, our line-up has grown and evolved to match the needs of the times and to develop and provide glass products which contribute to social development and everyday life. We will continue with our efforts to uncover the unlimited possibilities of glass and seek to create new value for society through advanced creative manufacturing.

From 1949: Creating NEG's foundations

In 1949, the company separated from NEC Corporation as an independent company. Initially, we produced hand-blown vacuum bulbs for radios and communication equipment. In 1951, we succeeded in automating production of glass tubing, which enabled us to mass produce glass tubing for fluorescent lamps. In 1956, we began production of glass tubing with the use of tank furnaces which stabilized our business foundation.



1949

- 1951 Successfully began use of the Danner process to form glass tubing automatically
- 1954 Started production of glass tubing for pharmaceutical and medical use
- 1958 Started production of glass for radiation shielding



From 1960: Becoming a specialized glass manufacturer focusing on CRT glass business

In 1965, we accomplished our aim to enter the CRT glass business. Entrance to the rapidly growing TV market helped expand our business even further. This was also when we started new businesses offering products to various industries, such as glassceramics, glass fiber, and glass for electronic devices.





- 1962 Started production of super heat-resistant glass-ceramics
- 1965 Started production of black-and-white CRT glass (Started production of color CRT glass in 1968)
- 1973 Started production of glass-ceramic building material
- 1976 Started production of glass fiber and glass for reed switches



From 1990: The age of overseas business development

In the 1990s, to meet the increase in global demand for CRTs, we created a worldwide supply network, thus firming our position as one of the leading manufacturers of CRT glass. In the late 1990s, to adapt to the market shift to FPDs, we entered the FPD glass business.



1990

- 1991 Established plant in Malaysia for CRT glass production
- 1993 Acquired 100% ownership of a U.S. joint venture company
- 1995 Established a CRT glass production plant in the U.K.
- 1997 Established a CRT glass production plant in Shijiazhuang, China
- 1998 Started production of glass substrates for plasma display panel (PDP) using the float process
- Started production of glass fiber in Malaysia
- 1999 Developed the overflow process



From 2000: The age of FPDs

To meet the rapid increase of the FPD market, we started producing glass substrates for liquid crystal displays (LCDs) using the overflow process. We made efforts to match the advanced requirements of the FPD market, such as making larger size substrates and high quality glass substrates.



- 2001 Started production of glass substrates for PDP with ITO conductive films
- 2002 Established a LCD glass processing plant in Gumi, Korea
- 2003 Established a LCD glass processing plant in Taiwan
- 2005 Established a joint venture LCD glass processing plant in Paju, Korea
- 2006 Established a LCD glass processing plant in Shanghai, China





From 2010: Creating a new business pillar for growth

With the deceleration of FPD glass sales, we expanded our glass fiber and glass tubing for pharmaceutical and medical use, etc., to create a new business pillar for further growth. We also launched various new products, such as glass for solar cells, cover glass for smartphones, phosphor-composite glass, and continued with the development of unique products.



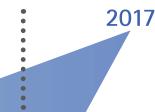
- 2010 Started production of glass for solar cells 2011 Started production of cover glass for
 - smartphones Started production of glass tubing for pharmaceutical and medical use in Malaysia
- 2012 Glass-ribbon adopted as microchip material for Micro Total Analysis System
- 2013 Developed ZERØ™ glass with a coefficient of thermal expansion of zero Established a LCD glass melting and forming plant in Paju, Korea





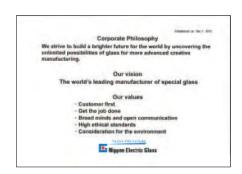
From 2015: For further growth

To seek further growth, in 2015, we revised our Corporate Philosophy and embarked on our medium-term business plan in 2016. We regard Automotive and Transportation, ICT and Semiconductors, Medical Care, and Displays as business areas for expansion and reinforcement, and Lighting, Energy, Social Infrastructure, and Home Appliances as strategic development areas. We will place particular emphasis and actively expand our business in these areas.



2015

- 2015 Enacted our new Corporate Philosophy Structure Developed glass for supporting semiconductor wafers
 Established a FPD glass melting and forming plant in Xiamen, China
- 2016 Formulated the EGP2018 medium-term business plan Acquired glass fiber operations in the EU from PPG Industries Developed glass frit for laser-sealing of ceramic packages





Creating Corporate Value

Our corporate philosophy reflects our dedication to strive to build a brighter future for the world by uncovering the unlimited possibilities of glass to make life better and more comfortable. To follow this corporate philosophy and achieve sustainable growth, we utilize six resources as capital to our business operations. Of such capitals, Human Capital consists of our worldwide employees and management, and they create technology, intellectual

Corporate Philosophy

"We strive to build a brighter future for the world by uncovering the unlimited possibilities of glass for more advanced creative manufacturing."

Main Input **Businesses Electronics and** Information Technology Human Capital Glass for Displays Glass for Chemical Intellectual Capital Strengthening Glass for Optical Devices Manufactured Capital Glass for Electronic Devices Glass for Solar Cells Social Capital **Performance Materials** and Others Natural Capital Glass Fiber Glass for Building Materials Financial Capital Heat-resistant Glass Glass for Medical Care

Planning R&D Production Sales

property, and know-how which make up our Intellectual Capital. Then there is Manufactured Capital, which allows for stable and efficient production of developed products, and Social Capital which consists of the local

communities that support us. By fully utilizing the six capitals, we continue to provide value to each market through innovative products, which in turn help realize a comfortable, enriched, and safe society.

Contributions to Markets



Automotive and Transportation



ICT and Semiconductors



Medical Care



Displays



Lighting



Energy

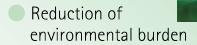


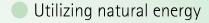
Social Infrastructure

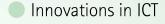


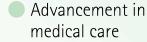
Home Appliances

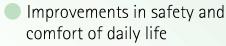
Creation of Value











Advancement of transportation

Creating a robust and durable social infrastructure











Reinvestment made to capital

Global Network

We have business locations in nine countries and regions, including Japan. Our overseas sales account for almost 80 percent of total sales.

(Consolidated subsidiaries: Japan 12, overseas 14)









Electric Glass Fiber NL, B.V. (The Netherlands)

Nippon Electric Glass Europe GmbH (Germany)

Electric Glass Fiber UK, Ltd. (U.K.)



Paju Electric Glass Co., Ltd. (Korea) Electric Glass (Korea) Co., Ltd. (Korea) Nippon Electric Glass (Korea) Co., Ltd. (Korea)

Electric Glass (Shanghai) Co., Ltd. (China) Electric Glass (Nanjing) Co., Ltd. (China) -

Nippon Electric Glass Co., Ltd.

Electric Glass (Xiamen) Co., Ltd. (China)-Electric Glass (Guangzhou) Co., Ltd. (China)

> Nippon Electric Glass Taiwan Co., Ltd. (Taiwan)

Nippon Electric Glass (Malaysia) Sdn. Bhd. (Malaysia)













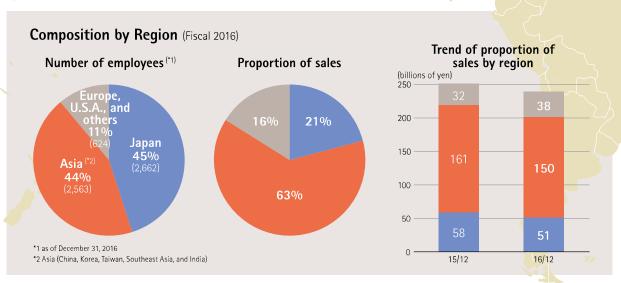
Techneglas LLC (U.S.A.)

Nippon Electric Glass America, Inc. (U.S.A.)



Tokyo Office & Sales Headquarters





Research & Development

Glass is a unique material in that it can be customized to different shapes with a wide variety of functions by modifying its composition and altering the various forming and processing methods used. Since our establishment, we have engaged in developing a range of technologies for material design, evaluation, melting, forming, and processing. Furthermore, we have used our compound technologies to create numerous types of glass products. We aim to make ongoing contributions to a brighter future through the development of various high-function glass products that provide positive benefits to society.

Outline of R&D policy Basic glass technology Applied **Business** expansion in growth areas Combining materials and processes technology Material evaluation miconducto technology development Displays Medical Car Compound echnologies Lighting Energy Social Home Infrastructure Appliances

R&D Policy

We develop new products using our basic glass technology that includes material design, evaluation, process design, and development of processing methods. We build on these basic technologies by combining applied technology, including precision processing, and ultra-thin glass substrate and ultra-large substrate manufacturing technologies. We will focus on expanding business in growth areas such as Automotive, ICT, Medical Care and Displays. Through these endeavors, we will create value for society.

Collaboration between staff and line departments



R&D Organization

Our staff departments work on the core area of basic research and development, namely, developing fundamental technologies. This includes tasks such as designing materials and processes and developing evaluation technologies. Meanwhile, the line departments work on business sector development which includes improving products in our existing business sectors by devising advanced functions in response to customer requirements. Furthermore, our staff departments and line departments collaborate intensively on strategic development based on our medium-term development agenda. Examples include creating next-generation businesses and developing manufacturing processes that help to reduce environmental burdens. These development activities are carried out through proactive cooperation with universities, research institutes and companies, both in Japan and overseas.

R&D Investment

By attributing major importance to investing in future technologies, we specified the reinforcement of R&D operations as one of the key policies of EGP2018, our medium-term business plan. We will invest in selected products and business areas that will support our future growth, in a focused and targeted manner, taking into account market needs and technological advancement.

R&D expenditure

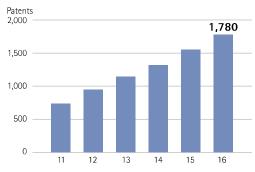




Intellectual Property

Enhancing our strength in intellectual property is a keystone of our business strategy. We regard the importance of our worldwide patent portfolio as a protector of our business and use it proactively in cross-licensing. The portfolio is steadily on the increase; we will endeavor to acquire patents in areas of business growth which match the needs of our business portfolio.

Number of acquired patents



R&D Centers

Our P&P Technology Centers carry out research and development of basic technologies and applied technologies for glass manufacturing. The Otsu center primarily engages in materials design, analysis and evaluation and basic process analysis, while the Takatsuki center focuses on development of processes for creating glass with new functions and compound technologies. The term "P&P" stands for "process and product," representing our philosophy regarding technology development: Development of novel technologies and processes must be valued, and the accumulated results of development will be reflected in the quality of our products.



P&P Technology Center Otsu



P&P Technology Center Takatsuki



Products and Technology

G-Leaf™ Ultra-Thin Glass: Ultimately Thin and Environmentally Friendly



Outstanding glass properties

•Optical properties •Electrical insulation •Gas barrier properties •Heat-resistance •Weather-resistance •Chemical stability •Green glass (As-free and Sb-free)



Properties achieved through the overflow process

•Surface flatness and smoothness (no need for polishing)



•Flexibility •Lightweight •Workability

Glass has various excellent properties: it can be formed into various shapes and sizes, it has gas barrier properties so it is impervious to air and water, and it is heat resistant. Accordingly, it is used in a multitude of applications, from building windows and dishware to highly advanced fields of telecommunication and aerospace.

We are developing new technologies that will promote utilization of those properties across an ever-broadening range of applications to enhance lifestyles and make a genuine contribution to society.

One major focus of our efforts is the pursuit of thinness. In that pursuit, we developed G-Leaf™ which is an ultra-thin glass with a thickness of no more than 0.2 mm (200 um). We are now able to make G-Leaf™ as thin as 0.03 mm (30 µm). In comparison, normal copy paper is around 0.05 mm, which shows just how thin G-Leaf™ is.



The name G-Leaf™ expresses the key characteristics of the product. It is environmentally friendly green glass containing no As (arsenic) or Sb (antimony), and is as light and thin as a leaf.

Breakthrough qualities applicable to numerous fields

The truly innovative property of G-Leaf™ ultra-thin glass is that it is not only extremely light but it has an incredible surface flatness and smoothness and is flexible enough that it can be rolled up. Even so, G-Leaf™ offers all the typical attributes of glass, including optical and gas-barrier properties and weather- and heat-resistance. We expect G-Leaf™ to contribute to the evolution of technologies and products across a broad range of fields. Moreover, G-Leaf™ requires only minimal materials to manufacture and can be transported compactly in rolls, saving on consumption of resources and energy and helping to reduce costs. It is a truly environmentally friendly material.

Overflow process for improved ultra-thin glass

The overflow process enables the production of thinner glass. This process allows for stable production of G-Leaf™ ultra-thin glass with all its excellent properties. The standout feature of the overflow process, which is also used to produce glass substrates for flat panel displays, is its ability to produce extremely smooth and evenly flat glass that requires no polishing, because the only thing that the glass surface makes contact with is air.

Overflows evenly from both sides molten glass Streams fuse at the bottom of the forming wedge

Direction in which it is drawn

gas barrier properties of G-Leaf™ protect humidity- and oxygen-sensitive OLED elements and its flexibility adapts well to the profile requirements of flexible displays.

Lamion[™] is a product manufactured by laminating G-Leaf™ on to the surfaces of resin plates and films. Lamion™ is lighter than glass sheets of the same thickness by around 30-50%, and offers excellent properties of both glass and resin. It is highly resistant to scratches and shock. These features make the product useful for digital signage covers for outdoor public facilities and platform doors at train stations.

In various businesses, G-Leaf™ provides solutions to issues that film and other materials cannot resolve, thereby increasing its potential to facilitate the development of more advanced technologies and products.



OLED lighting device made using G-Leaf™ (co-developed with Fraunhofer FEP, Germany)

Contributing to society by making glass thinner, lighter, and more flexible

We have been developing G-Leaf™ ultrathin glass for use in noteworthy nextgeneration technologies, such as glass substrates for organic light-emitting diode (OLED) lighting and flexible display units, and have verified its utility. The excellent

World's first black copper mesh touch sensor sheet using ultra-thin glass

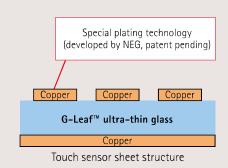
We are currently developing a capacitance type touch sensor sheet by forming fine black copper mesh on G-Leaf™ ultra-thin glass (displayed as a reference exhibit at Touch Taiwan 2016, held in August). The combination of copper mesh and thin glass substrate flexible enough for curved surfaces is a world first.

Features of black copper touch sensor sheet:

- 1. Clear visibility
- 2. Improved operability through excellent electric properties
- 3. Suitable for large touch panels
- 4. High durability (heat-resistant, weather-resistant, long-life)
- 5. Adaptable to cylindrical shape



Touch panel prototype



Nippon Electric Glass Annual Report 2016 21

Directors and Corporate Auditors



(front row, from left to right) Takeuchi, Arioka, Matsumoto, Tomamoto (back row, from left to right) Odano, Tsuda, Saeki, Yamazaki, Mori

Directors

Chairman of the Board (Representative Director)

President

(Representative Director)

Executive Vice President Senior Vice President Senior Vice President Senior Vice President

Senior Vice President

Masayuki Arioka

Motoharu Matsumoto

Executive Vice President Hirokazu Takeuchi Senior Vice President Masahiro Tomamoto

> Akihisa Saeki Koichi Tsuda Hiroki Yamazaki

Sumimaru Odano (Outside Director) Shuichi Mori (Outside Director)

Corporate Auditors -

Fujio Kishi (Full-time)
Masahiko Oji (Full-time)
Kazuya Ishii (Outside Corporate Auditor)
Keijiro Kimura (Outside Corporate Auditor)

Executive Officers

Seiichi Osako Shigeru Goto Toshimasa Kanai Yusuke Maenaka Akira Kishimoto Norio Nakamura Kiyohide Takeuchi Kunihiro Nakagawa Hiroaki Nomura Masaya Kubo Haruki Matsumiya Tomonori Kano Masaaki Kadomi Mamoru Morii



(from left to right) Ishii, Kishi, Oji, Kimura

Corporate Governance

To maintain public trust and to achieve sustainable growth, every employee and executive of our group will comply with laws and international rules and consistently act in accordance with our group's high ethical standards.

In fiscal 2016, for the first time, the company conducted an analysis and evaluation of the effectiveness of the Board of Directors and consequently complied with every principle stipulated in Japan's Corporate Governance Code. We will strengthen management supervisory functions and invigorate Board of Directors meetings which will help raise our group's competitiveness and achieve our EGP2018 medium-term business plan.

