

Shin-Etsu Chemical Co., Ltd.

# Annual Report 2017

Financial Section

# Ten-Year Summary

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

For the fiscal years ended March 31, 2008 through 2017

	Millions of yen			
	2008	2009	2010	2011
<b>For the year:</b>				
Net sales	¥1,376,364	¥1,200,813	¥916,837	¥1,058,257
Cost of sales	946,940	853,433	700,902	803,574
Selling, general and administrative expenses	142,278	114,453	98,718	105,460
Operating income	287,145	232,927	117,215	149,221
Ordinary income	300,040	250,533	127,019	160,338
Profit attributable to owners of parent	183,580	154,731	83,852	100,119
Capital expenditures	268,479	159,406	123,793	119,884
R&D costs	47,944	37,469	33,574	37,321
Depreciation and amortization	141,269	119,457	87,722	93,732
<b>At year-end:</b>				
Total assets	¥1,918,544	¥1,684,944	¥1,769,139	¥1,784,166
Working capital (Current assets - Current liabilities)	638,806	606,632	612,447	638,493
Common stock	119,419	119,419	119,419	119,419
Net assets	1,483,669	1,407,353	1,474,212	1,469,429
Interest-bearing debt	34,045	23,827	20,052	14,574
<b>Per share (Yen and U.S. dollars):</b>				
Earnings per share—basic	¥426.63	¥362.39	¥197.53	¥235.80
Earnings per share—fully diluted <sup>2</sup>	426.35	362.35	197.50	235.80
Cash dividends	90.00	100.00	100.00	100.00
Payout ratio (%)	21.1	27.6	50.6	42.4
Net assets	3,344.17	3,218.28	3,370.56	3,360.39
<b>General:</b>				
Operating income to net sales ratio (%)	20.9	19.4	12.8	14.1
Profit attributable to owners of parent to net sales ratio (%)	13.3	12.9	9.1	9.5
ROE (%)	13.3	11.0	6.0	7.0
ROA (%)	15.9	13.9	7.4	9.0
Equity ratio (%)	75.0	81.1	80.9	80.0
Number of employees	20,241	19,170	16,955	16,302
Number of shares issued (Thousands)	432,106	432,106	432,106	432,106

Notes: 1. The U.S. dollar amounts represent conversion of yen, for convenience only, at the rate of ¥112 = US\$1, the approximate rate of exchange on March 31, 2017.

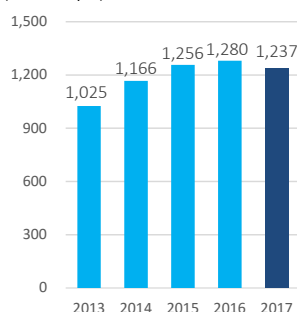
2. Diluted earnings per share for the fiscal year ended March 31, 2012 is not presented as there were no securities with dilutive effect.

Millions of yen						Thousands of U.S. dollars <sup>1</sup>
2012	2013	2014	2015	2016	2017	2017
¥1,047,731	¥1,025,409	¥1,165,819	¥1,255,543	¥1,279,807	¥1,237,405	\$11,048,267
798,592	769,427	873,879	940,399	930,019	868,404	7,753,612
99,505	98,938	118,130	129,814	141,262	130,383	1,164,140
149,632	157,043	173,809	185,329	208,525	238,617	2,130,514
165,237	170,207	180,605	198,025	220,005	242,133	2,161,907
100,643	105,714	113,617	128,606	148,840	175,912	1,570,645
87,165	86,841	83,155	109,903	134,753	145,647	1,300,423
35,725	37,671	43,546	47,165	53,165	49,020	437,680
82,868	80,961	91,445	96,918	100,466	93,087	831,140
¥1,809,841	¥1,920,903	¥2,198,912	¥2,452,306	¥2,510,085	¥2,655,636	\$23,711,036
694,803	832,878	981,667	1,100,999	1,170,679	1,232,607	11,005,421
119,419	119,419	119,419	119,419	119,419	119,419	1,066,247
1,494,573	1,623,176	1,822,135	2,012,711	2,080,465	2,190,082	19,554,306
15,732	13,929	15,638	14,328	13,470	14,642	130,738
¥237.03	¥248.94	¥267.20	¥302.05	¥349.46	¥412.86	\$3.686
—	248.92	267.07	301.98	349.42	412.83	3.685
100.00	100.00	100.00	100.00	110.00	120.00	1.071
42.2	40.2	37.4	33.1	31.5	29.1	29.1
3,422.93	3,709.19	4,165.28	4,602.80	4,761.48	5,002.16	44.662
14.3	15.3	14.9	14.8	16.3	19.3	19.3
9.6	10.3	9.7	10.2	11.6	14.2	14.2
7.0	7.0	6.8	6.9	7.5	8.5	8.5
9.2	9.1	8.8	8.5	8.9	9.4	9.4
80.3	82.0	80.6	79.9	80.8	80.3	80.3
16,167	17,712	17,892	18,276	18,407	19,206	19,206
432,106	432,106	432,106	432,106	432,106	432,106	432,106

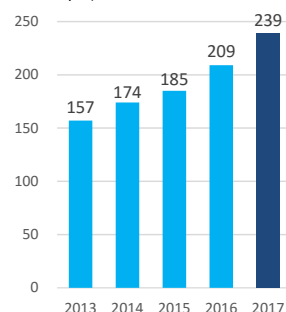
# Management's Discussion and Analysis

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

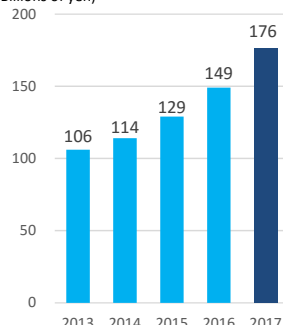
**Net Sales**  
(Billions of yen)



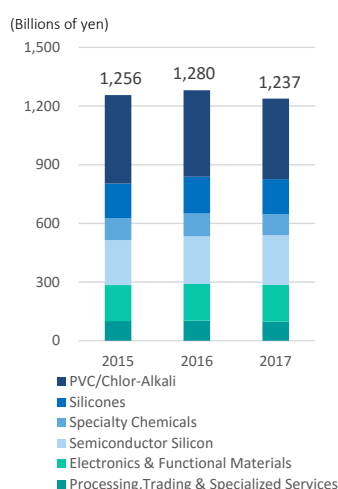
**Operating Income**  
(Billions of yen)



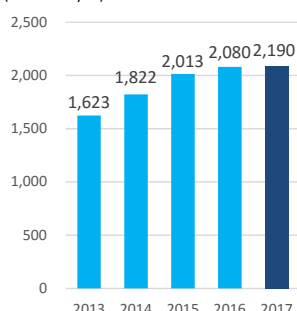
**Profit attributable to owners of parent**  
(Billions of yen)



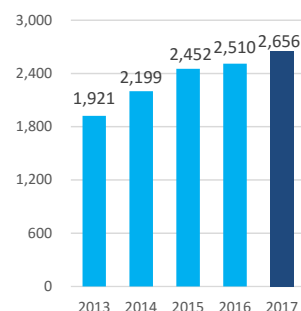
**Net Sales by Business Segment**



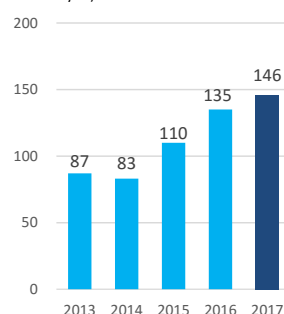
**Total Net Assets**  
(Billions of yen)



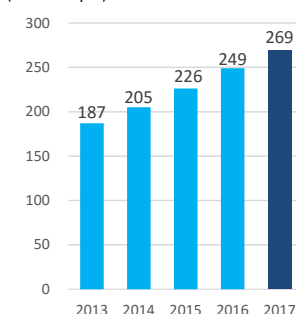
**Total Assets**  
(Billions of yen)



**Capital Expenditures**  
(Billions of yen)



**Net Cash Flow\***  
(Billions of yen)



\* Net cash flow =  
Profit attributable to owners of parent  
+ Depreciation and amortization

## Overview of the Shin-Etsu Group

The Shin-Etsu Group (the "Group") comprises Shin-Etsu Chemical Co., Ltd. (the "Company"), 128 subsidiaries and 14 affiliates (as of March 31, 2017). There are six business segments: PVC/Chlor-Alkali, Silicones, Specialty Chemicals, Semiconductor Silicon, Electronics & Functional Materials, and Processing, Trading & Specialized Services Business. The Group conducts business activities including manufacturing and sales through mutual cooperation among all Group companies.

## Consolidated Operating Performance

With regard to the world economy, during FY 2017 (April 1, 2016 to March 31, 2017), although in the United States and Europe a recovery of the economy was seen, economic growth in Japan was able to record only a slight increase. In China, a gradual slowdown in its economic growth continued, and weakness in the economy was also seen in emerging economies. In Japan, although there was a tendency toward the depreciation of the Japanese yen from the end of November 2016, on the whole during this fiscal year the Japanese manufacturing industry was affected by the increasing tendency toward the appreciation of the Japanese yen.

In these circumstances, in order to achieve continued increases in our business results, the Shin-Etsu Group endeavored (1) to deepen its relationships with its customers and further expand its global customer base; (2) to constantly carry out product development that strongly supports our customers' needs, improve product quality and achieve further differentiation in technologies; and (3) to continue our policy of strict cost management.

As a result, although the business results for this fiscal year saw a decrease in net sales, mainly due to the effects of the yen's appreciation, we were able to achieve increased profit. Therefore, compared with the previous fiscal year, net sales for FY 2017 decreased by 3.3% (¥42,402 million) to ¥1,237,405 million. Operating income was ¥238,617 million, an increase of 14.4% (¥30,092 million) from the previous fiscal year. Ordinary income also increased by 10.1% (¥22,128 million) to ¥242,133 million over the previous fiscal year. Profit attributable to owners of parent was ¥175,912 million, an increase of 18.2% (¥27,072 million) compared with the previous fiscal year.

## Business Segment Overview

### PVC/Chlor-Alkali Business

*Mainly comprising the manufacture and sales of PVC and caustic soda*

With regard to our PVC business, because Shintech in the U.S., making good use of its expanded production capacity, realized sales growth that surpassed that of the industry both within and outside of North America, it achieved a double-digit profit increase. Shin-Etsu PVC in Europe continued steady operation, and its shipments continued to be firm. The PVC business in Japan increased its sales volume both within Japan and outside of Japan and improved its profit.

As a result, compared with the previous fiscal year, net sales for this business segment decreased by 6.8% (¥30,101 million) to ¥411,600 million and operating income increased by 19.0% (¥8,496 million) to ¥53,186 million.

### Silicones Business

*Mainly comprising the manufacture and sales of silicones*

With regard to the silicones business, in Japan, shipments of product applications for cosmetics and on-board automobiles continued to do well. Globally, although general-purpose products were affected in the first half of the fiscal year by sluggish market prices, shipments of functional products for the United States, China and Southeast Asia were firm.

As a result, compared with the previous fiscal year, net sales for this business segment decreased by 4.5% (¥8,473 million) to ¥179,275 million and operating income increased by 2.5% (¥1,049 million) to ¥42,549 million.

### Specialty Chemicals Business

*Mainly comprising the manufacture and sales of cellulose derivatives and silicon metals*

With regard to cellulose derivatives, in Japan, although sales of construction materials products were slow, shipments of pharmaceutical-use products continued to do well. The business of SE Tylose in Europe continued to be steady on the whole for coating products and construction materials products. Shipments were firm in the silicon metal business of Simcoa Operations in Australia, although it was affected by a decline in market prices.

As a result, compared with the previous fiscal year, net sales for this business segment decreased by 7.5% (¥8,791 million) to ¥108,058 million and operating income increased by 22.2% (¥4,043 million) to ¥22,233 million.

### Semiconductor Silicon Business

*Mainly comprising the manufacture and sales of semiconductor silicon*

With regard to semiconductor silicon, together with applications for memory devices continuing to be firm, shipments of logic devices also did well, supported by demand in a wide range of fields for applications such as for smartphones.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 3.8% (¥9,286 million) to ¥252,612 million and operating income increased by 19.4% (¥9,080 million) to ¥55,991 million.

### Electronics & Functional Materials Business

*Mainly comprising the manufacture and sales of rare earth magnets and synthetic quartz products*

With regard to the rare earth magnets business, although products for hard-disk drives were slow, products for applications in automobiles were firm, including those for hybrid cars. With regard to the photoresist products business, ArF resists and trilayer materials continued to perform steadily and photomask blanks had good shipments. Although the business of materials for LED packaging was affected by production adjustments made by some customers, optical fiber preform continued to have firm shipments.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 0.6% (¥1,173 million) to ¥187,938 million and operating income increased by 7.3% (¥3,756 million) to ¥55,209 million.

### Processing, Trading & Specialized Services Business\*

*Mainly comprising the Shin-Etsu Polymer Group business and the provision of various services including construction and repairs*

Shin-Etsu Polymer Co., Ltd.'s business of input devices for automobiles and semiconductor wafer-related containers continued to do well.

As a result, compared with the previous fiscal year, net sales for this business segment decreased by 5.3% (¥5,496 million) to ¥97,919 million and operating income increased by 70.2% (¥3,953 million) to ¥9,584 million.

\*The name of this business segment was changed from the previous name of "Diversified Business" to "Processing, Trading & Specialized Services Business" in FY 2017. This change was made in order to make clearer the contents of this business segment. There is no change in the products and services that come under this business segment.

## Analysis of Financial Position

### Information on Assets, Liabilities and Net Assets

At the end of FY 2017, total assets increased by ¥145,551 million compared with that at the end of the previous fiscal year to ¥2,655,636 million. This was mainly due to the increase in cash and time deposits and fixed assets.

Total liabilities increased by ¥35,934 million from that at the end of the previous fiscal year to ¥465,553 million.

Total net assets amounted to ¥2,190,082 million. This was mainly due to the increase in retained earnings, resulting from profit attributable to owners of parent of ¥175,912 million, offset by a decrease in foreign currency translation adjustments due to the appreciation of the yen.

The equity ratio was 80.3%, down 0.5 percentage points from 80.8%, and net assets per share increased by ¥240.68 compared with the previous fiscal year, to ¥5,002.16.

### Cash Flows

The balance of cash and cash equivalents at the end of FY 2017 increased by 50.4% (¥245,701 million) compared with that at the end of the previous fiscal year to ¥733,306 million.

### Cash Flows from Operating Activities

Net cash provided by operating activities amounted to ¥290,872 million, an increase of ¥9,229 million from the previous fiscal year. This was mainly attributable to ¥242,133 million in income before income taxes and non-controlling interests, ¥93,087 million in depreciation and amortization, an increase of ¥23,501 million in accounts receivable-trade and ¥62,895 million for the payment of income taxes.

### Cash Flows from Investing Activities

Net cash provided by investing activities was ¥1,281 million, while net cash used for investing activities was ¥166,599 million in the previous fiscal year. This was mainly attributable to cash inflows of ¥186,381 million in proceeds from redemption of securities and a ¥30,289 million decrease in time deposits, despite cash outflow of ¥134,897 million for purchases of property, plant and equipment as well as ¥74,001 million for purchases of securities.

### Cash Flows from Financing Activities

Net cash used for financing activities decreased by ¥1,742 million from the previous fiscal year to ¥37,199 million. This was mainly due to a cash dividend payment of ¥48,987 million.

### Capital Expenditures

Capital expenditures totaled ¥145,647 million overall for the PVC/Chlor-Alkali Business, Silicones Business, Specialty Chemicals Business, Semiconductor Silicon Business, Electronics & Functional Materials Business and the Processing, Trading & Specialized Services Business.

Capital expenditure in the PVC/Chlor-Alkali Business totaled ¥57,232 million. This was mainly due to PVC processing equipment enhancements at Shintech and the construction of a new ethylene manufacturing plant (currently under construction).

In the Silicones Business, capital expenditures were ¥23,182 million. This was mainly due to the enhancement and rationalization of silicone product manufacturing equipment.

In the Specialty Chemicals Business, capital expenditures were ¥7,806 million.

In the Semiconductor Silicon Business, capital expenditures were ¥14,982 million. This was mainly due to investments to improve the quality of semiconductor silicon wafers at Shin-Etsu Handotai Co., Ltd.

In the Electronics & Functional Materials Business, capital expenditures were ¥38,190 million. This was mainly due to the construction of a new plant for the production of optical fiber preform at Shin-Etsu YOFC (Hubei) Optical Preform Co., Ltd. and the construction of a new plant for the production of photomask blanks at the Shin-Etsu Chemical Takefu plant.

In the Processing, Trading & Specialized Services Business, capital expenditures were ¥4,431 million.

Funds required for these investments were provided mainly using our own capital.

### Basic Policy Concerning Profit-sharing

Taking a long-term perspective, Shin-Etsu Chemical Co., Ltd. (the "Company") will focus on expanding company earnings and strengthening the make-up of the Group's structure as well as on sharing the results of such successful management efforts. It is our basic policy to distribute dividends so as to appropriately reward all of our shareholders. With regard to our financial reserves, we are making efforts to heighten the value of the company by reinvesting them in such core business activities as facility investment, and research and development, and we will proactively utilize them for strengthening Shin-Etsu's global competitive power and future business development.

In line with our basic profit-sharing policy, the year-end dividend is scheduled to be ¥60 per share, the same amount as the interim dividend of ¥60. Accordingly, the total annual dividend per share for FY 2017 will be an increase of ¥10 over the annual dividend of the previous fiscal year (¥110) to become ¥120 per share.

The forecast for the shareholders' dividend for FY 2018 has not yet been determined.

### Outlook for Fiscal 2018 (Ending March 31, 2018)

The world economy contains many uncertain factors and it does not allow for optimism.

Facing such a situation, the Shin-Etsu Group will carefully focus on developments in world markets and aggressively develop our sales activities while accurately capturing trends in demand. At the same time, we will further accelerate the development of our global business by such means as constructing manufacturing bases at optimal locations in the world and strengthening and expanding existing facilities. In addition, we will further focus on enhancing productivity and product quality, and at the same time, we will strive to develop products that have value for customers and we will also strive to assure the stable supply of our products. For this purpose, while continuing to maintain a sound financial base, we will proactively utilize our financial strength to carry out appropriate investments in a timely manner.

On the other hand, among the main products of the Shin-Etsu Group, there are those products that will be greatly affected by such factors as fluctuations in raw materials prices and in market conditions as well as supply and demand conditions.