Our Corporate Governance Policy

We believe that to increase corporate value and achieve sustainable growth, it is essential to ensure managerial transparency and continue to strengthen supervisory functions regarding the execution of

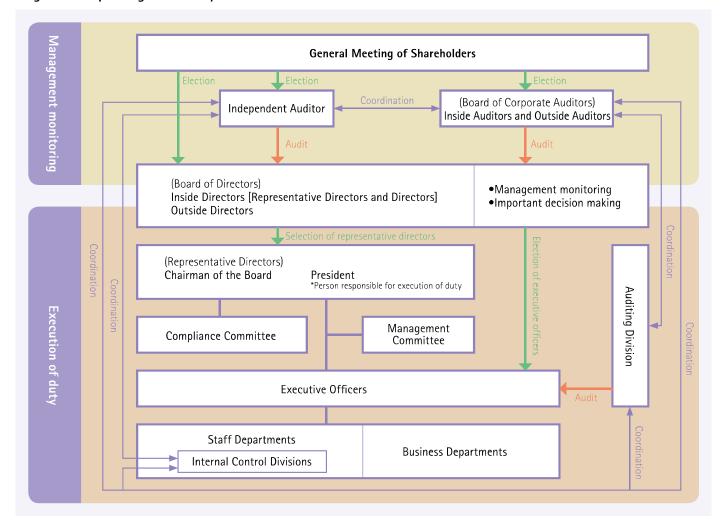
business affairs. This is our basic policy regarding corporate governance and we will strive to improve our organization and systems to fulfill this policy.

Corporate Governance Structure

Board of Directors

The Board of Directors makes decisions on important management affairs of our group and supervises the execution of business affairs. As of March 30, 2017, the Board of Directors consists of nine directors (including two representative directors, five inside directors, and two outside directors). To achieve clarity of management responsibility and a flexible management system capable of responding to changes

Diagram of corporate governance system (as of March 30, 2017)



Corporate Governance

in the business environment, our group has shortened the term of Directors to one year. Regular Board of Directors meetings are held on a monthly basis, and extraordinary Board of Directors meetings are held as necessary, to make decisions regarding important managerial issues and to supervise the execution of business affairs (management monitoring). In addition, the Board of Directors monitors management by receiving explanations directly from the Executive Officers about the summary of the business results of the current fiscal year and the budget of the next fiscal year in their charges respectively, at the budget meeting held once a year.

We disclosed the reasons for the appointment of each director in the notice of the 98th general meeting of shareholders (held on March 30, 2017) and uploaded the notice to our website. (http://www.neg.co.jp/uploads/sites/2/201703_98_en.pdf)

Board of Corporate Auditors

Our group uses a corporate audit system. The Board of Corporate Auditors consists of four Corporate Auditors, two of whom are Outside Corporate Auditors as of March 30, 2017. Corporate Auditors carry out audits of the Directors' execution of their duties through assessing business affairs and corporate assets and setting important audit items according to auditing policies,

Attendance of Board of Directors and Board of Corporate Auditors meetings in fiscal 2016

	Name	Board of Directors	Board of Corporate Auditors
Representative Directors	Masayuki Arioka	16/16 meetings (100%)	_
	Motoharu Matsumoto	16/16 meetings (100%)	_
Directors	Hirokazu Takeuchi	16/16 meetings (100%)	_
	Masahiro Tomamoto	16/16 meetings (100%)	_
	Akihisa Saeki	16/16 meetings (100%)	_
	Koichi Tsuda	16/16 meetings (100%)	_
	Hiroki Yamazaki	13/13 meetings (100%) (since appointed in March 2016)	
Outside Directors	Sumimaru Odano	16/16 meetings (100%)	_
	Shuichi Mori	13/13 meetings (100%) (since appointed in March 2016)	
Full-time Corporate Auditors	Fujio Kishi	16/16 meetings (100%)	13/13 meetings (100%)
	Masahiko Oji	16/16 meetings (100%)	13/13 meetings (100%)
Outside Corporate Directors	Kazuya Ishii	16/16 meetings (100%)	13/13 meetings (100%)
	Keijiro Kimura	14/16 meetings (88%)	12/13 meetings (92%)

plans, and assignment of duties established by the Board of Corporate Auditors as well as through participation in Board of Directors meetings. Meetings of the Board of Corporate Auditors are held monthly in principle, and Corporate Auditors share information and exchange their views there. The Corporate Auditors will endeavor to improve the effectiveness of their audits through expanding their knowledge about the business of our group. For this purpose, the Corporate Auditors take various measures, such as attending the budget meeting and periodically questioning Directors and/or Executive Officers about their duties and issues to be handled by them.

Management Committee

The management committee deliberates on our group's important managerial affairs as well as detailed action plans regarding the decisions made at the Board of Directors meetings. Management committee meetings are held twice a month on a regular basis and also when deemed necessary.

Corporate Officers

Our group uses a corporate officer system to promote faster decision making, ensure managerial transparency, and enhance the execution of business affairs. As of March 30, 2017, there are 20 corporate officers (six of whom are directors). The President is responsible for execution of duties and the other corporate officers execute the duties assigned to them by the President. Each corporate officer serves for a term of one year.

Outside Directors and Corporate Auditors

As of March 30, 2017, there are two outside directors and two outside corporate auditors in our company. One of the outside directors is an economist who has special knowledge and broad experience in the field of global economics. The other outside director has long been involved in corporate management, and has vast knowledge and experience in that arena. They provide objective advice and views at Board of Directors meetings. Their appointments will further strengthen



management supervisory functions.

Outside corporate auditors consist of one attorney and one certified public accountant, who are both independent from the company and are highly informed in their respective fields. They proactively perform their auditing duties and reinforce supervisory functions. We base our selection on whether or not candidates satisfy requirements set for "independent directors/corporate auditors" in accordance with the Tokyo Stock Exchange's rules and regulations. At the same time, we also take into account the importance of avoiding any risks or conflicts of interest with our general shareholders. We have registered all of our outside executives as independent directors/corporate auditors with the Tokyo Stock Exchange.

Analysis and Evaluation of the Effectiveness of the Board of Directors

We asked all our directors to respond to a questionnaire to investigate their effectiveness. We found that the Board of Directors was viable and functioning effectively. We will continue to conduct such surveys to rate the board's effectiveness and ensure that deliberations are conducted at Board of Directors meetings.

Compliance System

Our group has established a compliance committee, a specialized organization that keeps all employees of our group informed to ensure their compliance with laws and corporate ethical standards. The committee is responsible for the following activities.

- Drafting revisions to the Corporate Philosophy, Group Code of Conduct, and Principles of Activities
- Collecting and analyzing information on compliance and providing compliance training
- Installing and managing an internal reporting system (NEG Hotline)

Compliance Program

Group Code of Conduct and Principle of Activities

To ensure that all employees of our group are informed regarding compliance, we have created the Group Code of Conduct and Principle of Activities. We have printed wallet-sized cards with the Code of Conduct, Principle of Activities, Corporate Philosophy Structure, and an introduction about the NEG Hotline. These cards were distributed to all employees of our group.



Corporate Governance

Internal Reporting System

We have installed a system called the NEG Hotline. The purpose of the NEG Hotline is to prevent any legal violations, wrongdoings, or unethical acts as well as promote early detection and quickly resolve any such acts if they occur. We have established two consultation hotlines, one that connects employees to the compliance committee (internal contact point) and another that connects to a lawyer's office (outside contact point). The confidentiality of the informers is strictly protected at both contact points, so that no harm or unfair treatment will occur.



Electric Glass (Xiamen), compliance training



Tokyo Office, antitrust seminar

Ensuring Compliance

In order to raise awareness throughout our group, each year we carry out compliance training as a part of an education program for newly hired employees and antitrust seminars for employees engaged in sales activities.

We have designated October as Compliance Awareness Month. We conduct compliance seminars for executives and compliancerelated internal training throughout our group companies both in Japan and overseas, and put up compliance awareness posters throughout our facilities. We also ask all executives and employees of our group in Japan and overseas to provide us with signed declarations promising that they will abide by the Group Code of Conduct. This gives them the opportunity to reflect on how they carry out their work in terms of compliance.

Risk Management

Our group reviews business risks on a periodic basis, based on the company's basic policy on internal control, and takes actions to manage such risks. In cases involving any business risks that are deemed significant*, responsible divisions or special committees establish regulations and guidelines, conduct training, prepare manuals, and undertake other necessary activities.

*Significant business risks related to compliance, finance, the environment, disasters, trade control, information management, product quality, and health and safety



Implementation of BCP

To be prepared for disasters such as earthquakes, windstorms, floods, and fires, we created a disaster management manual based on the company's disaster prevention regulations, and we carry out emergency drills periodically. However, in the wake of the 2011 Great East Japan Earthquake, we have reviewed our disaster management measures and also implemented seismic reinforcement to our buildings, production facilities, and equipment. In fiscal 2015, we began using Business Continuity Planning (BCP), which replaced the previous disaster prevention regulations. To facilitate the processes necessary for BCP, we have created a new BCP manual providing information on detailed preparation procedures and actions that should be taken when an emergency or disaster strikes. In accordance with the implementation of BCP, we have introduced a system that will efficiently confirm the whereabouts of all domestic employees and their families in case of an emergency. Moreover, in order to realize quick recovery of production and resume supplying our customers, we are also strengthening our risk management system of procurement. In November 2016, to verify the effectiveness of the rules and manuals of each department, we conducted BCP response training in which the President acted as head of the disaster control headquarters.

Basic policy of BCP

- 1. To protect each employee and their families and to secure their safety
- 2. To protect production equipment, to prevent the spread of damage as well as secondary disasters from occurring within the company and the adjacent communities, and to help with rescue efforts
- 3. To resume providing clients with products and services as rapidly as possible



Otsu, BCP response training



Electric Glass (Guangzhou), life-saving training



Electric Glass (Guangzhou), emergency drill

Communication with Stakeholders

To improve management and enhance our corporate value, we strive to maintain active communication and deepen mutual understanding with various stakeholders.

We declare in our NEG Group Code of Conduct that we disclose necessary corporate information in a timely and appropriate manner, and communicate on a broad basis with stakeholders.

Communicating with Shareholders and Investors

Shareholders' Meeting

On March 30, 2016, the 97th general meeting of shareholders was held in the conference room at our head office. Following a report on the fiscal year results and our EGP2018 medium-term business plan, our management responded in a sincere manner to issues raised by our shareholders such as governance and overseas presence.



The 97th general meeting of shareholders (March 30, 2016)

Communicating with Investors

Over the course of each year, we communicate with institutional investors, both in Japan and overseas, by way of various activities, including interviews, teleconferences, financial results briefing sessions, and participation in IR-related events organized by securities firms. Through such communication, we explain our growth strategy and corporate value. Investors' opinions and requests are not only relayed to our management but are also utilized to help improve our investor relations activities.

Fiscal 2016 Results

Aggregate number of dialogues carried out: 149 companies

Information Disclosure Tools

We ensure prompt disclosure of information through use of the Tokyo Stock Exchange's Timely Disclosure Network (TDnet) and by posting information on our website in a timely fashion. Furthermore, to disclose information in a prompt, appropriate and fair manner, we make active use of news releases and web pages to present such information as we believe it assists our stakeholders to gain a better understanding of our group.





Communicating with Customers

We participate in a large number of exhibitions within and outside of Japan with the aim of promoting communication with as many customers as possible, so as to attract more business.



SID Display Week 2016

Communicating with **Business Partners**

Achieving coexistence and co-prosperity with our business partners is one of our basic procurement policies, demonstrating that we focus on growing in partnership with our suppliers through our procurement activities. Each year, we organize a Briefing Session for Business Partners. In the 2016 session, we presented our corporate philosophy structure and medium-term business plan, followed by an explanation of our sustainable green procurement policies.



Briefing Session for Business Partners

Communicating with the Local Community

Each of our business units arranges gettogethers with residents' associations as part of our communication with local communities. Through organization of factory tours, both our domestic and overseas subsidiaries promote further understanding

Major exhibitions participated in 2016

Name of Exhibition	Period	Location	Outline of Trade Fairs
The 8th Light-Tech Expo (Lighting Japan)	Jan. 13-15	Japan	LED and organic EL technologies
HPBExpo 2016	Mar. 17-19	U.S.A.	North America's largest stoves trade fair
The 9th Optics Expo (within Photonix 2016)	Apr. 6-8	Japan	Optical components and optical sensing
International Technical Exhibition of Medical Imaging 2016	Apr. 15-17	Japan	Medical diagnostic imaging equipment
SID DISPLAY WEEK 2016	May 24-26	U.S.A.	World's premier display technology event
JPCA Show 2016 (Module Japan 2016)	Jun. 1-3	Japan	Advanced electronic circuit technologies
Touch Taiwan 2016	Aug. 24-26	Taiwan	Touch panels and optical films
The 18th China International Optoelectronic Expo (CIOE)	Sep. 6-9	China	China's largest optical communication exhibition
CEATEC JAPAN 2016	Oct. 4-7	Japan	One of Asia's largest for IT and electronics
K 2016	Oct. 19-26	Germany	World's largest for plastics and rubber industries
Biwako Environmental Business Exhibition 2016	Oct. 19-21	Japan	One of Japan's largest featuring environmental industries
API China (PHARM PACK)	Nov. 16-18	China	China's largest trade fair for pharmaceuticals packaging
The 14th Shenzhen International Touchscreen Exhibition 2016 (C-Touch)	Nov. 24-26	China	One of the world's largest exhibitions for touch panels
SEMICON Japan 2016	Dec. 14-16	Japan	Microelectronics manufacturing

among their neighboring communities of our group's attitude toward manufacturing and environment-oriented initiatives.



Residents' association members visit Electric Glass (Korea)

Communicating with Employees

Issued regularly, our internal magazine Sho-Yu serves as a vehicle for fostering a better understanding of our group's corporate philosophy and sharing our vision with all employees. Top messages and content relating to our corporate business policies are translated into the languages of the respective localities in which our overseas subsidiaries operate. Sho-yu carries not only company-related information but also articles focusing on individual employees, with the objectives of offering topics to enhance workplace communication and improving relationships among employees. We are also making efforts to reinforce a sense of unity among our employees through organizing workplace get-togethers and events in which members of employees' families can also participate. In addition, our executives visit overseas subsidiaries to proactively engage in communication with local employees.



Internal magazine Sho-Yu



Electric Glass (Shanghai), dragon boat competition

Contributing to Local Communities

We engage in activities such as voluntary cleaning, offering plant tours and participation in community events to continue close interactions with local communities and to provide positive support for the development of the younger generation.

包括協定締結

Signing ceremony, University of Shiga Prefecture

Supporting the Younger Generation

Academic-industrial Collaboration

We concluded a comprehensive university-industry collaboration agreement with the University of Shiga Prefecture in 2007. Based on that agreement, we have been collaborating with the university on a variety of ongoing glass engineering-related projects which include the establishment of an endowment course, joint research and technological exchange on glass engineering, and supporting the development of tomorrow's leaders.

Visiting Lessons

Every year, we co-sponsor and cooperate with Otsu City Science Museum in IF (Innovation for the Future) Class to popularize scientific knowledge. We give visiting lessons to local elementary and junior high school students, in which they can learn about the characteristics and functions of glass, and also enjoy the experience of cutting glass.



IF Class visiting lesson

Plant Tours

We organize plant tours for local residents, students, and children to enhance

understanding about our business activities and to support the development of the younger generation.

Coexistence with Local Communities

To strengthen our ties with local communities, we proactively carry out volunteer activities such as cleaning and planting greenery and host various events to which we invite local residents.



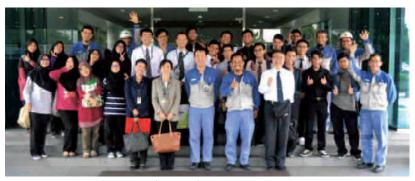
Electric Glass (Xiamen), clean-up after a typhoon



Shiga Takatsuki, clean-up around the plant



Shiga Takatsuki, enjoying a summer festival with local residents



Nippon Electric Glass (Malaysia), University of Malaya students tour our plant





Children visit Takatsuki Industrial Park (administered by our Shiga-Takatsuki plant, free public admission)

Donation and Support Activities

In response to the 2016 Kumamoto earthquake, the company donated 10 million yen and employees of our group and affiliated companies donated 522,324 yen. In addition, every year we make contributions to assist the elderly, community associations, and welfare organizations of the local community. We also allow use of our facilities to help promote local activities.



Otsu, special Olympics practice in our gym



Otsu, donation for Kumamoto earthquake



Electric Glass (Guangzhou), donating goods to local municipality



Electric Glass (Korea), making Kimchi for charity



Electric Glass (Korea), donation to welfare organization

Environmental Conservation

We regard "consideration for the environment" as one of our key values, and will continue to manufacture products that are friendly to the environment.

Our Way of Thinking on Environmental Conservation

As stated in our values, we regard "consideration for the environment" with great importance, and to live up to this value, we have been striving to reduce environmental burdens. Furthermore, we have been managing our business based on the belief that practicing the world's most efficient manufacturing methods is, in fact, the key to realizing the world's most environment-friendly manufacturing.

Against this backdrop, in August 2016, we revised our Environmental Charter in order to meet social expectations and comply with the new ISO 14001 standards (2015). The Environmental Charter sets forth our fundamental policy for, and gives direction to us in, our initiatives toward environmental conservation. In accordance with our Environmental Charter and through our glass business, our group will continue to be instrumental in helping to preserve the global environment and create a recycle-oriented society.

Motoharu Matsumoto, President

Environmental Charter

[Environmental Principles]

Preservation of the global environment is extremely important and indispensable for the prosperity of civilization and humanity in the 21st century.