In addition, over 70% of the Group's sales consist of sales outside of Japan, and exchange rate fluctuations affect our company's business. Exchange rate fluctuations also affect us when converting Shin-Etsu Chemical's overseas Group companies' business results into Japanese yen. When considering these external factors that have the possibility of these kinds of fluctuations, it is difficult at this point in time to make a reasonable business forecast for the coming fiscal year. Therefore, we have decided to refrain from making a forecast for FY 2018's consolidated operating performance. We will disclose the consolidated business forecast as soon as it becomes possible to do so.

## **Business Risks**

This section discusses risk factors that could potentially influence such key business matters as the results of the Group's business operations, financial condition and cash flows. The Group reduces its vulnerability to business risks by taking measures to prevent, disperse or hedge these risks. However, if an unforeseeable situation should occur, it could have a significant impact on the Group's business results.

This section contains a list of significant items that the Group considers are current risk factors, but it is not intended to be a comprehensive list of all risks that could seriously impact the Group's business performance.

### **1) Influence of Economic Trends and Product Markets**

Changes in the economic situation of countries or regions where the Group's key products are marketed can have a great impact on the results of the Group's business operations. In addition, among the Group's key products, some products could be affected by large price fluctuations due to the global supply and demand environment. The Group is hedging its risks by taking such strategies as diversifying and globalizing its businesses.

However, a downturn in demand for certain of its products or escalating price competition could have a significant effect on the Group's business operations results.

### **2) Influence of Fluctuations in Foreign Exchange Rates**

Overseas sales accounted for 72% of the consolidated net sales of the Group in fiscal 2017, and it is expected that this ratio will remain at a high level. The Japanese yen equivalent amounts of items in the financial statement items of overseas consolidated subsidiaries, which are included in the Group's consolidated financial statements, are influenced by fluctuations in foreign exchange rates.

A large movement in these rates could have a great impact on the business results of the entire Group. In addition, although we use forward-exchange contracts and other measures to reduce risk exposure associated with transactions in foreign currencies, a large movement in foreign exchange rates could have a similar serious effect on the Group's business operations results.

### **3) Influence of Natural Disasters and Disastrous Accidents**

To minimize the damage that could result from an interruption of production activities, the Group performs

regular disaster-prevention inspections, carries out a constant program of facility maintenance activities at its production facilities and makes facility investments to enhance safety and establish multiple manufacturing bases. However, if a natural disaster or disastrous accident or other unforeseen event damages production facilities or other areas, such circumstances could have a major impact on the Group's business operations results.

### **4) Influence of Public Regulations and Laws**

In countries and regions where the Group is carrying out its business activities, we are bound by the approval processes and licensing requirements involving investment and import/export regulations as well as by various related laws concerning commercial transactions, labor, patents, taxes, foreign exchange and other items. Any changes in these regulations and laws could have a significant effect on the Group's business operations results.

### **5) Influence of Supply Factors on Procurement of Materials**

The Group uses various raw materials in its production activities, and we strive to assure a stable supply of these materials by diversifying our supply sources. However, if supplies become tight or there are delays in procuring these materials, or if prices increase because of these events, there could be a great effect on the Group's business operations results.

### **6) Influence of the Development of New Products and Technologies**

The pace of technological progress is rapid in the electronics industry, which is an important market for some of the Group's products. The Group is constantly working on developing the most advanced cutting-edge materials to meet needs associated with this technological innovation. However, if the Group is unable to take appropriate measures in response to changes in industries and/or markets despite its constant efforts, there could be a significant effect on the Group's business operations results.

### **7) Influence of Environmental Issues**

The Group handles various types of chemical substances and complies strictly with various laws and regulations concerning the environment. In addition, the Group has been making efforts for energy-saving in order to help combat global warming and for eliminating or significantly reducing emissions of substances that are harmful to the environment. However, if regulations concerning the environment become more strict than presently anticipated and require large-scale capital expenditures and other investments as a result, there could be a significant effect on the Group's business operations results.

### **8) Influence of Product Liability**

The Group uses a large number of measures to maintain the optimum quality of its products in accordance with the characteristics of each product. However, a problem involving product quality that occurs due to unforeseen circumstances could have a significant effect on the Group's business operations results.

# Consolidated Balance Sheet

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES  
As of March 31, 2016 and 2017

	Millions of yen		Thousands of U.S. dollars (Note 3)
	2016	2017	2017
<b>ASSETS</b>			
<b>Current Assets:</b>			
Cash and time deposits (Note 20)	¥597,048	¥752,675	\$6,720,319
Notes and accounts receivable-trade	268,905	287,853	2,570,124
Securities (Notes 5 and 20)	236,486	186,591	1,665,997
Merchandise and finished goods	133,664	126,026	1,125,233
Work in process	13,367	12,234	109,232
Raw materials and supplies	133,981	128,896	1,150,865
Deferred taxes, current (Note 18)	36,330	35,937	320,866
Other	47,689	33,941	303,048
Less: Allowance for doubtful accounts (Note 2 (5))	(14,840)	(14,549)	(129,910)
Total current assets	1,452,633	1,549,607	13,835,779
<b>Fixed Assets:</b>			
<b>Property, Plant and Equipment</b> (Notes 2 (8) and 8):			
Buildings and structures, net	170,478	174,923	1,561,816
Machinery and equipment, net	410,322	437,775	3,908,706
Land	83,108	86,953	776,372
Construction in progress	133,551	139,180	1,242,684
Other, net	7,510	7,737	69,089
Total property, plant and equipment	804,972	846,570	7,558,669
<b>Intangible Assets</b>	13,152	10,229	91,337
<b>Investments and Other Assets:</b>			
Investments in securities (Notes 5 and 7)	130,202	135,311	1,208,142
Net defined benefit asset (Note 10)	1,551	1,928	17,221
Deferred taxes, non-current (Note 18)	16,458	22,562	201,449
Other (Note 7)	92,923	91,265	814,872
Less: Allowance for doubtful accounts (Note 2 (5))	(1,807)	(1,840)	(16,435)
Total investments and other assets	239,327	249,228	2,225,250
Total fixed assets	1,057,451	1,106,028	9,875,257
<b>Total Assets</b>	¥2,510,085	¥2,655,636	\$23,711,036

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



	Millions of yen		Thousands of U.S. dollars (Note 3)
	2016	2017	2017
<b>LIABILITIES</b>			
<b>Current Liabilities:</b>			
Notes and accounts payable-trade	¥115,557	¥123,823	\$1,105,569
Short-term borrowings (Note 9)	7,873	12,788	114,185
Accounts payable-other	49,071	54,671	488,140
Accrued expenses	56,824	61,611	550,104
Accrued income taxes	29,519	32,711	292,065
Accrued bonuses for employees	2,627	2,898	25,881
Accrued bonuses for directors	547	612	5,470
Other (Note 18)	19,933	27,881	248,940
Total current liabilities	281,954	317,000	2,830,357
<b>Long-Term Liabilities:</b>			
Long-term debt (Note 9)	5,288	1,578	14,092
Deferred taxes, non-current (Note 18)	96,183	98,228	877,042
Net defined benefit liability (Note 10)	33,319	35,809	319,730
Other	12,872	12,936	115,507
Total long-term liabilities	147,665	148,553	1,326,372
<b>Total Liabilities</b>	429,619	465,553	4,156,729
<b>Commitment and Contingent Liabilities</b> (Note 11)			
<b>NET ASSETS</b>			
<b>Stockholders' Equity:</b>			
Common stock:	119,419	119,419	1,066,247
Authorized: 1,720,000,000 shares			
Issued: 432,106,693 shares as of March 31, 2016 and 2017, respectively			
Additional paid-in capital	128,759	129,626	1,157,376
Retained earnings (Note 12)	1,731,042	1,857,857	16,588,017
Less: Treasury stock, at cost	(33,407)	(31,213)	(278,692)
6,127,692 shares and 5,724,030 shares as of March 31, 2016 and 2017, respectively			
Total stockholders' equity	1,945,813	2,075,690	18,532,947
<b>Accumulated Other Comprehensive Income:</b>			
Unrealized gains (losses) on available-for-sale securities (Note 2 (7))	13,780	22,887	204,348
Deferred gains (losses) on hedges	1,611	862	7,697
Foreign currency translation adjustments	68,566	35,154	313,879
Remeasurements of defined benefit plans	(1,480)	(1,761)	(15,723)
Total accumulated other comprehensive income	82,478	57,142	510,201
<b>Share Subscription Rights</b>	237	152	1,364
<b>Non-controlling Interests in Consolidated Subsidiaries</b>	51,936	57,096	509,793
Total net assets	2,080,465	2,190,082	19,554,306
<b>Total Liabilities and Net Assets</b>	¥2,510,085	¥2,655,636	\$23,711,036