Nippon Electric Glass, upholding the Corporate Philosophy of "To build a brighter future for the world by uncovering the unlimited possibilities of glass for more advanced creative manufacturing" and adhering to "consideration for the environment" as one of its essential corporate values, strives to be and remain the world's leading manufacturer of special glass by ensuring the state-of-the-art technological development, the highest quality standards, efficient production, and steady product supply. Nippon Electric Glass and its group companies are committed to contributing to preservation of the global environment and realization of a recycling-based society by adopting high-efficiency and environmentally responsible processes.

[Action Plan]

- 1. We will honor and observe all environment-related laws and regulations and the environment-related agreements and conventions that we have signed, and establish and enforce our own and voluntary environmental restrictions.
- 2. We will endeavor to reduce our environmental impact in all aspects of our corporate activities and in all stages of the product life cycle, including procurement, manufacturing, transportation, sales, use, reuse, treatment and disposal.
- 3. We will attain the world's highest-level manufacturing to more effectively utilize natural resources and energy sources, thereby contributing to preservation of biodiversity and reduction of greenhouse gas emissions.
- 4. We will strive to adapt our activities to the requirements of 21st-century society to prevent pollution, thereby optimizing our presence in society.
- 5. We will set environmental objectives and targets and attain them through optimization of our essential operations and environmental protection activities in which all employees participate. We will also continuously improve our environmental management system to enhance our environmental protection performance.

This Charter will be informed to all employees and affiliated companies, and will be made available to parties outside the Company at their request.

Promotion of the Environmental Management Plan

In fiscal 2016, in order to improve environmental performance, all domestic plants set 35 objectives, of which 30 were attained. A total of 38 objectives have been set for fiscal 2017. We will further enforce the implementation of the PDCA cycle and engage in activities to achieve these targets with a stronger sense of awareness and responsibility.

Adapting to New ISO 14001 **Standards**

In September 2015, the international environmental standard ISO 14001 (2015) was revised to ensure its adaptation to today's mounting environmental concerns and changes in social environment. We have implemented from January 2017 a new Environmental Management System (EMS) which incorporates the new ISO 14001 standard. We will undergo the auditing process to receive accreditation for the new ISO 14001 standard in 2017.

Environmental Education

In accordance with our plans to renew ISO 14001 certification, we have begun educational activities, mainly with employees engaged in internal auditing and administration of each plant, regarding the new ISO standard and EMS in preparation.



Environmental Control Logo

This logo is used when making internal postings about our EMS activities and Environmental Charter. The design was selected through internal suggestions. The green leaves represent environmental technology, nature and the hands of our employees, while the blue circle depicts the sky and the earth, environmental equipment made by our employees and the community and society surrounding us.

Environmental Management Activity Organizational Chart

Environmental Management President Meeting The executive officer in charge of environmental management serves as chair, and the President and representatives of each operational department attend this meeting. Representatives from overseas subsidiaries participate as necessary. Specific environmental conservation activities based on the Environmental Management President's environmental policies Meeting and performance report take place, promotion updates are shared, and deliberation on our group's environmental conservation activities are carried out at this meeting. Environmental Management Meeting for Environmental Managers Meeting Management Personnel Internal Environment Auditing Committee

ISO 14001 certification status

The ISO 14001 certification status of our group is as follows:

Company name	Date of certification
Nippon Electric Glass Co., Ltd. (multi-certification at four plants)	Aug. 27, 1999
Group companies	
Japan	
SGS Engineering Co., Ltd.	Jan. 19, 2001
Nichiden Glass Processing Company, Limited	Nov. 1, 2002
Shiga Nichiman Company, Limited	Feb. 15, 2013
Overseas	
Techneglass LLC	Jan. 31, 2000
Nippon Electric Glass (Malaysia) Sdn. Bhd.	Jan. 12, 2002
Nippon Electric Glass Taiwan Co., Ltd.	Sep. 18, 2006
Paju Electric Glass Co., Ltd.	Aug. 28, 2007
Nippon Electric Glass (Korea) Co., Ltd.	Oct. 9, 2007
Electric Glass (Shanghai) Co., Ltd.	Dec. 21, 2009
Electric Glass (Korea) Co., Ltd.	Dec. 9, 2014
Electric Glass (Guangzhou) Co., Ltd.	Nov. 11, 2015

Environmental Conservation

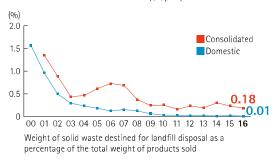
■ Environmental Business Plan

As one of our specific environmental activities, we have implemented an Environmental Business Plan over a number of years. This is an original activity whereby our concept for business operations is applied to environmental conservation activities, including deployment of 3R activities (reduce, reuse, recycle), with waste, water and exhaust gas as the main themes. This will help reduce environmental burdens that result from our glass production operations.

Waste reduction

Since this activity began in 2000, the amount of solid waste destined for landfill (Category D) has been steadily decreasing. Graph 1 indicates the changes in the ratio of solid waste (destined to become landfill waste)

Reduction of Landfill Waste (Graph 1)



Waste categories Categories classified by treatment level

		Internal Recycling (Category A)	-Electric precipitator (EP) dust -Polishing sludge -Scraps of glass
	Waste Handled Externally	Social Recycling (Category B)	-Scrap metal, scrap bricks -Waste paper and cardboard for recycling -Waste pallets
Waste in Total		Corporate Recycling (Category C)	-Recycling of scrap plastic to result in fuel -Recycling of polishing sludge as raw materials for cement -Recycling of waste oil to result in fuel
		Landfill Waste (Category D)	-External intermediate disposal of waste acids and waste alkalis -Incombustible waste, incinerated ash, mixed garbage, waste refractories

of products sold, as a result of standard manufacturing processes. In 2009, we achieved our aim of reducing the weight of solid waste destined for landfill disposal to be equivalent to 0.1% (or less) of the total weight of products sold for our Japanbased operations, and we maintain that level even today. Going forward, we will actively promote reduction of corporate recycling (Category C), which is outsourced, in addition to reducing landfill waste (Category D).

Water reduction

We have been working on reduction of water usage, not only in pursuit of resource conservation but also because we believe the level of manufacturing is represented in the way water is used. We aim at fully understanding the entire glass manufacturing process, including melting, forming, and processing (cleaning), using water as an index, and improving process techniques as well as equipment. At our overseas facilities, water resources are more valuable than they are in Japan. We will strive to reduce water usage and waste water volumes by horizontally disseminating knowledge that has been acquired over the years in Japan.

Reduction of evaporated glass components in glass melting furnaces

Exhaust gas from furnaces includes evaporated glass components which are caught by electrostatic precipitators and then recycled. The objective of reducing evaporated glass components in exhaust gas refers not only to removing such components by using electrostatic precipitators, but also keeping the volume of such components arising during the melting process as low as possible. Such reduction activities will allow for improvement in

our melting technology and energy conservation and lowering CO₂ emissions, which will result in lowering environmental burdens.

Graph 2 shows the reduction of the amount of evaporation from glass components

Volume of water usage compared to weight of products sold

Water entering NEG premises

Well water, tap water, industrial water, rainwater, spring water



Water used/reused internally



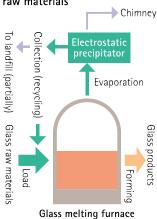
Water leaving NEG premises



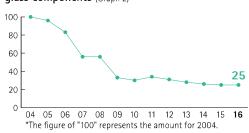
Discharge into rivers
Discharge to public
sewage

Evaporating water,
water sprinkling for
green spaces

Recycling mechanism for glass raw materials



Change of the amount of evaporation from glass components (Graph 2)







Moku-moku River at Notogawa plant remains as it was in the 1970s

generated during the glass melting process for our core business of glass for Flat Panel Displays (by over-flow process). The index is based on the total volume of evaporated glass components in exhaust gas compared to the total weight of glass sold. Compared to the level in 2004, before this business plan commenced, the percentage has been steadily decreasing and was reduced to one-fourth of the level prior to initiation of this plan.

Our Global Warming Countermeasures

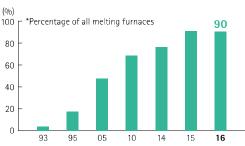
We use a significant amount of energy to melt glass; therefore, we put in great effort to conserve energy used in our glass melting furnaces and reduce the emission of greenhouse gas. The issue of greenhouse gas emission was discussed at the 2015 Paris Climate Conference (COP21), and Japan made part of its reduction target an international pledge. We will continue our endeavors to reduce greenhouse gas.

Introduction of oxy-fuel firing glass melting furnaces

In 1993, we introduced the first oxy-fuel firing glass melting furnace in Japan as a result of designing and developing our own oxy-fuel burner and glass melting furnace. Introduction of these furnaces is nearly completed. Compared to air combustion furnaces, oxy-fuel firing furnaces produce approximately 20% less CO₂ per unit of production weight.

The key issue for oxygen combustion is to remove the nitrogen that comprises 80% of air and is not associated with either combustion or heating. Thus, thermal

Oxy-fuel firing furnaces used for melting

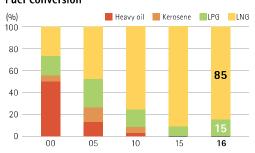


nitrogen oxides (NOx) generated when nitrogen is oxidized at high temperatures are rarely produced. The amount of exhaust gas is also substantially reduced, and thermal efficiency is improved, resulting in lower fuel consumption and CO₂ emissions.

Fuel conversion in glass melting furnaces

We have been switching to fuels with less environmental impact to fuel our glass melting furnaces. We have converted from heavy oil to LPG and ultimately to LNG, thus reducing CO₂ emissions.

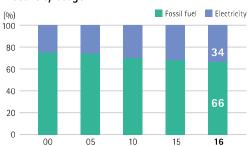
Fuel conversion



Increasing electricity usage in the glass melting process

In the melting process, both gas and electricity are used. In electric heating, unlike that using gas fuel, electrodes are directly inserted into the molten glass, resulting in excellent thermal conductivity to the glass. Also, in heating with electricity, the amount of exhaust gas can be substantially reduced compared with that generated by heating with fossil fuels. Thus, if electricity use is increased in percentage terms, energy savings can be achieved as well as reductions in CO2 emissions. Our group is continuing on with company-wide activities aimed at increasing electricity as an energy source used to melt glass.

Electricity usage



Developing Human Resources and Diversity

We respect the individuality and diversity of our employees and are committed to creating a workplace environment in which each of our employees is given opportunities to maximize their potential and gain a sense of fulfillment.



Employing and Developing Global Human Resources

Our business continues to diversify globally, with increases in the ratio of overseas sales and production. We are implementing initiatives to hire and develop human resources who are able to demonstrate great performance in both domestic and overseas environments.

Employment Activities

We welcome new graduates who are willing to take active roles in the global business arena. As one of our initiatives to recruit people with such talent, we participate in job fairs catering to international students. From fiscal 2012 to date, we have hired a total of 126 employees, including both new graduate and mid-career hires. Among them were eight international employees. We have put a support system in place for these international employees at each of their workplaces, and they are all performing well by positively asserting their individuality. We will continue to hire a diverse array of employees so that we can respond to global challenges and create a dynamic organization.

Human Resources Development

We are implementing a more progressive approach to nurturing employees for global business. In fiscal 2013, we started a Global Communications Program (GCP), which offers language training to young employees who are candidates for roles overseas. The program places emphasis on acquiring English of a satisfactory business-use level. Those who have taken this program are carrying out negotiations

with overseas clients and affiliates, and thus we are already seeing great results.

We also have training programs for both young and mid-career employees. The young employee program is intended for fifth year employees, and enables them to acquire necessary business skills as well as understand the company's goals and requirements for human resources. The mid-career program is intended for tenth year employees, providing them with insight to assume leadership positions in the workplace. To convey implicit knowledge such as technical and experience-based knowhow in addition to manufacturing-related academic information, we have a program called Monozukuri College (Manufacturing College). Through such programs, our employees learn our corporate philosophy and work-related skills that will serve them significantly in their jobs. Furthermore, we focus on developing managerial talent and nurturing human resources for global management positions.

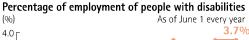
Promoting Employment of People with Disabilities

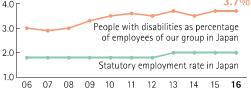
In 1980, we established a special-purpose subsidiary aimed at employing people with disabilities, and were among the first six companies in Japan to do so. To this day, our group is working toward expanding employment opportunities for people with disabilities. We have succeeded in significantly exceeding the statutory requirement and as of June 2016, our group had achieved a 3.7% employment rate for such people. In addition to employment opportunities, we strive to provide a safe

Training programs

Category	ltem
Training based on level	
	Young employee training (fifth year)
	Mid-career employee training (tenth year)
	Managerial position training (new managers)
	Mid-level management training
Global human resources	Global Communications Program (GCP)
	Overseas training for newly hired administrative employees
	Language training (English, Chinese, and Korean)
Skill-based training	Intellectual property training
_	Accounting seminars, Monozukuri College
Other	Compliance training, Antitrust seminar, Information security training







and suitable workplace environment for these employees. Initiatives include implementing support systems and enhancing acceptance in the workplace of people with mental disabilities. We have been developing programs to support the independence of local people with disabilities. Our efforts include incorporating occupational experience programs for students from nearby schools for children with special needs.

Developing the Next Generation and Promoting Female Career **Advancement**

We are working to create an employment environment in which employees can achieve a beneficial work-life balance.

In May 2015, we received the Kurumin accreditation mark from the Ministry of Health, Labour and Welfare for the fourth consecutive year. This is the first accreditation granted to a corporation based in Shiga Prefecture. This accreditation was awarded as a result of our achieving the goals set forth in our Fourth Action Plan. April 2015 marked the start of our threeyear Fifth Action Plan. We are emphasizing childcare leave for male employees and promoting their participation in this area. We believe this will increase their understanding of child rearing and

household chores and will in turn result in female employees' career continuity. In fiscal 2016, a total of four male employees took childcare leave. We also started a project consisting of female employees only, in which they search



The four-star Kurumin accreditation mark

NEG's Fifth Action Plan (Duration: April 1, 2015 to March 31, 2018)

Goal	Content
Childcare leave Females: To achieve more than 75% utilization rate Males: To achieve more than 13% utilization rate of those whose spouses have given birth to a child	Provide information regarding birth and child care systems and related issues, and promote their use
2. Allowing use of paid leave on an hourly basis	Study and adopt systems that meet employees' needs
3. Measures to reduce overtime	Require each department to set overtime reduction targets and manage them
4. Promotion of use of paid leave	Promote use of vacation days for significant days such as birthdays and anniversaries Encourage employees who have not taken much paid leave to take more
5. Female invigoration project	Incorporate systems catering to females that they believe would appropriately invigorate their careers and support their needs

for ways to invigorate the careers of female employees. They explore ways to increase female career opportunities and progress. They also exchange information and opinions with female employees at other firms.

■ Work-style Reforms

Providing an environment in which employees can be healthy and invigorated in their duties is an integral element of achieving sustainable growth for the company.

From 2017, we have started promoting work-style reforms. We will improve labor productivity by enhancing rapid internal decision making and revising business processes, which will result in reduction of overtime and allow employees to take more paid leave. We will adopt a flexible work-hour system and improve the workplace environment. Furthermore, we are considering various ways to give back to employees to compensate for the reduction in pay they will experience with the reduction of overtime.

In 2016, we had our employees take a stress test, which was made a requirement by law at the end of 2015, and provided feedback on the test. We have also implemented the Employee Assistance Program (EAP), which is operated by an external organization, and will help us to administer both physical and mental health of our employees.

Business Climate

In the global economy of fiscal year 2016, Europe continued to recover gradually. The U.S. economy also enjoyed a recovery on the back of solid employment conditions and personal consumption. A modest economic slowdown continued in China, but there were signs of a recovery due to the effects of various policies. With solid personal consumption, the Japanese economy continued to make modest recovery, due in part to improved employment conditions.

Against this backdrop, aiming at improvement of profitability in the display field and growth in developing markets, the NEG Group has been working to expand its business in China. Such actions include commencing operations and a decision on second phase investment (with a plan to start operations in the first quarter of fiscal 2018) at the melting and forming facility in Xiamen, starting operations at the processing base in Nanjing, and an agreement on a joint venture in Fujian province with Dongxu Optoelectronic Technology Co., Ltd. and its subsidiary (projected to commence operations in the second quarter of fiscal 2017). Meanwhile, in order to create a wellbalanced business portfolio, we have been expanding our business in other fields. We acquired a European glass fiber business from PPG Industries Ltd., increased production capacities in Malaysia for glass fiber and glass tubing for pharmaceutical and medical use, and invested in NS Materials Inc., as a preparatory step for future entry into the market for quantum dot (QD) phosphor-composite devices. Regarding new products and R&D activities, we have made progress on commercializing glass for supporting semiconductor wafers and infrared absorbing filters, and on developing

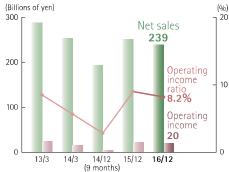
glass frit for laser-sealing of ceramic packages, and black copper mesh touch sensor sheets.

■ Analysis of Business Results

In fiscal 2016, glass fiber sales increased due to the continuance of a strong market and the contribution made by the PPG Europe business which we acquired in October 2016. Shipments of glass substrates for liquid crystal displays (LCDs) also increased but prices fell gradually. These factors resulted in net sales of ¥239,412 million (\$2,064 million) which was a 4.7% decrease on the previous fiscal year.

Profits in both operating income and ordinary income were supported by improvement in productivity and cost reductions of raw material and fuel, although a decline in sales, losses in sales revenue due to the impact of the strong yen, and foreign exchange losses were seen.

Net sales and operating income



As a result, gross profit was ¥51,509 million (\$444 million), a 2.8% decrease on the preceding year and operating income was ¥19,571 million (\$169 million), an 11.2% decrease. The operating income ratio was 8.2%, representing a decrease of 0.6 points on the previous fiscal year.

For the net amount of other income and other expenses, we experienced

losses of ¥4,369 million (\$38 million). This figure was derived chiefly from other income comprised of reversal of reserve for special repairs of ¥8,912 million (\$77 million). Other expenses included loss on impairment of fixed assets of ¥6,489 million (\$56 million), foreign exchange losses of ¥3,848 million (\$33 million), and depreciation of idle property, plant and equipment of ¥1,300 million (\$11 million).

As a result, income before income taxes was ¥15,202 million (\$131 million). This figure combined with provision for income taxes of ¥9,526 million (\$82 million), and profit attributed to non-controlling interests of ¥707 million (\$6 million), resulted in profit attributed to owners of parent of ¥4,969 million (\$43 million) and net income per share of ¥9.99 (\$0.09).

Dividends

The company follows on its basic policy of returning to its shareholders a steady return on their investments over the long term, without it being significantly affected by fluctuations in the company's earnings. The annual dividend for fiscal 2016 was ¥16 (\$0.14) per share. We plan to maintain the present level of dividend allotment in fiscal 2017. However, as we will carry out a 1-for-5 reverse stock split, effective July 1, 2017, our interim dividends for the next financial year will be ¥8 (\$0.07) with a year-end dividend of ¥40 (\$0.34). This reverse stock split will have no substantial effect on dividends.



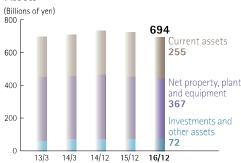
■ Financial Position

Total assets at the end of fiscal 2016 amounted to ¥693,918 million (\$5,892 million), a ¥33,020 million (\$285 million) decrease against the end of the previous fiscal year.

Current assets decreased by ¥12,560 million (\$108 million). Cash and time deposits decreased as a result of payments made for the purchases of equipment for overseas subsidiaries, payment of dividends, and acquisition of assets and shares of PPG Industries' European glass fiber business.

Net property, plant and equipment also decreased by ¥18,614 million (\$160 million) despite the above-mentioned acquisition of equipment and assets. This was mainly attributable to the decrease in tangible fixed assets resulting from a decline in value of foreign currency-denominated assets due to appreciation of the yen against certain currencies, and to depreciation and impairment of manufacturing equipment not expected to be used in the future. A portion of deferred tax assets was reversed based on the nonconsolidated results for fiscal 2016.

Assets

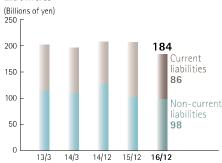


Current liabilities decreased by ¥19,375 million (\$167 million). Contributing factors included a reduction in other accounts payable due to payments made for equipment for overseas subsidiaries and repayments of long-

term debts payable within one year. Corporate bonds to be redeemed within one year were reclassified from non-current liabilities to current liabilities. Concurrently, matured bonds were redeemed.

Non-current liabilities also decreased by ¥3.408 million (\$29 million). Contributing factors included the refinancing accompanying the abovementioned repayment of matured longterm debts, cancellation of repair plans for glass-melting furnaces, and reversal of reserve for special repairs due to a change in accounting estimation.

Liabilities



Total net assets at the end of fiscal 2016 were ¥509,564 million (\$4,393 million), down by ¥10,237 million (\$88 million) on the previous fiscal year. This was attributable to a decrease in foreign currency translation adjustments due to appreciation of the yen against certain currencies, in addition to a decrease in retained earnings due to payment of dividends. Accordingly, the equity ratio at the end of fiscal 2016 was 72.7%, an increase of 2.1 points from 70.6% at the end of the preceding fiscal year.

Cash Flow Analysis

In order to achieve financial strength that will enable it to weather changes in the business environment, the NEG Group has designated the following as key elements of its fundamental financial policy: emphasize cash flow-oriented management, promote efficient use of assets (including streamlining financial and inventory assets and consolidating equipment to enhance production efficiency), and strengthen financial standing through maintaining an appropriate capitaladequacy ratio and realizing de facto debt-free management.

Cash flows



The NEG Group's cash flows for fiscal 2016 were as follows:

With regard to cash flows resulting from operating activities, compared to the previous fiscal year, a decrease was seen in depreciation and amortization despite being maintained at a high level, as well as inventories and income before income taxes. Impairment losses on manufacturing equipment increased. Meanwhile, reserve for special repairs was reversed. All these factors led to a total ¥48,261 million (\$416 million) in net cash provided by operating activities, an increase of ¥1,464 million (\$13 million) on fiscal 2015.

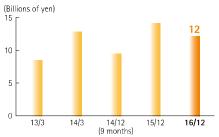
As regards cash flow from investment activities, net cash used for investing activities totaled ¥36,139 million (\$312 million), an increase of ¥3,501 million (\$30 million) compared to the previous fiscal year. This was mainly due to purchase of fixed assets in relation to Electric Glass (Xiamen) Co., Ltd., and the acquisition of PPG's European glass fiber business.

These activities resulted in a free cash flow (the total of cash flows from operating activities and investment activities) of ¥12,122 million (\$105 million), a decrease of ¥2,037 million (\$18 million) on the previous fiscal year.

Regarding cash flow from financing activities, net cash used totaled ¥17,624 million (\$152 million), an increase of ¥9,732 million (\$84 million) on account of such factors as refinancing due to repayment of long-term borrowing, redemption of corporate bonds, payments of dividends to shareholders, and cash dividends paid out to non-controlling interests.

Including the negative effect of exchange rate changes on cash and cash equivalents of ¥2,187 million (\$19 million), the balance of cash and cash equivalents at the end of fiscal 2016 was ¥126,167 million (\$1,088 million), a decrease of ¥7,689 million (\$66 million) compared to the end of fiscal 2015.

Free cash flows



Capital Expenditure

Total capital expenditure for fiscal 2016 was ¥46,429 million (\$400 million). In the Electronics and Information Technology sector, expenditures were primarily made for purchase of equipment for manufacture of glass substrates for LCDs and buildings at Electric Glass (Xiamen) Co., Ltd. and Electric Glass (Nanjing) Co., Ltd. In the Performance Materials and Others sector, expenditures were made for acquisition of PPG's European glass fiber business and to expand production capacities in Malaysia for glass fiber and glass tubing for pharmaceutical and medical use.

Contents

Consolidated Financial Statements

- 42 Consolidated Balance Sheets
- 44 Consolidated Statements of Income
- 45 Consolidated Statements of Comprehensive Income
- 46 Consolidated Statements of Changes in Net Assets
- 47 Consolidated Statements of Cash Flows
- 48 Notes to Consolidated Financial Statements

Consolidated Financial Statements

Consolidated Balance Sheets

Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries December 31, 2015 and 2016

ASSETS	Million	or of you	Thousands of
	December 31, 2015	s of yen December 31, 2016	U.S. dollars (Note 1) December 31, 2016
urrent assets:	December 61, 2016	December 617 2010	December 517 2016
Cash and time deposits (Note 5 and 9)	¥ 144,345	¥ 132,002	\$ 1,137,948
Notes and accounts receivable, trade (Note 5)	47,392	49,133	423,560
Allowance for doubtful receivables	(75)	(97)	(836)
Inventories (Note 10)	64,176	60,414	520,810
Deferred tax assets (Note 13)	5,030	4,066	35,052
Other current assets (Note 5)	6,562	9,352	80,621
Total current assets	267,430	254,870	2,197,155
Property, plant and equipment (Note 11 and 14): Land	12,657	13,639	117,578
Land	12,657	13,639	117,578
Building and structures	154,609	156,326	1,347,638
Machinery and equipment	702,723	714,697	6,161,181
Construction in progress	21,217	5,857	50,491
Total property, plant and equipment	891,206	890,519	7,676,888
Accumulated depreciation	(505,193)	(523,120)	(4,509,655)
Net property, plant and equipment	386,013	367,399	3,167,233
Investments and other assets:			
Investment securities (Note 5 and 6)	53,630	53,477	461,009
Investment in affiliates (Note 6)	1,684	1,685	14,526
Deferred tax assets (Note 13)	12,561	7,094	61,155
Other assets (Note 5)	5,620	9,393	80,974
Total investments and other assets	73,495	71,649	617,664
Total assets	¥ 726,938	¥ 693,918	\$ 5,982,052

The accompanying notes to the consolidated financial statements are an integral part of these statements.

ABILITIES AND NET ASSETS			
	Millior	ns of yen	Thousands of U.S. dollars (Note
	December 31, 2015	December 31, 2016	
Current liabilities:	·		
Short-term debt, including			
current portion of long-term debt (Note 5 and 12)	¥ 42,230	¥ 31,197	\$ 268,940
Notes and accounts payable (Note 5):			
Trade	29,567	31,605	272,458
Construction and other	16,062	8,931	76,991
Accrued expenses	9,527	9,814	84,603
Accrued income taxes	3,428	1,339	11,543
Reserve for loss on plant closing	1,036	437	3,767
Other reserves	79	89	767
Other current liabilities (Note 5)	3,471	2,613	22,526
Total current liabilities	105,400	86,025	741,595
Non-current liabilities:			
Long-term debt (Note 5 and 12)	67,500	70,800	610,345
Reserve for special repairs	31,650	23,127	199,371
Other reserves	28	32	276
Net defined benefit liability (Note 15)	1,202	1,562	13,466
Other non-current liabilities (Note 5 and 14)	1,357	2,808	24,206
Total non-current liabilities	101,737	98,329	847,664
Net assets (Note 16):			
Shareholders' equity:			
Common stock			
Authorized - 1,200,000,000 shares in Dec. 2015 and Dec. 20			
Issued - 497,616,234 shares in Dec. 2015 and Dec. 2016	32,156	32,156	277,207
Capital surplus	34,350	34,320	295,862
Retained earnings	427,431	424,442	3,658,983
Treasury stock at cost			
243,750 shares in Dec. 2015			
251,848 shares in Dec. 2016	(289)	(293)	(2,526)
Total shareholders' equity	493,648	490,625	4,229,526
Accumulated other comprehensive income (Note 4):			
Net unrealized holding gains on securities	23,290	22,558	194,465
Deferred losses on hedges	(204)	(418)	(3,603)
Foreign currency translation adjustments	(3,515)	(8,744)	(75,380)
Remeasurements of defined benefit plans		267	2,302
Total accumulated other comprehensive income	19,571	13,663	117,784
Non-controlling interests	6,582	5,276	45,483
Total net assets	519,801	509,564	4,392,793
Contingent liabilities (Note 17)			

Consolidated Statements of Income

Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries Years ended December 31, 2015 and 2016

		(Thousands of
	December 31, 2015	December 31, 2016	U.S. dollars (Note 1)
Net sales	¥ 251,178	¥ 239,412	\$ 2,063,896
Cost of sales	198,172	187,903	1,619,853
Gross profit	53,006	51,509	444,043
Selling, general and administrative expenses	30,971	31,938	275,327
Operating income	22,035	19,571	168,716
Other income (expenses):			
Interest and dividend income	1,584	1,242	10,707
Interest expense	(1,118)	(1,098)	(9,466)
Gain on sales of investment securities, net (Note 6)	2,132	-	-
Depreciation of idle property, plant and equipment	(2,149)	(1,300)	(11,207)
Loss on impairment of fixed assets (Note 11)	(1,486)	(6,489)	(55,940)
Reversal of reserve for special repairs	3,869	8,912	76,828
Foreign exchange losses	(5,743)	(3,848)	(33,172)
Loss on closing of plants	(1,255)	-	-
Other, net	(1,070)	(1,788)	(15,414)
	(5,236)	(4,369)	(37,664)
Income before income taxes	16,799	15,202	131,052
Income taxes (Note 13):			
Current	5,673	2,270	19,569
Deferred	780	7,256	62,552
	6,453	9,526	82,121
Profit	10,346	5,676	48,931
Profit attributable to non-controlling interests	709	707	6,095
Profit attributable to owners of parent	¥ 9,637	¥ 4,969	\$ 42,836
		⁄en	U.S. dollars (Note
Amount per share of common stock:	'	<u> </u>	2.3. dollars (1000
Profit attributable to owners of parent (Note 2) Diluted profit attributable to owners of parent (Note 2)	¥ 19.38 -	¥ 9.99	\$ 0.09
Cash dividends applicable to the year (Note 16)	16.00	16.00	0.14

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated Statements of Comprehensive Income Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries

Years ended December 31, 2015 and 2016

	Million	Millions of yen		
	December 31, 2015	December 31, 2016	December 31, 2016	
Profit	¥ 10,346	¥ 5,676	\$ 48,931	
Other comprehensive income (Note 4):				
Net unrealized holding gains or (losses) on securities	5,408	(732)	(6,310)	
Deferred gains or (losses) on hedges	560	(213)	(1,836)	
Foreign currency translation adjustments	(10,018)	(5,252)	(45,277)	
Remeasurements of defined benefit plans, net of tax	-	267	2,302	
	(4,050)	(5,930)	(51,121)	
Comprehensive income	¥ 6,296	¥ (254)	\$ (2,190)	
Comprehensive income attributable to:				
Owners of the parent	¥ 5,563	¥ (938)	\$ (8,086)	
Non-controlling interests	733	684	5,896	

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated Statements of Changes in Net Assets Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries

Years ended December 31, 2015 and 2016

	Thousands of shares					Millions	s of ven				
	Number of shares of common stock issued	Common stock	Capital surplus	Retained earnings	Treasury stock	Net unrealized holding gains on securities		Foreign currency translation adjustments	Remeasurements of defined benefit plans	Non-controlling interests	Total net assets
Balance at January 1, 2015	497,616	¥ 32,156	¥ 34,351	¥ 423,763	¥ (281)	¥ 17,882	¥ (764)	¥ 6,526	¥ -	¥ 8,944	¥ 522,57
Profit attributable to											
owners of parent	-	-	-	9,637	-	-	-	-	-	-	9,63
Cash dividends paid	-	-	-	(5,969)	-	-	-	-	-	-	(5,96
Acquisition of treasury stock	-	-	-	-	(9)	-	-	-	-	-	(
Disposition of treasury stock	-	-	(1)	-	1	-	-	-	-	-	(
Net changes in items other th	an										
shareholdes' equity					_	5,408	560	(10,041)		(2,362)	(6,43
Balance at January 1, 2016	497,616	¥ 32,156	¥ 34,350	¥427,431	¥ (289)	¥ 23,290	¥ (204)	¥ (3,515)	¥ -	¥ 6,582	¥519,80°
Profit attributable to											
owners of parent	_	_	-	4,969	-	_	_	_	_	_	4,96
Cash dividends paid	_	_	_	(7,957)	_	_	_	_	-	-	(7,95
Acquisition of treasury stock	_	_	_	_	(5)	_	_	_	_	_	(
Disposition of treasury stock	_	_	(0)) -	1	_	_	_	_	_	
Purchase of shares of											
consolidated subsidiaries	_	_	(30)) -	_	_	_	_	_	_	(3
Other	_	_	-	(1)	_	_	_	_	_	_	(
Net changes in items other than shareholdes' equity					-	(732)	(214)	(5,229)	267	(1,306)	(7,21
Balance at December 31, 2016	497,616	¥ 32,156	¥ 34,320	¥424,442	¥ (293)	¥ 22,558	¥ (418)	¥ (8,744)	¥ 267	¥ 5,276	¥509,56
					Thou	usands of U.S	. dollars (No				
		Common stock	Capital surplus	Retained earnings	Treasury stock	Net unrealized holding gains on securities	Deferred gains or (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Non-controlling interests	Total net assets
Balance at January 1, 2016		\$277,207	\$296,121	\$3,684,750	\$(2,492)	\$ 200,775	\$(1,758)	\$ (30,302)	\$ -	\$56,742	\$ 4,481,04
Profit attributable to owners of	of parent	-	-	42,836	-	-	-	-	-	-	42,83
Cash dividends paid		-	-	(68,594)	_	-	-	-	-	-	(68,59
Acquisition of treasury stock		-	-	-	(43)	-	-	-	-	-	(4
Disposition of treasury stock		-	(0)	-	9	-	-	-	-	-	
Purchase of shares of											
consolidated subsidiaries		-	(259)	-	-	-	-	-	-	-	(25
Other		_	-	(9)	_	-	_	_	-	-	
Otrici											

\$277,207 \$295,862 \$3,658,983 \$(2,526) \$194,465 \$(3,603) \$(75,380) \$2,302 \$45,483 \$4,392,793