# Consolidated Statement of Income

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

For the fiscal years ended March 31, 2016 and 2017

	Millions of yen		Thousands of U.S. dollars (Note 3)
	2016	2017	2017
<b>Net Sales (Note 21)</b>	¥1,279,807	¥1,237,405	\$11,048,267
<b>Cost of Sales (Notes 10 and 16)</b>	930,019	868,404	7,753,612
Gross profit	349,787	369,001	3,294,655
<b>Selling, General and Administrative Expenses (Notes 10, 15 and 16)</b>	141,262	130,383	1,164,140
Operating income (Note 21)	208,525	238,617	2,130,514
<b>Other Income (Expenses):</b>			
Interest income	4,011	4,714	42,092
Dividend income	4,506	2,602	23,237
Equity in earnings (losses) of affiliates	3,302	2,788	24,898
Subsidy income	2,837	—	—
Interest expenses	(452)	(529)	(4,725)
Loss on disposal of property, plant and equipment	(1,329)	(974)	(8,700)
Foreign exchange gain (loss)	(2,760)	(3,697)	(33,009)
Other, net	1,363	(1,388)	(12,400)
Ordinary income	220,005	242,133	2,161,907
Income before income taxes and non-controlling interests	220,005	242,133	2,161,907
<b>Income Taxes (Note 18):</b>			
Current	65,342	67,187	599,887
Deferred	4,284	(3,363)	(30,032)
Total Income Taxes	69,627	63,823	569,855
<b>Profit</b>	150,377	178,309	1,592,052
<b>Profit attributable to non-controlling interests</b>	(1,537)	(2,397)	(21,406)
<b>Profit attributable to owners of parent</b>	¥148,840	¥175,912	\$1,570,645
	Yen		U.S. dollars (Note 3)
<b>Earnings per Share (Note 2 (14)):</b>			
Profit attributable to owners of parent—basic	¥349.46	¥412.86	\$3.686
Profit attributable to owners of parent—fully diluted	349.42	412.83	3.685
Cash dividends	110.00	120.00	1.071
<b>Weighted-Average Number of Shares Outstanding (Thousands)</b>	425,919	426,086	426,086

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

# Consolidated Statement of Comprehensive Income

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES  
For the fiscal years ended March 31, 2016 and 2017

	Millions of yen		Thousands of U.S. dollars (Note 3)
	2016	2017	2017
<b>Profit</b>	¥150,377	¥178,309	\$1,592,052
<b>Other Comprehensive Income (Note 19):</b>			
Unrealized gains (losses) on available-for-sale securities	(8,589)	9,149	81,688
Deferred gains (losses) on hedges	1,703	(753)	(6,726)
Foreign currency translation adjustments	(33,370)	(34,265)	(305,944)
Remeasurements of defined benefit plans	1,905	(280)	(2,504)
Share of other comprehensive income (loss) of affiliates accounted for using the equity method	(141)	(205)	(1,837)
Total other comprehensive income (loss)	(38,491)	(26,356)	(235,324)
<b>Comprehensive Income</b>	¥111,885	¥151,953	\$1,356,728
(Breakdown)			
Comprehensive income attributable to owners of parent	¥112,017	¥150,576	\$1,344,434
Comprehensive income attributable to non-controlling interests	(132)	1,376	12,293

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

## Consolidated Statement of Changes in Net Assets

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

	Thousands	Millions of yen				
	Number of shares of common stock	Stockholders' Equity				
		Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total
<b>Balance at April 1, 2015</b>	432,106	¥119,419	¥128,572	¥1,626,873	¥(33,837)	¥1,841,029
Cash dividends (Note 12)				(44,720)		(44,720)
Profit attributable to owners of parent				148,840		148,840
Purchase of treasury stock					(16)	(16)
Disposal of treasury stock			(19)		445	425
Others			206	49		255
Net changes of items other than stockholders' equity						
<b>Balance at March 31, 2016</b>	432,106	¥119,419	¥128,759	¥1,731,042	¥(33,407)	¥1,945,813

	Millions of yen						
	Accumulated Other Comprehensive Income					Share subscription rights	Non-controlling interests in consolidated subsidiaries
	Unrealized gains (losses) on available-for-sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total		
<b>Balance at April 1, 2015</b>	¥22,349	¥(91)	¥100,425	¥(3,382)	¥119,300	¥139	¥52,242
Cash dividends (Note 12)							(44,720)
Profit attributable to owners of parent							148,840
Purchase of treasury stock							(16)
Disposal of treasury stock							425
Others							255
Net changes of items other than stockholders' equity	(8,568)	1,703	(31,858)	1,901	(36,822)	97	(306)
<b>Balance at March 31, 2016</b>	¥13,780	¥1,611	¥68,566	¥(1,480)	¥82,478	¥237	¥51,936

	Thousands	Millions of yen				
	Number of shares of common stock	Stockholders' Equity				
		Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total
<b>Balance at April 1, 2016</b>	<b>432,106</b>	<b>¥119,419</b>	<b>¥128,759</b>	<b>¥1,731,042</b>	<b>¥(33,407)</b>	<b>¥1,945,813</b>
Cash dividends (Note 12)				(48,987)		(48,987)
Profit attributable to owners of parent				175,912		175,912
Purchase of treasury stock					(19)	(19)
Disposal of treasury stock			878		2,213	3,092
Others			(11)	(109)		(121)
Net changes of items other than stockholders' equity						
<b>Balance at March 31, 2017</b>	<b>432,106</b>	<b>¥119,419</b>	<b>¥129,626</b>	<b>¥1,857,857</b>	<b>¥(31,213)</b>	<b>¥2,075,690</b>

	Millions of yen							
	Accumulated Other Comprehensive Income					Share subscription rights	Non-controlling interests in consolidated subsidiaries	Total net assets
	Unrealized gains (losses) on available-for-sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total			
<b>Balance at April 1, 2016</b>	<b>¥13,780</b>	<b>¥1,611</b>	<b>¥68,566</b>	<b>¥(1,480)</b>	<b>¥82,478</b>	<b>¥237</b>	<b>¥51,936</b>	<b>¥2,080,465</b>
Cash dividends (Note 12)								(48,987)
Profit attributable to owners of parent								175,912
Purchase of treasury stock								(19)
Disposal of treasury stock								3,092
Others								(121)
Net changes of items other than stockholders' equity	9,106	(749)	(33,412)	(280)	(25,335)	(84)	5,160	(20,259)
<b>Balance at March 31, 2017</b>	<b>¥22,887</b>	<b>¥862</b>	<b>¥35,154</b>	<b>¥(1,761)</b>	<b>¥57,142</b>	<b>¥152</b>	<b>¥57,096</b>	<b>¥2,190,082</b>

	Thousands	Thousands of U.S. dollars (Note 3)				
	Number of shares of common stock	Stockholders' Equity				
		Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total
<b>Balance at April 1, 2016</b>	<b>432,106</b>	<b>\$1,066,247</b>	<b>\$1,149,634</b>	<b>\$15,455,740</b>	<b>\$(298,285)</b>	<b>\$17,373,336</b>
Cash dividends (Note 12)				(437,388)		(437,388)
Profit attributable to owners of parent				1,570,645		1,570,645
Purchase of treasury stock					(174)	(174)
Disposal of treasury stock			7,843		19,767	27,610
Others			(101)	(979)		(1,081)
Net changes of items other than stockholders' equity						
<b>Balance at March 31, 2017</b>	<b>432,106</b>	<b>\$1,066,247</b>	<b>\$1,157,376</b>	<b>\$16,588,017</b>	<b>\$(278,692)</b>	<b>\$18,532,947</b>

	Thousands of U.S. dollars (Note 3)							
	Accumulated Other Comprehensive Income					Share subscription rights	Non-controlling interests in consolidated subsidiaries	Total net assets
	Unrealized gains (losses) on available-for-sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total			
<b>Balance at April 1, 2016</b>	<b>\$123,038</b>	<b>\$14,390</b>	<b>\$612,204</b>	<b>\$(13,221)</b>	<b>\$736,412</b>	<b>\$2,117</b>	<b>\$463,720</b>	<b>\$18,575,587</b>
Cash dividends (Note 12)								(437,388)
Profit attributable to owners of parent								1,570,645
Purchase of treasury stock								(174)
Disposal of treasury stock								27,610
Others								(1,081)
Net changes of items other than stockholders' equity	81,310	(6,693)	(298,325)	(2,502)	(226,210)	(753)	46,073	(180,891)
<b>Balance at March 31, 2017</b>	<b>\$204,348</b>	<b>\$7,697</b>	<b>\$313,879</b>	<b>\$(15,723)</b>	<b>\$510,201</b>	<b>\$1,364</b>	<b>\$509,793</b>	<b>\$19,554,306</b>

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

# Consolidated Statement of Cash Flows

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES  
For the fiscal years ended March 31, 2016 and 2017

	Millions of yen		Thousands of U.S. dollars (Note 3)
	2016	2017	2017
<b>Cash Flows from Operating Activities:</b>			
Income before income taxes and non-controlling interests	¥220,005	¥242,133	\$2,161,907
Adjustments to reconcile income before income taxes to net cash provided by operating activities:			
Depreciation and amortization	100,466	93,087	831,140
Loss on impairment of fixed assets	3,343	2,028	18,115
Increase (decrease) in net defined benefit liability	2,461	1,384	12,359
(Gain) loss on sales of investments in securities	(145)	(0)	(1)
(Gain) loss on write-down of investments in securities	40	—	—
Increase (decrease) in allowance for doubtful accounts	4,128	(165)	(1,476)
Interest and dividend income	(8,517)	(7,317)	(65,330)
Interest expenses	452	529	4,725
Exchange (gain) loss	4,451	2,370	21,161
Equity in (earnings) losses of affiliates	(3,302)	(2,788)	(24,898)
Changes in assets and liabilities:			
(Increase) decrease in notes and accounts receivable	20,180	(23,501)	(209,834)
(Increase) decrease in inventories	(8,510)	10,621	94,836
(Increase) decrease in long-term advance payment	3,900	3,180	28,395
Increase (decrease) in notes and accounts payable	(4,610)	9,606	85,775
Other, net	12,270	15,351	137,070
Subtotal	346,614	346,522	3,093,947
Proceeds from interest and dividends	9,133	7,774	69,412
Payments of interest	(468)	(528)	(4,720)
Payments of income taxes	(73,635)	(62,895)	(561,564)
<b>Net cash provided by operating activities</b>	<b>281,643</b>	<b>290,872</b>	<b>2,597,075</b>
<b>Cash Flows from Investing Activities:</b>			
(Increase) decrease in time deposits	(79,555)	30,289	270,440
Purchases of securities	(190,901)	(74,001)	(660,725)
Proceeds from redemption of securities	265,146	186,381	1,664,123
Purchases of property, plant and equipment	(147,227)	(134,897)	(1,204,440)
Proceeds from sales of property, plant and equipment	271	235	2,099
Purchases of intangible fixed assets	(818)	(1,377)	(12,296)
Purchases of investments in securities	(1,854)	(1,613)	(14,407)
Proceeds from sales of investments in securities	310	53	476
Proceeds from redemption of investments in securities	5,000	0	0
Purchases of investments in subsidiaries resulting in change in scope of consolidation	(2,516)	—	—
Payments of loans	(2,858)	(481)	(4,295)
Proceeds from collection of loans	698	3,494	31,205
Other, net	(12,294)	(6,802)	(60,740)
<b>Net cash used for investing activities</b>	<b>(166,599)</b>	<b>1,281</b>	<b>11,438</b>
<b>Cash Flows from Financing Activities:</b>			
Net increase (decrease) in short-term borrowings	151	520	4,643
Proceeds from long-term debt	—	25	223
Repayments of long-term debt	(875)	(212)	(1,897)
Purchases of treasury stock	(16)	(19)	(174)
Proceeds from sales of treasury stock	361	2,979	26,606
Cash dividends paid	(44,720)	(48,987)	(437,388)
Cash dividends paid to non-controlling interests	(576)	(615)	(5,497)
Other, net	6,733	9,110	81,344
<b>Net cash used for financing activities</b>	<b>(38,941)</b>	<b>(37,199)</b>	<b>(332,140)</b>
<b>Effect of Exchange Rate Changes on Cash and Cash Equivalents</b>	<b>(12,513)</b>	<b>(13,584)</b>	<b>(121,288)</b>
<b>Net Increase (Decrease) in Cash and Cash Equivalents</b>	<b>63,589</b>	<b>241,369</b>	<b>2,155,085</b>
<b>Cash and Cash Equivalents at Beginning of Year</b>	<b>423,846</b>	<b>487,604</b>	<b>4,353,611</b>
<b>Increase (Decrease) in Cash and Cash Equivalents Resulting from Changes in Scope of Consolidation</b>	<b>167</b>	<b>4,332</b>	<b>38,681</b>
<b>Cash and Cash Equivalents at End of Year (Note 20)</b>	<b>¥487,604</b>	<b>¥733,306</b>	<b>\$6,547,377</b>

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

# Notes to Consolidated Financial Statements

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES  
For the fiscal years ended March 31, 2016 and 2017

## 1. BASIS OF PRESENTING CONSOLIDATED FINANCIAL STATEMENTS

The accompanying consolidated financial statements have been prepared from accounts and records maintained by Shin-Etsu Chemical Co., Ltd. (the "Company") and its subsidiaries. The Company and its domestic consolidated subsidiaries maintain their accounts and records in accordance with the provisions set forth in the Corporation Law of Japan and the Financial Instruments and Exchange Law and in conformity with generally accepted accounting principles prevailing in Japan. The accounts of overseas consolidated subsidiaries are based on their accounting records maintained in conformity with generally accepted accounting principles prevailing in the respective countries. Before the fiscal year ended March 31, 2008, in general, no adjustments to the accounts of overseas consolidated subsidiaries were reflected in the accompanying consolidated financial statements to present them in compliance with Japanese accounting principles followed by the Company.

Effective from the fiscal year ended March 31, 2009, the "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for Consolidated Financial Statements" (Accounting Standards Board of Japan ("ASBJ") Practical Issues Task Force No. 18, issued on May 17, 2006) has been applied, and accordingly some revisions have been made to the consolidated accounts as necessary.

The accompanying consolidated financial statements of the Company and its subsidiaries are prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to application and disclosure requirements of International Financial Reporting Standards, and are compiled from the consolidated financial statements prepared by the Company, as required by the Financial Instruments and Exchange Law of Japan.

The presentation of the accompanying consolidated financial statements is made in conformity with the Consolidated Financial Statements Regulation (ordinance promulgated by the Ministry of Finance) and meets the requirements for disclosure of financial information of the Company on a consolidated basis. However, certain reclassifications have been made to the consolidated financial statements issued domestically to enable the presentation in a form which is more familiar to readers outside Japan.

The amounts in the accompanying consolidated financial statements are stated in millions of yen. Amounts less than ¥1 million are omitted, except where otherwise indicated.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### (1) Principles of consolidation

The Company had 128 majority-owned subsidiaries as of March 31, 2017 (127 as of March 31, 2016). The consolidated financial statements include the accounts of the Company and 94 (91 for 2016) majority-owned subsidiaries (collectively, the "Companies"), of which the principal firms are listed on page 37 with their respective fiscal year-ends.

The remaining 34 (36 for 2016) unconsolidated subsidiaries, including Shin-Etsu Electronics (Malaysia) Sdn. Bhd., whose total assets, net sales, net income and retained earnings in the aggregate are not material to the consolidated financial statements have been excluded from the scope of consolidation. For consolidation of subsidiaries whose fiscal year-ends are not the same as the Company, necessary adjustments are made for significant intercompany transactions occurring during the periods between the fiscal year-end of respective consolidated subsidiaries and that of the Company.

Unrealized intercompany profits and losses among the Companies are entirely eliminated, and the portion thereof attributable to non-controlling interests is allocated to the non-controlling interests.

Assets and liabilities of consolidated subsidiaries are measured at fair value at the time of acquisition.

Goodwill is amortized within 20 years on a straight-line basis.

Shin-Etsu Magnetic Materials Vietnam Co., Ltd. and other companies were newly included in the scope of consolidation mainly due to increased importance.

### (2) Accounting for investments in unconsolidated subsidiaries and affiliates

The Company had 34 (36 for 2016) unconsolidated subsidiaries (majority-owned) and 14 (14 for 2016) affiliates (meaning 20% to 50% ownership of a company's equity interest). The equity method is applied to the investments in 3 (3 for 2016) major affiliates and investments in the remaining unconsolidated subsidiaries, including Shin-Etsu Electronics (Malaysia) Sdn. Bhd., and affiliates, including TATSUNO CHEMICAL INDUSTRIES INC., are stated at cost because they are not material to the consolidated financial statements.

The unconsolidated subsidiaries and affiliates accounted for by the equity method are listed below:

Mimasu Semiconductor Industry Co., Ltd.

Shin-Etsu Quartz Products Co., Ltd.

Admatechs Co., Ltd.

### (3) Translation of foreign currency transactions

Foreign currency transactions are generally translated into yen at the rates prevailing at the respective transaction dates.

Foreign currency deposits, receivables and payables are translated into yen at the exchange rate prevailing at the respective balance sheet dates and the resulting translation gain or loss is included in the determination of profit for the year.

However, all of the overseas consolidated subsidiaries apply the current rate method to translate transactions and account balances in foreign currencies into their respective home currencies.

### (4) Translation of foreign currency financial statements (accounts of overseas subsidiaries)

The balance sheet accounts of overseas consolidated subsidiaries are translated into yen at current exchange rates prevailing at the end of the fiscal year, except for equity, which is translated at the historical rate. Revenue and expense accounts are translated at the average exchange rates during the year. The resulting translation adjustments are shown as "Foreign currency translation adjustments" in the accompanying balance sheets as of March 31, 2016 and 2017.



**(5) Allowance for doubtful accounts**

The Company and its consolidated subsidiaries provide an allowance for doubtful accounts using the historic percentage of bad debt loss against the balance of general receivables plus an amount deemed necessary to cover individual accounts estimated to be uncollectible.

**(6) Inventories**

Inventories are mainly stated at cost determined by the weighted-average method. Balance sheet amounts are written down based on any decline in profitability.

**(7) Financial instruments**

Securities:

Held-to-maturity debt securities are stated at amortized cost using the straight-line method. Available-for-sale securities for which market quotations are available are stated at fair value. Net unrealized gains or losses on these securities are reported as a separate component of accumulated other comprehensive income at net-of-tax amounts. Other securities for which market quotations are unavailable are stated at cost, determined by the moving-average cost method.

Derivatives:

Derivatives are stated at fair value, with changes in fair value included in profit or loss in the same period in which they arise, except for derivatives that are designated as "hedging instruments."

The Company and consolidated subsidiaries enter into foreign exchange contracts, currency swaps, interest rate swaps and commodity swap contracts.

Hedge accounting:

Gains or losses arising from changes in the fair value of the derivatives designated as "hedging instruments" are deferred as an asset or liability and included in profit or loss in the same period during which the gains and losses on the hedged items or transactions are recognized.