Balance at December 31, 2016

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated Statements of Cash Flows

Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries Years ended December 31, 2015 and 2016

	Millions of yen		Thousands of U.S. dollars (Note 1)	
	December 31, 2015	December 31, 2016	6 December 31, 201	
Cash flows from operating activities:				
Income before income taxes	¥ 16,799	¥ 15,202	\$ 131,052	
Depreciation and amortization	37,154	31,256	269,448	
Loss on impairment of fixed assets	1,486	6,489	55,940	
Loss on closing of plant	1,255	-	-	
Gain on sales of investment securities, net	(2,132)	-	-	
Decrease in reserve for special repairs	(1,204)	(8,523)	(73,475)	
Interest and dividend income	(1,584)	(1,242)	(10,707)	
Interest expense	1,118	1,098	9,466	
Foreign exchange losses	6,082	3,441	29,664	
Increase in notes and accounts receivable, trade	(2,134)	(1,022)	(8,810)	
Decrease (increase) in inventories	(9,330)	4,550	39,223	
Increase (decrease) in notes and accounts payable	(1,541)	681	5,871	
Other	3,158	1,583	13,647	
Subtotal	49,127	53,513	461,319	
Interest and dividends received	1,553	1,272	10,966	
Interest paid	(1,061)	(1,073)	(9,250)	
Income taxes paid	(2,822)	(5,451)	(46,992)	
Net cash provided by operating activities	46,797	48,261	416,043	
Decrease in time deposits, net Proceeds from sales of marketable and investment securities	9,541 3,154 (44,500)	4,646	40,052	
Purchases of property, plant and equipment	(44,599)	(27,688)		
Payment for transfer of business (Note 8)		(· · · · · · · · · · · · · · · ·	(238,690)	
	-	(7,434)	(64,086)	
Purchase of shares of subsidiaries resulting in change	-		(64,086)	
in scope of consolidation (Note 8)	- - -	(5,066)	(64,086) (43,672)	
in scope of consolidation (Note 8) Other	(734)	(5,066) (597)	(64,086) (43,672) (5,147)	
in scope of consolidation (Note 8)	- (734) (32,638)	(5,066)	(64,086) (43,672)	
in scope of consolidation (Note 8) Other Net cash used in investing activities		(5,066) (597)	(64,086) (43,672) (5,147)	
in scope of consolidation (Note 8) Other Net cash used in investing activities		(5,066) (597)	(64,086) (43,672) (5,147)	
in scope of consolidation (Note 8) Other Net cash used in investing activities Cash flows from financing activities:	(32,638)	(5,066) (597) (36,139)	(64,086) (43,672) (5,147) (311,543)	
in scope of consolidation (Note 8) Other Net cash used in investing activities Cash flows from financing activities: Increase in short-term debt, net	(32,638)	(5,066) (597) (36,139)	(64,086) (43,672) (5,147) (311,543)	
in scope of consolidation (Note 8) Other Net cash used in investing activities Cash flows from financing activities: Increase in short-term debt, net Proceeds from long-term borrowings	(32,638) 1,215	(5,066) (597) (36,139) 3,390 13,300	(64,086) (43,672) (5,147) (311,543) 29,224 114,655	
in scope of consolidation (Note 8) Other Net cash used in investing activities Cash flows from financing activities: Increase in short-term debt, net Proceeds from long-term borrowings Repayment of long-term borrowings	(32,638) 1,215	(5,066) (597) (36,139) 3,390 13,300 (13,300)	(64,086) (43,672) (5,147) (311,543) 29,224 114,655 (114,655)	
in scope of consolidation (Note 8) Other Net cash used in investing activities Cash flows from financing activities: Increase in short-term debt, net Proceeds from long-term borrowings Repayment of long-term borrowings Redemption of unsecured bonds	(32,638) 1,215 - (499)	(5,066) (597) (36,139) 3,390 13,300 (13,300) (10,000)	(64,086) (43,672) (5,147) (311,543) 29,224 114,655 (114,655) (86,207)	
in scope of consolidation (Note 8) Other Net cash used in investing activities Cash flows from financing activities: Increase in short-term debt, net Proceeds from long-term borrowings Repayment of long-term borrowings Redemption of unsecured bonds Cash dividends paid	(32,638) 1,215 - (499) - (5,969)	(5,066) (597) (36,139) 3,390 13,300 (13,300) (10,000) (7,957)	(64,086) (43,672) (5,147) (311,543) 29,224 114,655 (114,655) (86,207) (68,595)	
in scope of consolidation (Note 8) Other Net cash used in investing activities Cash flows from financing activities: Increase in short-term debt, net Proceeds from long-term borrowings Repayment of long-term borrowings Redemption of unsecured bonds Cash dividends paid Cash dividends paid to non-controlling interests	(32,638) 1,215 - (499) - (5,969) (2,566)	(5,066) (597) (36,139) 3,390 13,300 (13,300) (10,000) (7,957) (2,020)	(64,086) (43,672) (5,147) (311,543) 29,224 114,655 (114,655) (86,207) (68,595) (17,414)	
in scope of consolidation (Note 8) Other Net cash used in investing activities Cash flows from financing activities: Increase in short-term debt, net Proceeds from long-term borrowings Repayment of long-term borrowings Redemption of unsecured bonds Cash dividends paid Cash dividends paid to non-controlling interests Other Net cash used in financing activities	(32,638) 1,215 - (499) - (5,969) (2,566) (73)	(5,066) (597) (36,139) 3,390 13,300 (13,300) (10,000) (7,957) (2,020) (1,037)	(64,086) (43,672) (5,147) (311,543) 29,224 114,655 (114,655) (86,207) (68,595) (17,414) (8,939)	
in scope of consolidation (Note 8) Other Net cash used in investing activities Cash flows from financing activities: Increase in short-term debt, net Proceeds from long-term borrowings Repayment of long-term borrowings Redemption of unsecured bonds Cash dividends paid Cash dividends paid to non-controlling interests Other Net cash used in financing activities Effect of exchange rate changes on cash and cash equivalents	(32,638) 1,215 - (499) - (5,969) (2,566) (73) (7,892) (2,234)	(5,066) (597) (36,139) 3,390 13,300 (13,300) (10,000) (7,957) (2,020) (1,037) (17,624)	(64,086) (43,672) (5,147) (311,543) 29,224 114,655 (114,655) (86,207) (68,595) (17,414) (8,939) (151,931) (18,853)	
in scope of consolidation (Note 8) Other Net cash used in investing activities Cash flows from financing activities: Increase in short-term debt, net Proceeds from long-term borrowings Repayment of long-term borrowings Redemption of unsecured bonds Cash dividends paid Cash dividends paid to non-controlling interests Other	(32,638) 1,215 - (499) - (5,969) (2,566) (73) (7,892)	(5,066) (597) (36,139) 3,390 13,300 (13,300) (10,000) (7,957) (2,020) (1,037) (17,624)	(64,086) (43,672) (5,147) (311,543) 29,224 114,655 (114,655) (86,207) (68,595) (17,414) (8,939) (151,931)	

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Notes to Consolidated Financial Statements

Nippon Electric Glass Co., Ltd. and Consolidated Subsidiaries

1. Basis of presenting consolidated financial statements

The accompanying consolidated financial statements of Nippon Electric Glass Co., Ltd. ("the Company") and its consolidated subsidiaries have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Law and its related accounting regulations and in conformity with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to application and disclosure requirements from International Financial Reporting Standards.

The accompanying consolidated financial statements have been restructured and translated into English with certain expanded disclosures from the consolidated financial statements of the Company prepared in accordance with Japanese GAAP and filed with the appropriate Local Finance Bureau of the Ministry of Finance as required by the Japanese Financial Instruments and Exchange Law. Certain supplementary information included in the statutory Japanese language consolidated financial statements, but not required for fair presentation, is not presented in the accompanying consolidated financial statements.

The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of the readers outside Japan, using the prevailing exchange rate at December 31, 2016, which was ¥116 to U.S. \$1.00. The translations, provided for convenience, should not be construed as representations that the Japanese yen amounts have been, could have been or could in the future be converted into U.S. dollars at this or any other rate of exchange.

2. Significant accounting policies

(a) Consolidation policies

Under Japanese GAAP, companies are required to consolidate all significant equity investments over which they have the power of control through a majority of voting rights or the existence of certain other conditions evidencing control.

The accompanying consolidated financial statements include the accounts of the Company and substantially all of its subsidiaries. All significant intercompany transactions and account balances are eliminated upon consolidation.

Investments in unconsolidated subsidiaries and affiliates are stated at cost. If the equity method of accounting had been applied to the investments in these companies, the effect on the accompanying consolidated financial statements would not be material.

(b) Translation of foreign currencies

All short-term and long-term monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the relevant exchange rates at the balance sheet date.

The financial statements of the Company's overseas consolidated subsidiaries are translated into Japanese yen at the current rates for assets and liabilities and at historical rates for shareholders' equity accounts. Average rates for the years are used for the translation of income and expense amounts. Foreign currency translation adjustments are recorded in net assets.

(c) Cash and cash equivalents

In preparing the consolidated statements of cash flows, cash on hand, deposits placed with banks on demand and short-term highly liquid investments with maturities of three months or less when deposited or purchased are considered to be cash and cash equivalents.

(d) Marketable and investment securities

Available-for-sale securities with observable fair market values are stated at fair market value. Unrealized gains and losses on these securities are reported, net of applicable income taxes, as a separate component of net assets. Realized gains or losses on sales of such securities are calculated using moving average cost.

(e) Allowance for doubtful receivables

Allowance for doubtful receivables is provided in an amount sufficient to cover possible losses on collection. For regular receivables, it consists of an estimated amount based on the historical ratio of bad debt losses. For receivables from customers in financial difficulty, it consists of the estimated non-collectable amounts of specific doubtful receivables.

(f) Inventories

Inventories are stated principally at the lower of cost or net realized value, with cost determined by the moving average method.

(g) Property, plant and equipment (except for leased properties)

Property, plant and equipment are principally stated at cost.

Depreciation of property, plant and equipment of the Company and its domestic consolidated subsidiaries is calculated by the declining balance method at rates based on the estimated useful life of the assets. Buildings, excluding facilities attached to buildings, acquired after March 31, 1998, are depreciated using the straight-line method. Facilities attached to buildings and structures acquired after March 31, 2016, are also depreciated using the straight-line method. Depreciation of property, plant and equipment of overseas consolidated subsidiaries is calculated principally by the declining balance method at rates based on the estimated useful life of the assets. The estimated useful life of machinery and equipment is generally 9 years.

(h) Reserve for directors' bonuses

To provide a reserve for directors' bonuses, the Company and its consolidated subsidiaries record the amount estimated to be paid to directors after the balance sheet date for their services rendered during the fiscal period.

(i) Severance and retirement benefits

The Company and its consolidated subsidiaries, excluding certain consolidated subsidiaries, principally use a simplified method for calculating projected benefit obligation, which provides for accrued retirement benefits for voluntary retirement at the end of the fiscal year because there are few employees who have applied for the defined benefit pension plans.

The allowance for employees' severance and retirement benefits is recognized in an amount after deducting pension assets from retirement benefit for the net defined benefit liability in certain consolidated subsidiaries. Net defined benefit liability and retirement benefit costs are as follows.

- (1) Allocation of projected retirement benefit obligation In calculating the retirement benefit obligation, the benefit formula bases method is used to allocate the projected retirement benefit obligation to the estimated years of service of the eligible employees.
- (2) Method for amortizing actuarial gain or loss Depending on each company's actual situation, actuarial gain or loss is amortized at the time of occurrence or by

the straight-line method over a period not exceeding the estimated average remaining service years of employees from the next year following the time of occurrence.

(j) Directors' retirement benefits

To provide for directors' retirement benefits, the Company and its consolidated subsidiaries recorded the amount that was required by internal corporate policy at the end of the current fiscal year. However, the directors' retirement benefits system was abolished in June 2004, and the Company has ceased recording these provisions since July 2004.

(k) Reserve for special repairs

To be prepared for significant repairs of glass-melting furnaces that occur on a periodic basis, estimated costs for the next envisioned repairs are accrued within the period between the previous repair and the next such envisioned repair.

Effective from the 4th quarter of the current fiscal year, the Company made changes in accounting estimates for the costs of the next envisioned repairs.

By the launching of Electric Glass (Xiamen) Co., Ltd. and other business activities in this fiscal year, overseas production ratio increased. The Company estimated the costs for the next envisioned repairs and the accumulation period again based on the change in actual domestic glass melting furnace use considering the progress in equipment and technology and reversed the reserve for special repairs.

As a result of this change, operating income increased by ¥466 million (\$4,017 thousand) and income before income taxes and non-controlling interests increased by ¥4,484 million (\$38,655 thousand).

(I) Reserve for loss on plant closing

To provide for loss on plant closing, the Company recorded the estimated cost of closing the plant.

(m) Income taxes

The tax effects of loss carryforwards and temporary differences between the financial statement basis and the tax basis of assets and liabilities are recognized as deferred tax assets and liabilities. The provision for income taxes is computed based on the pretax income included in the consolidated statements of income.

(n) Research and development

Costs related to research and development activities are charged to income as incurred and amounted to ¥6,183 million and ¥6,658 million (\$57,397 thousand) for the fiscal years ended December 31, 2015 and 2016, respectively.

(o) Net income per share

The computations of net income per share are based on the average number of shares of common stock outstanding during each year. Diluted net income per share of common stock is computed based on the average number of shares outstanding, increased by the number of shares that would be outstanding assuming all dilutive convertible bonds were converted at the beginning of the year at the current conversion price. As there were no dilutive shares outstanding during the year, the computation of diluted net income per share was not calculated.

(p) Derivatives and hedge accounting

The Company and its consolidated subsidiaries state derivative financial instruments at fair value and recognize changes in the fair value as gain or loss, unless the derivative financial instruments are used for hedging purposes.

Forward foreign exchange contracts and interest rate swap contracts that meet the criteria for hedge accounting as provided in the "Accounting Standard for Financial Instruments" are accounted for using deferral hedge accounting, which requires unrealized gain or loss to be deferred as net unrealized gain or loss on the contract as a component of net assets until the gain or loss related to the hedged item is actually recognized.

Hedging instruments and hedged items used by the Company and its consolidated subsidiaries are as follows:

Hedging instruments: Forward foreign exchange contracts

and interest rate swap contracts

Hedged items: Forecasted foreign currency

transactions and interest on borrowings

The Company and its consolidated subsidiaries enter into forward foreign exchange contracts and interest rate swap contracts to hedge the risk of exchange rate fluctuations in forecasted foreign currency transactions and fluctuations in interest rates on borrowings, respectively. For forecasted foreign currency transactions, the suitability for hedging is confirmed by pretesting and post testing with consideration for whether the transaction is highly likely to be executed. The Company and its consolidated subsidiaries use derivative transactions solely for the purpose of managing risks and not for speculation. The counterparties are major financial institutions, therefore, the Company and its consolidated subsidiaries consider the credit risk to be minimal. The derivative transactions are entered into by each company in accordance with accounting policies and decisions made by each company's management.

(g) Goodwill

Goodwill is amortized by the straight-line method over the period it is expected to have an effect.

(r) Reclassification and restatement

Certain prior period amounts have been reclassified to conform to the current year presentation. These reclassifications had no impact on the previously reported results of operations or retained earnings.

3. Changes in accounting policies

(a) Application of accounting standards for business combinations

Effective from current fiscal year, the Company and its domestic subsidiaries adopted "Revised Accounting Standard for Business Combinations" (ASBJ Statement No. 21, September 13, 2013 (hereinafter, "Statement No. 21")), "Revised Accounting Standard for Consolidated Financial Statements" (ASBJ Statement No. 22, September 13, 2013 (hereinafter, "Statement No. 22")) and "Revised Accounting Standard for Business Divestitures" (ASBJ Statement No. 7, September 13, 2013 (hereinafter, "Statement No. 7")) (together, the "Business Combination Accounting Standards"). As a result, the Company changed its accounting policies to recognize in capital surplus differences arising from changes in the Company's ownership interests in subsidiaries over which the Company continues to maintain control and to record acquisition related costs as expenses in the fiscal year in which the costs are incurred. In addition, the Company changed its accounting policy for the reallocation of acquisition costs due to the completion following provisional accounting to reflect such reallocation in the consolidated financial statements for the fiscal year in which the business combination took place. The Company also changed the presentation of net income, and the term "non-controlling interests" is used instead of "minority interests." Certain amounts in the prior year comparative information were reclassified to conform to the changes in the current year presentation.

With regard to the application of the Business Combination Accounting Standards, the Company followed the provisional treatments in Article 58-2(4) of Statement No. 21, Article 44-5(4) of Statement No. 22 and Article 57-4 (4) of Statement No. 7 with application from the beginning of the current fiscal year prospectively. As a result, operating income and income before income taxes at the end of the current fiscal year decreased by ¥462 million (\$3,983 thousand), and capital surplus at the end of the current fiscal year decreased by ¥29 million (\$250 thousand).

In the consolidated statement of cash flows, cash flows from acquisition or disposal of shares of subsidiaries with no change in the scope of consolidation are included in "Cash flows from financing activities." Cash flows from acquisition related costs for shares of subsidiaries with change in the scope of consolidation or costs related to acquisition or disposal of shares of subsidiaries with no change in the scope of consolidation are included in "Cash flows from operating activities."

Capital surplus as of the end of the current fiscal year in the consolidated statement of changes in net assets decreased by ¥29 million (\$250 thousand).

The effect of these changes on per share information was immaterial.

(b) Application of practical solution on a change in depreciation method due to Tax Reform 2016

Effective from the current fiscal year, the Company applied the accounting treatment related to the change in depreciation methods associated with the revisions of the corporate tax system in fiscal 2016 as recommended in the relevant publication by the Practical Issues Task Force on June 17, 2016 (PITF report No. 32). Accordingly, the method of depreciation for facilities attached to buildings and structures acquired on or after April 1, 2016 was changed from the declining-balance method to the straight-line methods. The effect of these changes on consolidated financial statements was immaterial.

4. Accounting standards for presentation of comprehensive income

The components of other comprehensive income for the fiscal years ended December 31, 2015 and 2016 were as follows:

	Millions	s of yen	Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Net unrealized holding gains or losses on securities			
Increase (decrease) during the year	¥ 9,244	¥ (1,687)	\$(14,542)
Reclassification adjustments	(2,131)	(1)	(9)
Subtotal, before tax	7,113	(1,688)	(14,551)
Tax (expense) benefit	(1,705)	956	8,241
Subtotal, net of tax	5,408	(732)	(6,310)
Deferred gains or losses on hedges			
Increase (decrease) during the year	(116)	(435)	(3,750)
Reclassification adjustments	636	132	1,138
Subtotal, before tax	520	(303)	(2,612)
Tax (expense) benefit	40	90	776
Subtotal, net of tax	560	(213)	(1,836)
Foreign currency translation adjustments			
Increase (decrease) during the year	(10,018)	(5,252)	(45,277)
Subtotal, before tax	(10,018)	(5,252)	(45,277)
Remeasurements of defined benefit plans			
Increase (decrease) during the year	-	356	3,069
Subtotal, before tax	-	356	3,069
Tax (expense) benefit	-	(89)	(767)
Subtotal, net of tax	-	267	2,302
Total other comprehensive income	¥ (4,050)	¥(5,930)	\$(51,121)

5. Financial instruments

(a) Status of financial instruments

(1) Policy on financial instruments

As a Group policy, the Company and its consolidated subsidiaries restrict investments of surplus cash, if any, to financial assets such as bank deposits. Funds required by the Company are obtained mainly through bank borrowings and the issuance of bonds. Derivatives are used to avoid the risks to be hereinafter described, and the Company does not enter into derivative contracts for speculative purposes.

(2) Details of financial instruments, risks thereof and risk management structure

Notes and accounts receivable trade, which are operating receivables, are exposed to customer credit risk. The Company, pursuant to the Company's Credit Control Regulations, manages credit risk by managing relative due dates and outstanding balances of each counterparty and by periodically monitoring the credit status of major counterparties. Consolidated subsidiaries perform similar procedures in conformity with the Company's Credit Control Regulations.

Operating receivables denominated in foreign currencies, which arise from the Company's global business development. are exposed to foreign exchange fluctuation risk. The Group enters into forward foreign exchange contracts mainly for accounts receivable associated with export transactions of finished goods to manage fluctuation in future foreign exchange rates.

Investment securities consist mainly of equity securities of companies with which companies in the Group have business relationships and are exposed to market price fluctuation risk. The Company, pursuant to the Company's Shareholdings Regulations, regularly monitors the fair values of such securities and continuously reviews the holding thereof.

Notes and accounts payable trade, which are operating debt, are settled within one year.

Regarding borrowings, short-term debt is issued mainly for the purpose of obtaining funds for operating transactions, and bonds and long-term debt are issued mainly for the purpose of obtaining funds for capital expenditures. Interest rates on some borrowings are floating rates and are exposed to interest rate fluctuation risk against which long-term debt is partially hedged through interest rate swap contracts.

In addition, borrowings denominated in foreign currencies are exposed to foreign exchange fluctuation risk, which the Company uses currency swap contracts to manage.

For details regarding hedge accounting of derivatives such as hedging instruments and hedged items and hedging policy, refer to Note 2 (p), "Significant accounting policies -Derivatives and hedge accounting."

Matters regarding derivative transactions are determined by executives in charge of accounting at each consolidated Group company in accordance with the regulations of each company. Approval for transactions that exceed a certain scope is granted by the Company's management committee. Operations and management pertaining to the execution thereof are carried out by each company's accounting department, and such operations are managed through a check and balance system. With derivative transactions, the Company enters into contracts only with financial institutions with high ratings to reduce credit risks.

Operating debt and borrowings are exposed to liquidity risks. The Group manages such risks by cash management forecasting planning at each Group company.

(3) Supplementary explanation for fair values of financial instruments

Please note that notional amounts of derivatives in the note on "Derivatives" do not indicate the market risks pertaining to the derivatives themselves.

(b) Fair values of financial instruments

The table below shows the book values of financial instruments recorded in the consolidated balance sheet, their fair values and any differences between the book value and fair value as of December 31, 2015 and 2016. Financial instruments whose fair values were deemed to be extremely difficult to estimate were not included. (Note 3)

		Millions of yen	
2015/12:	Book value	Fair value	Difference
(1) Cash and time deposits	¥144,345	¥144,345	¥ -
(2) Notes and accounts receivable, trade	47,392	47,392	-
(3) Investment securities:			
Other securities	53,627	53,627	-
(4) Short-term debt:			
Short-term debt	(18,930)	(18,930)	-
Current portion of long-term debt	(13,300)	(13,301)	(1)
Current portion of unsecured bonds	(10,000)	(10,083)	(83)
(5) Notes and accounts payable, trade	(29,567)	(29,567)	-
(6) Long-term debt:			
Unsecured bonds	(40,000)	(40,279)	(279)
Long-term borrowings	(27,500)	(27,493)	7
(7) Derivatives			
Derivatives not accounted for with hedge accounting	(1,962)	(1,962)	=
Derivatives accounted for with hedge accounting	(299)	(299)	=

		Millions of yen	
2016/12:	Book value	Fair value	Difference
(1) Cash and time deposits	¥ 132,002	¥ 132,002	¥ -
(2) Notes and accounts receivable, trade	49,133	49,133	-
(3) Investment securities:			
Other securities	52,740	52,740	_
(4) Short-term debt:			
Short-term debt	(21,197)	(21,197)	-
Current portion of unsecured bonds	(10,000)	(10,016)	(16)
(5) Notes and accounts payable, trade	(31,605)	(31,605)	-
(6) Long-term debt:			
Unsecured bonds	(30,000)	(30,343)	(343)
Long-term borrowings	(40,800)	(40,753)	47
(7) Derivatives			
Derivatives not accounted for with hedge accounting	(791)	(791)	_
Derivatives accounted for with hedge accounting	(602)	(602)	_
		housands of U.S. dollars	
-	Book value	Fair value	Difference
(1) Cash and time deposits	Book value \$1,137,948	Fair value \$1,137,948	Difference \$ -
(1) Cash and time deposits(2) Notes and accounts receivable, trade	Book value	Fair value	
(2) Notes and accounts receivable, trade(3) Investment securities:	Book value \$1,137,948 423,560	Fair value \$1,137,948 423,560	
(1) Cash and time deposits(2) Notes and accounts receivable, trade(3) Investment securities: Other securities	Book value \$1,137,948	Fair value \$1,137,948	
(1) Cash and time deposits(2) Notes and accounts receivable, trade(3) Investment securities: Other securities(4) Short-term debt:	Book value \$1,137,948 423,560 454,655	Fair value \$1,137,948 423,560 454,655	
 (1) Cash and time deposits (2) Notes and accounts receivable, trade (3) Investment securities: Other securities (4) Short-term debt: Short-term debt 	800k value \$1,137,948 423,560 454,655 (182,733)	Fair value \$1,137,948 423,560 454,655 (182,733)	\$ - - -
 (1) Cash and time deposits (2) Notes and accounts receivable, trade (3) Investment securities: Other securities (4) Short-term debt: Short-term debt Current portion of unsecured bonds 	Book value \$1,137,948 423,560 454,655 (182,733) (86,207)	Fair value \$1,137,948 423,560 454,655 (182,733) (86,345)	
 (1) Cash and time deposits (2) Notes and accounts receivable, trade (3) Investment securities: Other securities (4) Short-term debt: Short-term debt Current portion of unsecured bonds (5) Notes and accounts payable, trade 	800k value \$1,137,948 423,560 454,655 (182,733)	Fair value \$1,137,948 423,560 454,655 (182,733)	\$ - - -
 (1) Cash and time deposits (2) Notes and accounts receivable, trade (3) Investment securities: Other securities (4) Short-term debt: Short-term debt Current portion of unsecured bonds (5) Notes and accounts payable, trade (6) Long-term debt: 	Book value \$1,137,948 423,560 454,655 (182,733) (86,207) (272,458)	Fair value \$1,137,948 423,560 454,655 (182,733) (86,345) (272,458)	\$ - - - (138)
 (1) Cash and time deposits (2) Notes and accounts receivable, trade (3) Investment securities: Other securities (4) Short-term debt: Short-term debt Current portion of unsecured bonds (5) Notes and accounts payable, trade (6) Long-term debt: Unsecured bonds 	Book value \$1,137,948 423,560 454,655 (182,733) (86,207) (272,458) (258,621)	Fair value \$1,137,948 423,560 454,655 (182,733) (86,345) (272,458)	\$ - - (138) - (2,957)
 (1) Cash and time deposits (2) Notes and accounts receivable, trade (3) Investment securities: Other securities (4) Short-term debt: Short-term debt Current portion of unsecured bonds (5) Notes and accounts payable, trade (6) Long-term debt: Unsecured bonds Long-term borrowings 	Book value \$1,137,948 423,560 454,655 (182,733) (86,207) (272,458)	Fair value \$1,137,948 423,560 454,655 (182,733) (86,345) (272,458)	\$ - - - (138)
 (1) Cash and time deposits (2) Notes and accounts receivable, trade (3) Investment securities: Other securities (4) Short-term debt: Short-term debt Current portion of unsecured bonds (5) Notes and accounts payable, trade (6) Long-term debt: Unsecured bonds Long-term borrowings (7) Derivatives 	Book value \$1,137,948 423,560 454,655 (182,733) (86,207) (272,458) (258,621) (351,724)	Fair value \$1,137,948 423,560 454,655 (182,733) (86,345) (272,458) (261,578) (351,319)	\$ - - (138) - (2,957)
 (1) Cash and time deposits (2) Notes and accounts receivable, trade (3) Investment securities: Other securities (4) Short-term debt: Short-term debt Current portion of unsecured bonds (5) Notes and accounts payable, trade (6) Long-term debt: Unsecured bonds Long-term borrowings 	Book value \$1,137,948 423,560 454,655 (182,733) (86,207) (272,458) (258,621)	Fair value \$1,137,948 423,560 454,655 (182,733) (86,345) (272,458)	\$ - - (138) - (2,957)

Notes: Fair value measurements of financial instruments and matters regarding marketable securities and derivatives

- 1. Amounts for "Book value" and "Fair value" in parentheses indicate net liabilities.
- 2. Measurements of fair value for financial instruments and matters regarding marketable securities and derivatives
 - (1) Cash and time deposits and (2) Notes and accounts receivable, trade

 The fair value of these items approximates the book value because of their short-term nature. Thus, the book value is used as the fair value.
 - (3) Investment securities

The fair value of equity securities is based on market prices on public exchanges.

For information on investment securities, refer to Note 6, "Marketable and investment securities."

(4) Short-term debt and (5) Notes and accounts payable, trade The fair value of these items, excluding the current portion of long-term debt and unsecured bonds, approximates the book value because of their short-term nature. Thus, the book value is used as the fair value. The current portion of long-term debt and unsecured bonds, which are included in Short-term debt, is measured based on the methods used in "(6) Long-term debt" below and classified as such.

(6) Long-term debt

The fair value of unsecured bonds issued by the Company is measured based on the market price if available and the present value calculated by discounting the total amount of principle and interest outstanding at an appropriate rate considering the time to maturity and the credit risk if the market price is not available.

The fair value of long-term borrowings is measured by discounting the total amount of principle and interest outstanding at an estimated interest rate for similar new borrowings.

- (7) Derivatives Refer to Note 7, "Derivatives."
- 3. Financial instruments whose fair values are deemed to be extremely difficult to estimate

Equity securities issued by affiliates and non-listed equity securities are not included in "(3) Investment securities." Because their fair values were deemed extremely difficult to estimate, they had no quoted market prices and it was not possible to estimate their future cash flows.

For information related to these securities, refer to Note 6, "Marketable and investment securities."

6. Marketable and investment securities

(a) Acquisition cost and book value of securities with observable market values at December 31, 2015 and 2016 were as follows:

		Millions of yen	
2015/12:	Acquisition cost	Book value	Difference
Available-for-sale securities:			
Securities with book value exceeding acquisition cost:			
Equity securities	¥ 21,487	¥ 53,627	¥ 32,140
Securities with book value not exceeding acquisition cost:			
Equity securities	_	-	-
'	¥ 21,487	¥ 53,627	¥ 32,140
		Millions of yen	
2016/12:	Acquisition cost	Book value	Difference
Available-for-sale securities:	<u>. </u>		
Securities with book value exceeding acquisition cost:			
Equity securities	¥ 22,287	¥ 52,740	¥ 30,453
Securities with book value not exceeding acquisition cost:			
Equity securities	_	_	_
	¥ 22,287	¥ 52,740	¥ 30,453
	Т	housands of U.S. dollars	S
2016/12:	Acquisition cost	Book value	Difference
Available-for-sale securities:	<u>.</u>		
Securities with book value exceeding acquisition cost:			
Equity securities	\$192,129	\$454,655	\$262,526
Constitution to the head of the second to th			
Securities with book value not exceeding acquisition cost: Equity securities	_	_	_
, , , , , , , , , , , , , , , , , , , ,	\$192,129	\$454,655	\$262,526

(b) Book values of securities with no available market values at December 31, 2015 and 2016 were as follows:

	Millions	Thousands of U.S. dollars	
	2015/12	2016/12	2016/12
Available-for-sale securities:			
Equity securities issued by affiliates	¥ 1,684	¥ 1,685	\$ 14,526
Non-listed equity securities, other	3	737	6,353
	¥ 1,687	¥ 2,422	\$ 20,879

(c) Sales of available-for-sale securities sold in the years ended December 31, 2015 and 2016 were as follows:

	Millions	Millions of yen		
	2015/12	2016/12	2016/12	
Total sales amounts	¥ 3,154	¥ 3	\$ 26	
Gains on sales	2,132	1	9	
Losses on sales	-	0	0	

(d) Impairment loss on investment securities

There was no impairment loss on investment securities in the years ended December 31, 2015 and 2016.

If the fair market value as of the end of each financial quarter has dropped by more than 30% from the acquisition cost, all of the loss on impairment is recognized.

7. Derivatives

The fair values of derivative contracts used by the Company and its consolidated subsidiaries at December 31, 2015 and 2016 were as follows:

(a) Derivative transactions not accounted for under hedge accounting

Currency related transactions

		Millions o	of yen	
Type of transaction:	Notional amount	Portion due after 1 year	Fair value	Unrealized gain (loss)
Forward foreign exchange				
Sell	¥ 5,136	¥ -	¥ 62	¥ 62
Buy	706	-	(20)	(20)
Currency swap	21,850	19,310	(2,004)	(2,004)
=	¥ 27,692	¥ 19,310	¥ (1,962)	¥ (1,962)
		Millions o	of yen	
Type of transaction:	Notional amount	Portion due after 1 year	Fair value	Unrealized gain (loss)
Forward foreign exchange				
Buy	¥ 132	¥ -	¥ 3	¥ 3
Currency swap	14,810	11,270	(794)	(794)
	¥ 14,942	¥ 11,270	¥ (791)	¥ (791)
		Thousands of l	J.S. dollars	
Type of transaction:	Notional amount	Portion due after 1 year	Fair value	Unrealized gain (loss)
Forward foreign exchange				
Buy	\$ 1,138	\$ -	\$ 26	\$ 26
Currency swap	127,672	97,155	(6,845)	(6,845)
	\$128,810	\$ 97,155	\$ (6,819)	\$ (6,819)
	Forward foreign exchange Sell Buy Currency swap Type of transaction: Forward foreign exchange Buy Currency swap Type of transaction: Forward foreign exchange Buy Currency swap	Forward foreign exchange Sell Buy 706 Currency swap 21,850 ¥ 27,692 Type of transaction: Notional amount Forward foreign exchange Buy Currency swap 14,810 ¥ 14,942 Type of transaction: Notional amount Forward foreign exchange Buy 14,942 Type of transaction: Forward foreign exchange Buy 1,138 Currency swap 127,672	Type of transaction: Forward foreign exchange Sell Buy 706 Currency swap 21,850 19,310 Y 27,692 Millions of transaction: Notional amount Forward foreign exchange Buy Currency swap 14,810 Type of transaction: Type of transaction: Notional amount Forward foreign exchange Buy 14,810 11,270 Y 14,942 Thousands of I 1,270 Thousands of I 1,270 Toward foreign exchange Buy 14,810 Type of transaction: Notional amount Forward foreign exchange Buy 14,810 Thousands of I 1,270 Thousands of I 1,270	Forward foreign exchange Sell

Notes: The fair value is based on prices obtained from financial institutions.