The derivatives designated as hedging instruments by the Company are interest rate swaps, foreign exchange contracts, currency swaps and commodity swap contracts. The related hedged items are interest rate transactions tied to funding activities, forecasted foreign currency transactions and prices of raw materials.

The Company has a policy to utilize the above hedging instruments in order to hedge the risk of fluctuations in interest rates and foreign currencies. Thus, the Company's purchases of the hedging instruments are limited to, at maximum, the amounts of the underlying hedged items. The Company does not enter into derivative transactions for trading or speculative purposes.

The Company evaluates the effectiveness of its hedging activities by reference to the accumulated gains or losses on the hedging instruments and the corresponding hedged items from the commencement of the hedges.

**(8) Property, plant and equipment**

The Company and its domestic subsidiaries principally calculate depreciation by the declining-balance method, based on the estimated useful lives of the assets, except for buildings acquired on or after April 1, 2008, and facilities attached to buildings and structures acquired on or after April 1, 2016, which are depreciated by straight-line method. Foreign subsidiaries principally calculate depreciation by the straight-line method over the estimated useful lives of the assets. The cost of property, plant and equipment retired or otherwise disposed of and accumulated depreciation are eliminated from the related accounts, and the resulting gain or loss is reflected in income.

**(9) Repairs and maintenance**

Normal repairs and maintenance, including minor renewals and improvements, are charged to income as incurred.

**(10) Accrued bonuses for employees**

Certain consolidated subsidiaries recognize the estimated amount of employees' bonuses to be paid in the subsequent period that is attributable to the current fiscal year.

**(11) Accrued bonuses for directors**

The Company and its consolidated subsidiaries recognize the estimated amount of directors' bonuses to be paid in the subsequent period that is attributable to the current fiscal year.

**(12) Accrued retirement benefits**

The Company applies the benefit formula basis to measure the pension obligations. The expected retirement benefit attributed to periods of service under the plan's benefit formula is deemed as arising in each period.

Actuarial differences are amortized over a five-year period, which is within the average remaining service period of employees, using the straight-line method from the fiscal year when the difference was generated. Prior service cost is amortized as incurred over ten-year period, which is within the average remaining service period of employees using the straight-line method from the time when the prior service cost was generated.

**(13) Research and development costs**

Research and development costs are charged to income as incurred.

**(14) Income and dividends per share**

Earnings per share is based upon the weighted-average number of shares of common stock outstanding during each fiscal year. Earnings per share adjusted for dilution represents earnings per share assuming full conversion of all convertible debentures of the Company outstanding with related reduction in interest expenses.

**(15) Dividends**

Dividends are proposed by the Board of Directors and approved by the stockholders at meetings held subsequent to the fiscal year to which the dividends are applicable, and registered stockholders as of the end of such fiscal year are entitled to the subsequently declared dividends. Interim cash dividends are also paid (see Note 12).

Dividends charged to retained earnings in the accompanying consolidated statements of changes in net assets represent dividends approved and paid during the year.

**(16) Consumption tax**

Consumption tax withheld by the Company and certain subsidiaries on sales of products and services is not included in the amount of net sales in the consolidated statements of income. Consumption tax borne by the Company and certain subsidiaries on purchases of goods and services and on expenses is also not included in the related amounts in the consolidated statements of income.

### 3. UNITED STATES DOLLAR AMOUNTS

The accompanying consolidated financial statements are prepared in Japanese yen. The U.S. dollar amounts included in the consolidated financial statements and notes thereto represent the arithmetical results of translating yen to dollars on a basis of ¥112 to US\$1, the approximate effective rate of exchange on March 31, 2017. The inclusion of such dollar amounts is solely for convenience and is not intended to imply that yen amounts have been or could be readily converted, realized or settled in dollars at ¥112 to US\$1 or at any other rate.

### 4. FINANCIAL INSTRUMENTS

**(1) Overview of financial instruments*****Management policy***

In principle, fund management is limited to deposits with financial institutions with high credit ratings and risk-free bonds, and financing is obtained primarily through borrowings from banks.

***Financial instruments, risks and risk management***

Notes and accounts receivable-trade are exposed to credit risk of customers. With regard to credit risk related to notes and accounts receivable-trade, each business department not only controls and manages account due dates and balances, but also confirms the credit standing of major customers periodically, making efforts to identify doubtful accounts as early as possible.

Securities and investments in securities are stocks in companies with which the Company has business relationships, held-to-maturity debt securities and also certificates of deposit. Regarding securities and investment securities, the Company regularly determines their fair value and the financial situation of the issuing companies. For stocks, the Company also continually reviews the stock holding status, considering its relationship with the issuing companies.

In order to hedge the foreign currency exchange risk associated with assets and liabilities denominated in foreign currencies and interest rate risk associated with financial assets and liabilities, derivative transactions such as interest rate swap transactions, currency swap transactions and foreign exchange forward contracts are utilized. Also, to hedge price fluctuation risks when procuring raw materials, commodity swap transactions are utilized. All derivative transactions are entered into for the purpose of hedging risks arising in the ordinary course of business, and there are no derivative transactions entered into for trading or speculative purposes.

***Supplementary explanation on the estimated fair value of financial instruments***

The fair value of financial instruments is based on their quoted market price, if available. When there is no quoted market price available, fair value is reasonably estimated. Since various assumptions and factors are reflected in estimating the fair value, different assumptions and factors could result in different fair values.

**(2) Fair value of financial instruments**

As of March 31, 2016 and 2017, the book value, fair value and the difference between the two are as follows:

	Millions of yen		
	2016		
	Book value	Fair value	Difference
Assets:			
(1) Cash and time deposits	¥597,048	¥597,048	¥—
(2) Notes and accounts receivable—trade	268,905	268,905	—
(3) Securities and investments in securities			
i) Held-to-maturity debt securities	9,137	9,163	26
ii) Investments in and advances to unconsolidated subsidiaries and affiliates	23,572	14,586	(8,986)
iii) Available-for-sale securities	298,979	298,979	—
(4) Long-term loans	7,091	7,034	(57)
<b>Total</b>	<b>¥1,204,735</b>	<b>¥1,195,717</b>	<b>¥(9,017)</b>
Liabilities:			
(1) Notes and accounts payable—trade	¥115,557	¥115,557	¥—
(2) Short-term borrowings	7,873	7,873	—
(3) Accounts payable—other	49,071	49,071	—
(4) Accrued expenses	56,824	56,824	—
(5) Accrued income taxes	29,519	29,519	—
(6) Long-term debt	5,288	5,289	0
<b>Total</b>	<b>¥264,135</b>	<b>¥264,135</b>	<b>¥0</b>
Derivative transactions:			
Hedge accounting not applied	¥3,137	¥3,137	¥—
Hedge accounting applied	2,325	2,325	—
<b>Total</b>	<b>¥5,462</b>	<b>¥5,462</b>	<b>¥—</b>

	Millions of yen			Thousands of U.S. dollars		
	2017			2017		
	Book value	Fair value	Difference	Book value	Fair value	Difference
<b>Assets:</b>						
(1) Cash and time deposits	¥752,675	¥752,675	¥—	\$6,720,319	\$6,720,319	\$—
(2) Notes and accounts receivable—trade	287,853	287,853	—	2,570,124	2,570,124	—
(3) Securities and investments in securities						
i) Held-to-maturity debt securities	9,263	9,226	(37)	82,713	82,381	(331)
ii) Investments in and advances to unconsolidated subsidiaries and affiliates	24,250	24,860	610	216,518	221,968	5,450
iii) Available-for-sale securities	260,071	260,071	—	2,322,066	2,322,066	—
(4) Long-term loans	6,422	6,182	(240)	57,346	55,199	(2,147)
<b>Total</b>	<b>¥1,340,537</b>	<b>¥1,340,870</b>	<b>¥332</b>	<b>\$11,969,089</b>	<b>\$11,972,061</b>	<b>\$2,972</b>
<b>Liabilities:</b>						
(1) Notes and accounts payable—trade	¥123,823	¥123,823	¥—	\$1,105,569	\$1,105,569	\$—
(2) Short-term borrowings	12,788	12,788	—	114,185	114,185	—
(3) Accounts payable—other	54,671	54,671	—	488,140	488,140	—
(4) Accrued expenses	61,611	61,611	—	550,104	550,104	—
(5) Accrued income taxes	32,711	32,711	—	292,065	292,065	—
(6) Long-term debt	1,578	1,559	(19)	14,092	13,920	(171)
<b>Total</b>	<b>¥287,185</b>	<b>¥287,166</b>	<b>¥(19)</b>	<b>\$2,564,157</b>	<b>\$2,563,985</b>	<b>\$ (171)</b>
<b>Derivative transactions:</b>						
Hedge accounting not applied	¥(3,941)	¥(3,941)	¥—	\$(35,193)	\$(35,193)	\$—
Hedge accounting applied	1,149	1,149	—	10,266	10,266	—
<b>Total</b>	<b>¥(2,791)</b>	<b>¥(2,791)</b>	<b>¥—</b>	<b>\$(24,926)</b>	<b>\$(24,926)</b>	<b>\$—</b>

Notes:

1. Method for calculating fair value of financial instruments, and notes regarding securities and derivative transactions

Assets

(1) Cash and time deposits and (2) Notes and accounts receivable—trade

These are settled within a short time, and their fair value and book value are nearly equal. Thus, the book value is listed as the fair value in the table above.