(b) Derivative transactions to which hedge accounting has been applied

Currency related transactions

2015/12:			Millions of yen					
Method of hedge accounting	Type of transaction	Hedged item	Notion	al amount	Portion due	after 1 year	Fair	value
	Forward foreign exchange	2						
Deferral hedge accounting	Buy	Forecasted transactions for investments denominated in foreign currencies	¥	502	¥ 	-	¥	(15)
			¥	502	¥	_	¥	(15)
2016/12:						s of yen		
Method of hedge accounting	Type of transaction	Hedged item	Notion	al amount	_ <u>Portion due</u>	after 1 year	Fair	value
	Forward foreign exchange	2						
Deferral hedge accounting	Sell	Forecasted transactions for accounts receivable denominated in foreign currencies	¥ 1	6,668	¥ 3	,951	¥	(321)
Deferral hedge accounting	Buy	Forecasted transactions for investments denominated in foreign currencies	1	0,921		-		34
			¥ 2	27,589	¥ 3	,951	¥	(287)
		_						

2016/12:			Thousands of U.S. dollars			
Method of hedge accounting	Type of transaction	Hedged item	Notional amount	Portion due after 1 year	Fa	air value
	Forward foreign excha	ange				
Deferral hedge accounting	Sell	Forecasted transactions for accounts receivable denominated in foreign currencies	\$143,689	\$ 34,060	\$	(2,767)
	Buy	Forecasted transactions for investments denomir in foreign currencies	94,147 nated	-		293

\$237,836

\$ 34,060

(2,474)

Notes: The fair value is based on prices obtained from financial institutions.

Interest related transactions

2015/12:		Millions of yen				
Method of hedge accounting	Type of transaction	Hedged item	Notional amount	Portion due after 1 year	Fa	ir value
Deferral hedge accounting	Interest rate swap	Interest on borrowings	¥ 35,000	¥ 27,500	¥	(284)
2016/12:				Millions of yen		
Method of hedge accounting	Type of transaction	Hedged item	Notional amount	Portion due after 1 year	Fa	ir value
Deferral hedge accounting	Interest rate swap	Interest on borrowings	¥ 27,500	¥ 27,500	¥	(315)
2016/12:				Thousands of U.S. dollars		
Method of hedge accounting	Type of transaction	Hedged item	Notional amount	Portion due after 1 year	Fa	ir value
Deferral hedge accounting	Interest rate swap	Interest on borrowings	\$237,069	\$237,069	\$	(2,716)

Notes: The fair value is based on prices obtained from financial institutions.

8. Payments for transfers of business and purchases of shares of subsidiaries

Payments for transfers of business and purchases of shares of subsidiaries at December 31, 2016 were as follows:

	Millions of yen	Thousands of U.S. dollars
Current assets	¥ 4,382	\$ 37,776
Non-current assets	11,915	102,715
Goodwill	1,813	15,629
Current liabilities	(3,572)	(30,793)
Non-current liabilities	(1,958)	(16,879)
Cost of share acquisition and business transfer	12,580	108,448
Cash and cash equivalents	(80)	(690)
Payment for acquisition of the European glass fiber business of PPG	¥ 12,500	\$ 107,758

9. Cash and cash equivalents

Cash and cash equivalents at December 31, 2015 and 2016 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Cash and time deposits on consolidated balance sheets	¥ 144,345	¥132,002	\$1,137,948
Time deposits due over three months	(10,489)	(5,835)	(50,301)
Cash and cash equivalents in			
consolidated statements of cash flows	¥ 133,856	¥126,167	\$1,087,647

10. Inventories

Inventories at December 31, 2015 and 2016 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Finished and purchased goods	¥ 40,085	¥ 38,977	\$ 336,009
Work-in-process	1,631	1,457	12,560
Raw materials and others	22,460	19,980	172,241
	¥ 64,176	¥ 60,414	\$ 520,810

11. Loss on impairment of fixed assets

Long-lived assets such as property, plant and equipment and acquired intangibles subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the book values of the assets may not be recoverable. Recoverability of assets to be held and used in operations is measured by a comparison between the book value of the asset and the estimated undiscounted future cash flows expected to be generated by the asset. If the book value of the asset exceeds the estimated future cash flows, an impairment loss is recognized in the amount by which the book value of the asset exceeds the fair value.

Loss on impairment of fixed assets for the fiscal years ended December 31, 2015 and 2016 is summarized below.

(a) Grouping

The Company and its consolidated subsidiaries group operating assets by business unit for which the profit or loss is continually controlled to measure the impairment of the assets.

Idle assets which are not used for business are treated separately.

(b) Assets subject to impairment

After review, the book values of the following assets were reduced to their recoverable values and the reduced amounts were recognized as impairment loss.

2015/12:

Use	Reason	Location	Туре
Important idle assets	No utilization plan	Shiga-Takatsuki factory,	Building and structures,
		Nippon Electric Glass (Korea)	machinery and equipment,
		Co., Ltd., other	construction in progress, other

2016/12:

Use	Reason	Location	Туре
Important idle assets	No utilization plan	Notogawa factory,	Building and structures,
		Shiga-Takatsuki factory,	machinery and equipment,
		Wakasa-Kaminaka factory,	land, other
		Nippon Electric Glass (Korea)	
		Co., Ltd., other	

(c) Assessment of recoverable values

The recoverable values of important idle assets were measured based on net selling price.

No recoverable values were expected for the production facilities of the glass manufacturing line due to the probability of low future sales.

(d) Impairment loss on fixed assets was as follows:

	Millions	Thousands of U.S. dollars	
	2015/12	2016/12	2016/12
Buildings and structures	¥ 0	¥ 3,503	\$ 30,199
Machinery and equipment	851	2,241	19,319
Land	-	648	5,586
Other	635	97	836
	¥ 1,486	¥ 6,489	\$ 55,940

12. Short-term and long-term debt

Short-term debt, including the current portion of long-term debt, at December 31, 2015 and 2016 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Short-term bank borrowings; average rate 1.0% per annum	¥15,930	¥19,197	\$165,492
Commercial paper; average rate 0.0% per annum	3,000	2,000	17,241
Current portion of long-term borrowings	13,300	-	-
Current portion of unsecured bonds; average rate 0.4% per annum	10,000	10,000	86,207
	¥42,230	¥31,197	\$268,940

Long-term debt at December 31, 2015 and 2016 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Borrowings, principally from banks and insurance companies			
due from 2017 through 2023; average rate 0.1% per annum	¥40,800	¥40,800	\$351,724
1.0% unsecured bonds, due in 2016	10,000	-	-
0.4% unsecured bonds, due in 2017	10,000	10,000	86,207
0.7% unsecured bonds, due in 2019	10,000	10,000	86,207
0.3% unsecured bonds, due in 2020	10,000	10,000	86,207
0.6% unsecured bonds, due in 2022	10,000	10,000	86,207
	90,800	80,800	696,552
Less current portion of long-term borrowings	(13,300)	-	-
Less current portion of unsecured bonds	(10,000)	(10,000)	(86,207)
	¥67,500	¥70,800	\$610,345

The aggregate annual maturities of long-term debt at December 31, 2016 were as follows:

	Millions of yen	Thousands of U.S. dollars
2017	¥10,000	\$ 86,207
2018	7,500	64,655
2019	20,000	172,414
2020	10,000	86,207
2021	23,200	200,000
2022 and thereafter	10,100	87,069
	¥80,800	\$696,552

For flexible financing purposes, the Company has committed credit facilities with certain banks. The maximum aggregate credit facility available to the Company is ¥25,000 million (\$215,517 thousand). The credit facility has not been used as of December 31, 2016.

13. Income taxes

The Company is subject to a number of taxes based on income, which, in the aggregate, indicate a statutory tax rate in Japan of approximately 35.4% and 32.9% for the fiscal years ended December 31, 2015 and 2016, respectively.

The significant differences between the statutory tax rate in Japan and the effective tax rate of the Company and its consolidated subsidiaries for financial statement purposes for the fiscal years ended December 31, 2015 and 2016 were as follows:

	2015/12	2016/12
Statutory tax rate in Japan	35.4%	32.9%
Exclusion from gross revenue of dividends	(22.0)	(17.6)
Difference in tax rates for overseas consolidated subsidiaries	(21.1)	(35.5)
Expenses not deductible for tax purposes,		
mainly entertainment expenses	9.9	2.6
Undistributed earnings of overseas consolidated subsidiaries	(2.4)	9.9
Effect of elimination of dividend income	21.6	17.2
Changes in statutory tax rates on the Company and		
its domestic consolidated subsidiaries	11.6	4.0
Overseas withholding tax	2.5	2.8
Unrealized profits	1.1	4.5
Less valuation allowance	0.7	42.0
Other	1.1	(0.1)
Effective tax rate	38.4%	62.7%

Significant components of the Company's and its consolidated subsidiaries' deferred tax assets and liabilities as of December 31, 2015 and 2016 were as follows:

	Million	Millions of yen	
	2015/12	2016/12	2016/12
Deferred tax assets:			
Reserve for special repairs in excess of tax limit	¥ 9,983	¥ 7,057	\$ 60,836
Capital allowances	5,576	6,597	56,871
Depreciation in excess of tax limit	6,014	6,585	56,767
Unrealized gain on property, plant and equipment	3,389	2,768	23,862
Loss on devaluation of inventories	2,729	2,205	19,009
Tax losses carried forward	1,878	3,608	31,103
Loss on valuation of investment securities	1,467	1,394	12,017
Long-term prepaid expenses	630	410	3,534
Accrued bonuses	372	357	3,078
Reserve for loss on plant closing	341	134	1,155
Other	4,044	3,853	33,216
Subtotal deferred tax assets	36,423	34,968	301,448
Less valuation allowance	(2,845)	(8,805)	(75,905)
Total deferred tax assets	33,578	26,163	225,543
Deferred tax liabilities:			
Depreciation of overseas consolidated subsidiaries	(5,576)	(5,523)	(47,612)
Net unrealized holding gains on securities	(8,850)	(7,895)	(68,061)
Undistributed profit of overseas consolidated subsidiaries	(1,221)	(2,722)	(23,465)
Special depreciation allowance	(263)	(80)	(690)
Other	(77)	(117)	(1,008)
Total deferred tax liabilities	(15,987)	(16,337)	(140,836)
Net deferred tax assets	¥ 17,591	¥ 9,826	\$ 84,707

Adjustment of deferred tax assets and liabilities following the change in the statutory tax rates

The "Act for Partial Revision of the Income Tax Act, etc." and the "Act for Partial Revision of the Local Tax Act, etc." were enacted during the Diet session on March 29, 2016, and the statutory tax rate, etc., were changed from the consolidated fiscal year beginning on or after April 1, 2016.

Accordingly, with regards to temporary differences, etc., that are expected to be realized in the consolidated fiscal year beginning on or after January 1, 2017, the statutory tax rate for calculating deferred tax assets and liabilities will be changed from 32.1% to 30.7%. Regarding temporary differences, etc., that are expected to be realized in the consolidated fiscal year beginning on or after January 1, 2019, the statutory tax rate for calculating deferred tax assets and liabilities will be changed to 30.5%.

Following these changes, net deferred tax assets recorded in this fiscal year decreased by ¥187 million (\$1,612 thousand), while income taxes-deferred increased by ¥592 million (\$5,103 thousand), net unrealized holding gains on securities increased by ¥414 million (\$3,569 thousand) and deferred gains or (losses) on hedges decreased by ¥9 million (\$78 thousand).

14. Asset retirement obligations

(a) Asset retirement obligations recorded on the consolidated balance sheets

(1) Outline of asset retirement obligations

Recorded asset retirement obligations are expenses such as costs for disposal of machinery and equipment owned by the Company that contain PCB (polychlorinated biphenyl) and costs for removal of asbestos from buildings owned by the Company when they are demolished.

(2) Basis for calculating asset retirement obligations

Asset retirement obligations are based on estimates provided by specialty companies (construction companies, etc.).

(3) Changes in the total amount of asset retirement obligations during the fiscal years ended December 31, 2015 and 2016 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Beginning balance	¥ 490	¥ 328	\$ 2,828
Decrease due to the fulfillment of asset retirement obligations	(66)	(8)	(69)
Change in estimated asset retirement obligations	(113)	-	-
Other	17	-	-
Ending balance	¥ 328	¥ 320	\$ 2,759

(b) Asset retirement obligations not recorded on the consolidated balance sheets

Regarding some factory sites and other properties being used under real estate leasing agreements, the Company and its consolidated subsidiaries have obligations related to the cost of restoring such properties to their original state at the time of business termination or moving out. However, since there are uncertainties regarding the lease periods of the properties to which such obligations apply because there are no plans to move out at this time, it is impossible to reasonably estimate the related asset retirement obligations. Therefore, no asset retirement obligations are recorded for such obligations.

15. Severance and retirement benefits

The Company and domestic consolidated subsidiaries provide mainly defined contribution pension plans. However, certain employees are provided unfunded lump-sum payment plans. Overseas consolidated subsidiaries provide funded lump-sum payment plans defined contribution pension plans, and defined benefits plan.

Under defined benefit pension plans, the reconciliation of opening and ending balances for projected benefit obligation for the fiscal years ended December 31, 2015 and 2016 were as follows:

	Million	Millions of yen	
	2015/12	2016/12	2016/12
Projected benefit obligation at beginning of year	¥(1,239)	¥ (1,224)	\$ (10,552)
Service cost	(257)	(299)	(2,578)
Interest cost	(28)	(114)	(983)
Actuarial differences	49	(105)	(905)
Benefits paid	159	302	2,603
Increase from business combinations	=	(28,470)	(245,430)
Other	92	(1,690)	(14,569)
Projected benefit obligation at end of year	¥(1,224)	¥(31,600)	\$(272,414)

Under defined benefit pension plans, the reconciliation of opening and ending balances for pension assets for the fiscal years ended December 31, 2015 and 2016 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Pension assets at beginning of year	¥ 21	¥ 22	\$ 190
Expected return on pension assets	0	87	750
Actuarial differences	0	447	3,853
Contributions paid by employer	2	1	9
Benefits paid	-	(168)	(1,448)
Increase from business combinations	-	27,939	240,853
Other	(1)	1,710	14,741
Pension assets at end of year	¥ 22	¥ 30,038	\$ 258,948

Under defined benefit pension plans, the reconciliation of ending balances for projected benefit obligations and pension assets and the balances for net defined benefit liability recognized in the consolidated balance sheets for the fiscal years ended December 31, 2015 and 2016 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Projected benefit obligations of funded plans	¥ (417)	¥(30,796)	\$(265,483)
Pension assets	22	30,038	258,948
	(395)	(758)	(6,535)
Projected benefit obligation of unfunded plans	(807)	(804)	(6,931)
Net liabilities for severance and retirement benefits recognized			
in the consolidated balance sheets	(1,202)	(1,562)	(13,466)
Net defined benefit liability	(1,202)	(1,562)	(13,466)
Net liabilities for severance and retirement benefits recognized			
in the consolidated balance sheets	¥(1,202)	¥ (1,562)	\$ (13,466)

Under defined benefit pension plans, components of severance and retirement benefit expense for the fiscal years ended December 31, 2015 and 2016 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Service cost	¥ 257	¥ 299	\$ 2,577
Interest cost	28	114	983
Expected return on pension assets	(0)	(87)	(750)
Amortization of actuarial differences	(50)	14	121
Other	(0)	-	-
Severance and retirement benefit expense for			
defined benefit pension plans	¥ 235	¥ 340	\$ 2,931

Under defined benefit pension plans, remeasurements of defined benefit plans for the fiscal years ended December 31, 2015 and 2016 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Actuarial differences	¥ -	¥ 356	\$ 3,069
Total	¥ -	¥ 356	\$ 3,069

Under defined benefit pension plans, the accumulated amount for remeasurements of defined benefit plans for the fiscal years ended December 31, 2015 and 2016 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2015/12	2016/12	2016/12
Unrecognized amount for actuarial differences	¥ -	¥ (356)	\$ (3,069)
Total	¥ -	¥ (356)	\$ (3,069)

Under defined benefit pension plans, the percentage composition by asset class of total plan assets for the fiscal years ended December 31, 2015 and 2016 was as follows:

	2015/12	2016/12
Equity securities	51%	51 %
Bonds	14%	49%
Others	35%	0%
Total	100%	100%

The current and expected allocation of plan assets as well as the current and expected long-term rates of return for the various assets that constitute the plan assets are considered when determining the long-term expected rate of return on plan assets.

Under defined benefit pension plans, principal actuarial assumptions for the fiscal years ended December 31, 2015 and 2016 were as follows:

	2015/12	2016/12
Discount rates	Mainly 1.3%	Mainly 1.8%
Long-term expected rates of return on plan assets	Mainly 1.6%	Mainly 1.3%
Expected rates of pay raises	Mainly 2.0%	Mainly 2.4%

The total amounts that the Company and its consolidated subsidiaries needed to contribute to defined contribution pension plans was ¥1,238 million for the fiscal year ended December 31, 2015 and ¥1,181 million (\$10,181 thousand) for the fiscal year ended December 31, 2016.

16. Net assets

Under Japanese laws and regulations, the entire amount paid for new shares is required to be designated as common shares. However, a company may, by a resolution of the Board of Directors, designate an amount not exceeding one half of the price of the new shares as additional paid-in capital, which is included in capital surplus.

Under The Japanese Corporate Law ("the Law"), in cases in which a dividend distribution of surplus takes place, the smaller of an amount equal to 10% of the dividend or the excess, if any, of 25% of common share over the total of additional paid-in capital and legal earnings reserve must be set aside as additional paid-in capital or legal earnings reserve. The legal earnings reserve is included in retained earnings in the accompanying consolidated balance sheets.

Under the Law, both of these appropriations generally require a resolution of the shareholders' meeting.

Additional paid-in capital and legal earnings reserve may not be distributed as dividends. Under the Law, all additional paid-in capital and all legal earnings reserve may be transferred to other capital surplus and retained earnings, which are potentially available for dividends, by a resolution of a shareholders' meeting.

The maximum amount that the Company can distribute as dividends is calculated based on the non-consolidated financial statements of the Company in accordance with Japanese laws and regulations.

At the annual shareholders' meeting held on March 30, 2017, the shareholders approved cash dividends amounting to ¥3,979 million (\$34,302 thousand), or ¥8.00 per share. In addition, the Company paid interim cash dividends of ¥3,979 million (\$34,302 thousand), or ¥8.00 per share, on August 31, 2016.

17. Business combinations

(a) Overview of the business combination

(1) Name and business of the acquired company

Name of the purchaser of shares: PPG Industries Fiber Glass B.V. Name of the transferor of business: PPG Industries (UK) Limited Business: Production and sales of glass fiber

(2) Main reasons for the business combination

Through the acquisition, the Company aims to expand its glass fiber business 1) by fortifying its global supply capabilities by acquisition of production base in Europe, 2) by increasing sales of chopped strands, a main product of the Company, and 3) by adding other glass fiber products to the current lineup.

(3) Date of the business combination October 1, 2016

(4) Legal form of the business combination

Share acquisition and business transfer in consideration for cash

(5) Name of the acquired company after the business combination

Electric Glass Fiber NL, B.V. Electric Glass Fiber UK, Ltd.

(6) Ratio of voting rights acquired

PPG Industries Fiber Glass B.V. 100%

(7) Primary basis for determining which is the acquiring company

The share acquisition and business transfer in consideration for cash

(b) Period of inclusion of acquired company's performance in the consolidated financial statements From October 1, 2016 to December 31, 2016

(c) Amount and type of consideration paid for and acquisition cost of the acquired company

		Millions of euro
Consideration for acquisition	Cash and cash equivalents	€108
Acquisition cost		108

(d) Description of the conditions pertaining to payments for the acquisition set by the business agreement and the accounting treatment policy going forward

This acquisition included an agreement whereby, based on a specified market interest rate and specified time from the closing. If additional payments are made, the amount would be deemed as being paid at the acquisition and the amounts of the initial acquisition cost, goodwill and amortized goodwill would be changed to reflect the additional payment.

(e) Main acquisition-related costs

Advisory fees, etc.: ¥470 million (\$4,052 thousand)

(f) Details of assets acquired and liabilities assumed on the date of the business combination

	Millions of yen	Thousands of U.S. dollars
Current assets	¥4,382	\$37,776
Non-current assets	11,915	102,715
Total assets	16,297	140,491
Current liabilities	¥3,572	\$30,793
Non-current liabilities	1,958	16,879
Total liabilities	5,530	47,672

(g) Amounts allocated to intangible assets other than goodwill and the weighted average amortization period by components

	Millions of yen	Thousands of U.S. dollars	The weighted average amortization period
Customer relationships	¥1,007	\$ 8,681	10
Developed technology	304	2,621	5

(h) Amount, cause and amortization of goodwill arising from the acquisition

(1) Amount of goodwill

¥1,813 million (\$15,629 thousand)

(2) Source of goodwill

Expected future excess earning power

(3) Amortization method and period

Straight-line method over 10 years

(i) Estimate and calculation method of the impact on the consolidated statements of income calculated on the assumption that the business combination had been concluded at the start of the consolidated fiscal year

A description is omitted as the estimated amount of the impact is difficult to calculate.

18. Contingent liabilities

Contingent liabilities at December 31, 2015 and 2016 were as follows:

		Millions of yen		Thousands	Thousands of U.S. dollars	
	20	15/12	20	16/12	20	016/12
Notes receivable discounted	¥	104	¥	37	\$	319
Guarantees of employees' housing loans		298		224		1,931

19. Segment information

Information by segment for the fiscal years ended December 31, 2015 and 2016 was as follows:

(a) Segment information (by management approach)

Outline of reportable segment

The Company has adopted a business division system in which each business division develops a comprehensive strategy for the products it handles and conducts business activities based on such strategy. The Board of Directors periodically reviews decisions regarding the allocation of management resources to each business division and evaluates business performance.

Although it is considered that the Group consists of multiple business segments that are handled by various business divisions, in general the "glass products" made by the Group companies are similar in terms of characteristics, manufacturing methods, market and industry, customer type, and marketing factors. Therefore, the Group has consolidated these segments into a single "Glass Business" segment.

Accordingly, information for other segments has been omitted except for information given in the "Outline of reportable segment."

(b) Related Information

(1) Information by products and services

	Millions of yen		
	Glass business		Total
2015/12:	Electronics and Information Technolog	Performance Materials y and Others	
Sales to external customers	¥ 167,050	¥ 84,128	¥ 251,178
	Millions of yen		
		business	Total
2016/12:	Electronics and	Performance Materials	
	Information Technolog	y and Others	
Sales to external customers	¥ 147,126	¥ 92,286	¥ 239,412
		Thousands of U.S. dollars	
	Glass business		Total
2016/12:	Electronics and	Performance Materials	
	Information Technolog	y and Others	
Sales to external customers	\$1,268,327	\$795,569	\$2,063,896

(2) Geographical information

Net sales

2015/12:		Million	s of yen		
Japan	Korea	China	Taiwan	Other areas	Total
¥ 58,011	¥ 79,612	¥ 35,187	¥ 28,276	¥ 50,092	¥ 251,178
2016/12:		Millions	s of yen		
Japan	Korea	China	Taiwan	Other areas	Total
¥ 51,159	¥ 70,410	¥ 41,155	¥ 22,775	¥ 53,913	¥ 239,412
2016/12:		Thousands o	f U.S. dollars		
Japan	Korea	China	Taiwan	Other areas	Total
\$ 441,026	\$606,983	\$354,784	\$196,336	\$464,767	\$2,063,896

Notes: 1. The classifications of countries and areas are based on the location of customers.

Property, plant and equipment

2015/12:		Million	s of yen		
Japan	Korea	China	Malaysia	Other areas	Total
¥ 230,418	¥ 59,341	¥ 44,081	¥ 46,725	¥ 5,448	¥ 386,013
2016/12:		Million	is of yen		
Japan	Korea	China	Malaysia	Other areas	Total
¥ 212,055	¥ 51,894	¥ 44,212	¥ 42,758	¥ 16,480	¥ 367,399
2016/12:		Thousands of	of U.S. dollars		
Japan	Korea	China	Malaysia	Other areas	Total
\$1,828,061	\$447,362	\$381,138	\$368,603	\$142,069	\$ 3,167,233

Notes: 1. The classifications of countries and areas are based on the location of property, plant and equipment.

(3) Information by major customers

Sales

	Millions	s of yen	Thousands of U.S. dollars	Related segment
	2015/12	2016/12	2016/12	
LG Display Co., Ltd.	¥63,944	¥54,196	\$467,207	Glass business

(c) Information on impairment of fixed assets

Millions of yen		
Glass business	Total	
¥ 1,486	¥ 1,486	
Millions	s of yen	
Glass business	Total	
¥ 6,489	¥ 6,489	
Thousands of U.S. dollars		
Glass business	Total	
\$55,940	\$ 55,940	
	Glass business ¥ 1,486 Millions Glass business ¥ 6,489 Thousands of Glass business	

^{2.} The main countries classified as "Other areas" are Europe and the U.S.A.

^{2.} The main country classified as "Other areas" are Europe and Taiwan.

(d) Information on amortization of goodwill and unamortized balance

2016/12:	Millions of yen			
	Glass business	Total		
Amortization of goodwill	¥ 84	¥ 84		
Balance at end of year	1,904	1,904		
2016/12:	Thousands of U.S. dollars			
	Glass business	Total		
Amortization of goodwill	\$ 724	\$ 724		
Balance at end of year	16,414	16,414		

20. Significant Subsequent Events

Change in Company's share-trading unit and consolidation of shares

At the Board of Directors' meeting held on February 3, 2017, the Company resolved an amendment in the articles of incorporation and change in the Company's share-trading unit and resolved to submit a proposal on a consolidation of shares to the 98th Ordinary General Meeting of Shareholders held on March 30, 2017.

The proposal was approved by resolution of the general meeting of shareholders.

The change in the Company's share-trading unit and consolidation of shares is summarized below.

(a) Purpose of change in the Company's share-trading unit and consolidation of shares

The Japanese Stock Exchanges Conference is making efforts to unify share trading units of common shares of domestic listed companies into units of 100 shares to improve investors' convenience. The deadline for transferring to a 100-share unit has been set for October 1, 2018.

Taking such efforts into consideration in view of the medium and long-term share price fluctuations, the Company has resolved to change the share-trading unit from 1,000 shares to 100 shares and will implement a consolidation of shares at the level considered to be desirable by The Japanese Stock Exchanges Conference, namely, ¥50,000 or more but less than ¥500,000.

(b) Details of change in the Company's share-trading unit

Effective July 1, 2017, the Company's share-trading unit will be changed from a 1,000-share unit to a 100-share unit.

(c) Details of consolidations of shares

(1) Class of shares

Common shares

(2) Consolidation method and ratio

On July 1, 2017, five (5) common shares will be consolidated into one (1) common share based on the number of shares held by shareholders of record as of June 30, 2017.

(3) Change in number of shares as a result of the share consolidation

Total number of outstanding shares before consolidation (As of December 31, 2016)	497,616,234 shares
Number of shares decreased due to consolidation	398,092,988 shares
Total number of outstanding shares after consolidation	99,523,246 shares

[&]quot;Number of shares decreased due to consolidation" and "Total number of outstanding shares after consolidation" are calculated based on the total number of outstanding shares before the share consolidation and the share consolidation ratio.

(4) Treatment of fractional shares

If fractional shares of less than one share arise as a result of the share consolidation, the Company shall sell them in accordance with Article 235 of the Companies Act. The proceeds from the sale shall then be distributed to the shareholders in proportion to their respective ownership interests.

(d) Schedule of change in the Company's share-trading unit and consolidation of shares

Resolution at the Board of Directors' meeting	February 3, 2017
Resolution at the ordinary general meeting of shareholders	March 30, 2017
Effective date of change in the Company's share-trading	July 1, 2017
unit and consolidation of shares	

(e) Impact on per share information

Assuming the share consolidation was conducted at January 1, 2015, per share information for the years ended December 31, 2015 and 2016 would be as follows:

	Yen		U.S. dollars
	2015/12	2016/12	2016/12
Net assets per share	¥5,159.30	¥5,069.60	\$43.70
Profit attributable to owners of parent per share	96.88	49.95	0.43

As there were no dilutive shares, diluted profit attributable to owners of parent per share was not calculated.

Independent Auditor's Report

To the Board of Directors of Nippon Electric Glass Co., Ltd.:

We have audited the accompanying consolidated financial statements of Nippon Electric Glass Co., Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheets as at December 31, 2016 and 2015, and the consolidated statements of income, statements of comprehensive income, statements of changes in net assets and statements of cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

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 such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatements, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in Japan. Those standards require that we comply with ethical requirements and 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 our judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control 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, while the objective of the financial statement audit is not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. 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 present fairly, in all material respects, the financial position of Nippon Electric Glass Co., Ltd. and its consolidated subsidiaries as at December 31, 2016 and 2015, and their financial performance and cash flows for the years then ended in accordance with accounting principles generally accepted in Japan.

Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended December 31, 2016 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.

KPMG AZSA LLC

April 21, 2017 Kyoto, Japan

Corporate Information

Corporate Data

(as of December 31, 2016)

Founded December 1, 1949

Company NameNippon Electric Glass Co., Ltd.Head Office7-1, Seiran 2-chome, Otsu,

Shiga 520-8639 Japan

Sales Headquarters

Osaka 1-14, Miyahara 4-chome, Yodogawa-ku,

Osaka 532-0003 Japan

Tokyo 16-4 Konan 2-chome, Minato-ku,

Tokyo 108-0075 Japan

Plants Otsu, Shiga-Takatsuki, Notogawa,

and Precision Glass Center

Capital32,156 million yenEmployees5,849 (consolidated)

Stock Exchange Listings Tokyo Stock Exchange (first section)

Stock Code 5214

Fiscal Year January 1 to December 31 of each year

General Shareholders Meeting Held each year in March

Transfer Agent for Common Stock Sumitomo Mitsui Trust Bank, Limited

Directors, Corporate Auditors, and Executive Officers

(as of March 30, 2017)

Corporate Auditors

DirectorsExecutive OfficersChairman of the BoardPresidentMasayuki AriokaMotoharu Matsumoto

President Executive Vice President

Motoharu Matsumoto Hirokazu Takeuchi

DirectorSenior Vice PresidentHirokazu TakeuchiMasahiro TomamotoMasahiro TomamotoAkihisa SaekiAkihisa SaekiKoichi Tsuda

Akihisa Saeki Koichi Isuda
Koichi Tsuda Hiroki Yamazaki
Hiroki Yamazaki
Sumimaru Odano*1 Vice President

Shuichi Mori^{*1} Seiichi Osako Shigeru Goto *1 Outside Director Toshimasa Kani

Toshimasa Kanai Yusuke Maenaka Akira Kishimoto Norio Nakamura Kiyohide Takeuchi Kunihiro Nakagawa Hiroaki Nomura

Mamoru Morii

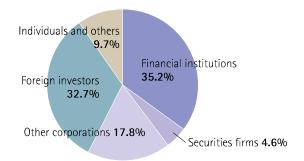
Fujio Kishi Kunihiro Nakagawa Masahiko Oji Hiroaki Nomura Kazuya Ishii^{*2} Masaya Kubo Certified Public Accountant Haruki Matsumiya Keijiro Kimura^{*2} Tomonori Kano Attorney at Law Masaaki Kadomi

*2 Outside Corporate Auditor

Stock Information (as of December 31, 2016)

Total number of shares authorized to be issued	1,200,000,000 shares
Total number of shares issued	497,616,234 shares
Shares per unit	1,000 shares
Total number of shareholders	12,467

Distribution of Shares by Shareholder Type



Major Shareholders

Shareholders	Number of shares held (Thousands of shares)	Investment stake (%)
NIPRO CORPORATION	68,335	13.7
The Master Trust Bank of Japan, Ltd. (Trust Account)	38,708	7.8
Japan Trustee Services Bank, Ltd. (Trust Account)	32,290	6.5
THE BANK OF NEW YORK 133524	11,893	2.4
Japan Trustee Services Bank, Ltd. (Trust Account No.9)	10,687	2.1
Trust & Custody Services Bank, Ltd. (Collateral on Unit Trust Account)	8,551	1.7
The Shiga Bank, Ltd.	8,089	1.6
Trust & Custody Services Bank, Ltd. (Investment Trust Account)	6,859	1.4
Japan Trustee Services Bank, Ltd. (Trust Account No.4)	6,088	1.2
STATE STREET BANK AND TRUST COMPANY 505223	5,854	1.2

Disclosure Policy

The NEG Group Code of Conduct stipulates that it will disclose necessary corporate information in a timely and appropriate manner and that it will enhance communication with concerned parties. Following this policy, we will continue to disclose important information relating to our Group's activities to all stakeholders in a timely and appropriate manner.

Caution concerning Forward-Looking Statements

Statements in this annual report with respect to NEG's plans, outlooks, and strategies, as well as other statements that are not historical facts, are forwardlooking statements involving risks and uncertainties.

Period of Reporting

Fiscal year 2016 (January 1 to December 31, 2016) Some qualitative information regarding the period from January to March 2017 has been included in this report.



7-1, Seiran 2-chome, Otsu, Shiga 520-8639 Japan TEL: (81) 77-537-1700 http://www.neg.co.jp/en/





This report is printed on paper certified by the Forest Stewardship Council® and printed using a vegetable-based ink which reduces VOC compound emissions.