(3) Securities and investments in securities

These mainly consist of stocks and held-to-maturity debt securities. The fair value of stocks is based on prices quoted on stock exchanges, while the fair value of held-to-maturity debt securities is based on either a price quoted on the exchanges or prices provided by counterparty financial institutions. Negotiable certificates of deposit are settled within a short time, and the fair value and book value are nearly equal. Thus, the book value is listed as the fair value in the table above.

(4) Long-term loans

The fair value of long-term loans is calculated based on a future cash flow discounted at an appropriate rate such as mid-term and long-term interest rates with credit spreads, for all loans grouped by a certain period of time and credit rating under the Company's credit exposure management.

Liabilities

(1) Notes and accounts payable—trade, (2) Short-term borrowings, (3) Accounts payable—other, (4) Accrued expenses and (5) Accrued income taxes

These are settled within a short time, and their fair value and book value are nearly equal. Thus, the book value is listed as the fair value in the table above.

(6) Long-term debt

The fair value for long-term debt is calculated based on a present value of principal and interest, discounted at the expected rate for new borrowings with the same terms.

Derivative transactions

Assets and liabilities arising from derivative transactions are presented in the table above. Total net payables are shown in parenthesis.

2. The following table summarizes financial instruments whose fair value is extremely difficult to estimate.

Description	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Non-listed equity securities	¥34,531	¥27,811	\$248,319
Investments in securities, etc.	467	506	4,522
<b>Total</b>	<b>¥34,999</b>	<b>¥28,318</b>	<b>\$252,842</b>

Quoted market prices are not available for these securities. Since it is extremely difficult to estimate their fair value, the fair value is not disclosed.

3. Repayment schedule of time deposits, notes and accounts receivable-trade, securities and investments in securities, and long-term loans.

Description	Millions of yen			
	2016			
	Within one year	Over one year within five years	Over five years within ten years	Over ten years
Time deposits	¥596,986	¥—	¥—	¥—
Notes and accounts receivable-trade	268,905	—	—	—
Securities and investments in securities	236,486	3,533	5,123	—
Long-term loans	—	2,671	572	3,847
<b>Total</b>	<b>¥1,102,378</b>	<b>¥6,205</b>	<b>¥5,695</b>	<b>¥3,847</b>

Description	Millions of yen				Thousands of U.S. dollars			
	2017				2017			
	Within one year	Over one year within five years	Over five years within ten years	Over ten years	Within one year	Over one year within five years	Over five years within ten years	Over ten years
Time deposits	¥752,639	¥—	¥—	¥—	\$6,719,996	\$—	\$—	\$—
Notes and accounts receivable-trade	287,853	—	—	—	2,570,124	—	—	—
Securities and investments in securities	186,591	3,560	5,118	—	1,665,997	31,790	45,701	—
Long-term loans	—	2,546	160	3,715	—	22,736	1,433	33,176
<b>Total</b>	<b>¥1,227,085</b>	<b>¥6,107</b>	<b>¥5,279</b>	<b>¥3,715</b>	<b>\$10,956,119</b>	<b>\$54,527</b>	<b>\$47,134</b>	<b>\$33,176</b>

4. Repayment schedule of short-term borrowings, long-term debt and lease obligations.

Description	Millions of yen					
	2016					
	Within one year	Over one year within two years	Over two years within three years	Over three years within four years	Over four years within five years	Over five years
Short-term borrowings	¥6,510	¥—	¥—	¥—	¥—	¥—
Long-term debt	1,363	5,213	24	6	13	31
Lease obligations	135	86	45	29	9	1
<b>Total</b>	<b>¥8,009</b>	<b>¥5,299</b>	<b>¥69</b>	<b>¥36</b>	<b>¥23</b>	<b>¥32</b>

Description	Millions of yen					
	2017					
	Within one year	Over one year within two years	Over two years within three years	Over three years within four years	Over four years within five years	Over five years
Short-term borrowings	¥6,976	¥—	¥—	¥—	¥—	¥—
Long-term debt	5,812	6	355	5	1,178	31
Lease obligations	110	66	51	31	11	4
<b>Total</b>	<b>¥12,899</b>	<b>¥73</b>	<b>¥406</b>	<b>¥37</b>	<b>¥1,190</b>	<b>¥36</b>

Description	Thousands of U.S. dollars					
	2017					
	Within one year	Over one year within two years	Over two years within three years	Over three years within four years	Over four years within five years	Over five years
Short-term borrowings	\$62,289	\$—	\$—	\$—	\$—	\$—
Long-term debt	51,895	55	3,173	53	10,526	282
Lease obligations	989	598	455	279	99	39
<b>Total</b>	<b>\$115,174</b>	<b>\$653</b>	<b>\$3,629</b>	<b>\$333</b>	<b>\$10,625</b>	<b>\$322</b>

## 5. SECURITIES

Securities as of March 31, 2016 and 2017 consisted of the following:

### (1) Held-to-maturity debt securities

Description	Millions of yen						Thousands of U.S. dollars		
	2016			2017			2017		
	Book value	Fair value	Difference	Book value	Fair value	Difference	Book value	Fair value	Difference
Securities with fair value that exceeds book value	¥5,860	¥5,919	¥59	¥6,102	¥6,120	¥18	\$54,482	\$54,647	\$164
Securities with fair value that does not exceed book value	3,277	3,244	(33)	3,161	3,106	(55)	28,230	27,734	(495)
<b>Total</b>	<b>¥9,137</b>	<b>¥9,163</b>	<b>¥26</b>	<b>¥9,263</b>	<b>¥9,226</b>	<b>¥(37)</b>	<b>\$82,713</b>	<b>\$82,381</b>	<b>\$(331)</b>

### (2) Available-for-sale securities

Description	Millions of yen						Thousands of U.S. dollars		
	2016			2017			2017		
	Book value	Acquisition cost	Difference	Book value	Acquisition cost	Difference	Book value	Acquisition cost	Difference
Securities with book value that exceed acquisition cost	¥52,853	¥28,475	¥24,377	¥70,421	¥36,879	¥33,542	\$628,766	\$329,279	\$299,486
Securities with book value that does not exceed acquisition cost	246,125	248,411	(2,285)	189,649	189,993	(343)	1,693,300	1,696,369	(3,069)
<b>Total</b>	<b>¥298,979</b>	<b>¥276,887</b>	<b>¥22,092</b>	<b>¥260,071</b>	<b>¥226,872</b>	<b>¥33,198</b>	<b>\$2,322,066</b>	<b>\$2,025,649</b>	<b>\$296,417</b>

Note: Non-listed equity securities, with a book value of ¥3,800 million and ¥2,018 million (\$18,024 thousand), and other investment securities with a book value of ¥467 million and ¥506 million (\$4,522 thousand), as of March 31, 2016 and 2017, respectively, whose fair value is extremely difficult to estimate are excluded from the above.

## 6. DERIVATIVE TRANSACTIONS

### (1) Derivative transactions to which hedge accounting is not applied:

1) Currency related:

As of March 31, 2016

Description	Millions of yen		
	Contract amounts	Fair value	Unrealized gain (loss)
Forward foreign exchange contracts			
Sales contracts:			
USD	¥107,837	¥3,117	¥3,117
EUR	1,781	53	53
Other	1,640	15	15
Purchase contracts:			
USD	1,190	(16)	(16)
Other	3,004	110	110
<b>Total</b>	<b>¥115,454</b>	<b>¥3,280</b>	<b>¥3,280</b>

As of March 31, 2017

Description	Millions of yen			Thousands of U.S. dollars		
	Contract amounts	Fair value	Unrealized gain (loss)	Contract amounts	Fair value	Unrealized gain (loss)
Forward foreign exchange contracts						
Sales contracts:						
USD	¥109,052	¥(3,727)	¥(3,727)	\$973,679	\$(33,281)	\$(33,281)
EUR	3,101	(32)	(32)	27,691	(291)	(291)
Other	2,342	31	31	20,910	277	277
Purchase contracts:						
USD	1,303	22	22	11,635	198	198
Other	7,083	(234)	(234)	63,244	(2,096)	(2,096)
<b>Total</b>	<b>¥122,882</b>	<b>¥(3,941)</b>	<b>¥(3,941)</b>	<b>\$1,097,162</b>	<b>\$(35,193)</b>	<b>\$(35,193)</b>

Note: The fair value is provided by counterparty financial institutions.

2) Commodity related:

As of March 31, 2016

Description	Millions of yen		
	Contract amounts	Fair value	Unrealized gain (loss)
Commodity swap contracts			
Receive floating, pay fixed	¥2,279	¥(143)	¥(143)
<b>Total</b>	¥2,279	¥(143)	¥(143)

As of March 31, 2017

Not applicable.

**(2) Derivative transactions to which hedge accounting is applied:**

1) Currency related:

As of March 31, 2016

Hedge accounting method	Transaction	Hedged items	Millions of yen		
			Contract amounts	Contract amounts over one year	Fair value
Deferral hedge accounting	Forward foreign exchange contracts:				
	Sales contracts				
	USD	Accounts receivable-trade	¥26,191	¥—	¥2,308
	Purchase contracts				
	EUR	Accounts payable-trade	874	—	17
<b>Total</b>			¥27,065	¥—	¥2,325

As of March 31, 2017

Hedge accounting method	Transaction	Hedged items	Millions of yen			Thousands of U.S. dollars		
			Contract amounts	Contract amounts over one year	Fair value	Contract amounts	Contract amounts over one year	Fair value
Deferral hedge accounting	Forward foreign exchange contracts:							
	Sales contracts							
	USD	Accounts receivable-trade	¥31,419	¥—	¥415	\$280,533	\$—	\$3,709
	Purchase contracts							
	EUR	Accounts payable-trade	1,509	—	85	13,478	—	766
<b>Total</b>			¥32,929	¥—	¥501	\$294,011	\$—	\$4,476

Note: The fair value is provided by counterparty financial institutions.

2) Commodity related:

As of March 31, 2016

Not applicable.

As of March 31, 2017

Hedge accounting method	Transaction	Hedged items	Millions of yen		
			Contract amounts	Contract amounts over one year	Fair value
Deferral hedge accounting	Commodity swap contracts	Accounts payable-trade	¥2,201	¥2,201	¥642
	Commodity option contracts	Accounts payable-trade	1,697	1,263	6
<b>Total</b>			¥3,898	¥3,465	¥648

Hedge accounting method	Transaction	Hedged items	Thousands of U.S. dollars		
			Contract amounts	Contract amounts over one year	Fair value
Deferral hedge accounting	Commodity swap contracts	Accounts payable-trade	\$19,655	\$19,655	\$5,733
	Commodity option contracts	Accounts payable-trade	15,154	11,284	54
<b>Total</b>			\$34,810	\$30,940	\$5,788

Note: The fair value is provided by counterparty financial institutions.



## 7. INVESTMENTS IN UNCONSOLIDATED SUBSIDIARIES AND AFFILIATES

Investments in unconsolidated subsidiaries and affiliates as of March 31, 2016 and 2017 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Investments in securities (Stocks)	¥54,304	¥50,043	\$446,813
Other (Investments in capital)	10,934	4,130	36,876

## 8. ACCUMULATED DEPRECIATION

Accumulated depreciation of property, plant and equipment as of March 31, 2016 and 2017 was ¥1,903,907 million and ¥1,939,277 million (\$17,314,981 thousand), respectively.

## 9. SHORT-TERM BORROWINGS, LONG-TERM DEBT AND LEASE OBLIGATIONS

Short-term borrowings, long-term debt and lease obligations as of March 31, 2016 and 2017 consisted of the following:

	Average interest rate	Due date	Millions of yen		Thousands of U.S. dollars
			2016	2017	2017
Short-term borrowings	1.1%	—	¥6,510	¥6,976	\$62,289
Current portion of long-term debt	0.7%	—	1,363	5,812	51,895
Current portion of lease obligations	—	—	135	110	989
Long-term debt, excluding current portion	0.6%	January 2018-April 2028	5,288	1,578	14,092
Lease obligations, excluding current portion	—	January 2018-August 2025	172	164	1,472
<b>Total</b>			<b>¥13,470</b>	<b>¥14,642</b>	<b>\$130,738</b>

Notes: 1. Average interest rate is the weighted average rate based on the balance as of March 31, 2017.

2. Average interest rate of lease obligations is not shown as the balance includes the interest portion.

3. Repayment schedule subsequent to March 31, 2017 for long-term debt and lease obligations, excluding the current portion, is as follows:

Years ending March 31,	Millions of yen		Thousands of U.S. dollars	
	Long-term debt	Lease obligations	Long-term debt	Lease obligations
2018	¥6	¥66	\$55	\$598
2019	355	51	3,173	455
2020	5	31	53	279
2021	1,178	11	10,526	99

## 10. RETIREMENT AND PENSION PLANS

The Company and its domestic consolidated subsidiaries have defined contribution pension plans (DC pension plans) and lump-sum severance payment plans as their defined benefit pension plans.

Certain overseas consolidated subsidiaries have defined benefit pension plans while others have defined contribution pension plans.

Additionally, the Company has a "Retirement Benefit Trust".

Information on defined benefit pension plans for the fiscal years ended March 31, 2016 and 2017 is as follows:

### 1. Defined Benefit Pension Plans

#### (1) Changes in Benefit Obligations

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Beginning balance of benefit obligations	¥61,807	¥61,328	\$547,577
Service costs	4,116	3,641	32,517
Interest costs	1,431	1,271	11,357
Actuarial differences arising during the year	(2,391)	2,315	20,675
Retirement benefits paid	(2,527)	(2,893)	(25,831)
Other*	(1,107)	(1,164)	(10,399)
Ending balance of benefit obligations	¥61,328	¥64,500	\$575,895

\*Mainly foreign currency translation adjustments

#### (2) Changes in Pension Assets

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Beginning balance of pension assets	¥30,446	¥29,559	\$263,927
Expected return on pension assets	1,054	1,224	10,935
Actuarial differences arising during the year	(1,383)	279	2,495
Contributions made by the Company and consolidated subsidiaries	915	1,079	9,642
Retirement benefits paid	(634)	(1,115)	(9,958)
Other*	(838)	(409)	(3,656)
Ending balance of pension assets	¥29,559	¥30,619	\$273,386

\*Mainly foreign currency translation adjustments

#### (3) Reconciliation of Benefit Obligations and Pension Assets with Net Defined Benefit Liability and Asset on the Consolidated Balance Sheets

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Funded benefit obligations	¥54,684	¥57,408	\$512,577
Pension assets	(29,559)	(30,619)	(273,386)
Net	25,124	26,789	239,191
Unfunded benefit obligations	6,644	7,091	63,318
Net amount of liability and asset on Consolidated Balance Sheets	¥31,768	¥33,881	\$302,509

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Net defined benefit liability	¥33,319	¥35,809	\$319,730
Net defined benefit asset	(1,551)	(1,928)	(17,221)
Net amount of liability and asset on Consolidated Balance Sheets	¥31,768	¥33,881	\$302,509

**(4) Retirement Benefit Expenses**

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Service costs	¥4,116	¥3,641	\$32,517
Interest costs	1,431	1,271	11,357
Expected return on pension assets	(1,054)	(1,224)	(10,935)
Amortization of actuarial differences	2,020	1,346	12,018
Amortization of prior service cost	19	17	155
Retirement benefit expenses for defined benefit pension plans	¥6,532	¥5,052	\$45,113

**(5) Remeasurements of Defined Benefit Plans (Other Comprehensive Income)****Breakdown (before deduction of tax effects)**

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Actuarial differences	¥3,029	¥(693)	\$(6,190)
Prior service cost	19	(5)	(48)
<b>Total</b>	¥3,048	¥(698)	\$(6,238)

**(6) Remeasurements of Defined Benefit Plans (Accumulated Other Comprehensive Income)****Breakdown (before deduction of tax effects)**

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Unrecognized actuarial differences	¥(1,757)	¥(2,451)	\$(21,884)
Unrecognized prior service cost	(40)	(46)	(410)
<b>Total</b>	¥(1,798)	¥(2,497)	\$(22,295)

**(7) Pension Assets****Breakdown**

	Millions of yen	
	2016	2017
Bonds	42%	41%
Stocks	32%	34%
Other	26%	25%
<b>Total</b>	100%	100%

(Note) 19% and 20% of total pension assets amount were in a "Retirement Benefit Trust" for lump-sum severance payment plans as of March 31, 2016 and 2017, respectively.

**Rate of expected return on pension assets**

The expected return on pension assets is determined based on the current and estimated future rates of return on various pension assets.

**(8) Basic Assumptions for Calculating Benefit Obligations**

	2016	2017
Discount rate	Mainly 0.2%	Mainly 0.2%
Expected rate of return on pension assets	Mainly 1.5%	Mainly 1.5%

**2. Defined Contribution Pension Plans**

Contributions to defined contribution pension plans by the Company and its consolidated subsidiaries

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
	¥2,282	¥2,191	\$19,563

## 11. COMMITMENT AND CONTINGENT LIABILITIES

The Companies were contingently liable as guarantors of housing loans for employees and of loans by unconsolidated subsidiaries, affiliates and others as of March 31, 2016 and 2017 in the aggregate amounts of ¥257 million and ¥191 million (\$1,711 thousand), respectively.

## 12. RETAINED EARNINGS

(1) Cash dividends from retained earnings represent dividends with an effective date during the fiscal year. Details of cash dividends paid during the fiscal years ended March 31, 2016 and 2017 are as follows:

					Millions of yen	Yen
Resolution	Type of shares	Record date	Effective date	Total amount of dividends	Cash dividends per share	
Fiscal year ended March 31, 2016						
Ordinary general meeting of shareholders held on June 26, 2015	Common stock	March 31, 2015	June 29, 2015	¥21,294	¥50.00	
Board of directors meeting held on October 27, 2015	Common stock	September 30, 2015	November 18, 2015	23,425	55.00	
Total				¥44,720		

				Millions of yen                  Yen		Thousands of U.S. dollars	U.S. dollars
Resolution	Type of shares	Record date	Effective date	Total amount of dividends	Cash dividends per share	Total amount of dividends	Cash dividends per share
Fiscal year ended March 31, 2017							
Ordinary general meeting of shareholders held on June 29, 2016	Common stock	March 31, 2016	June 30, 2016	¥23,428	¥55.00	\$209,186	\$0.49
Board of directors meeting held on October 28, 2016	Common stock	September 30, 2016	November 18, 2016	25,558	60.00	228,202	0.54
Total				¥48,987		\$437,388	

(2) Cash dividends for the fiscal years ended March 31, 2016 and 2017 with an effective date in the subsequent fiscal year are as follows:

					Millions of yen		Yen	
Resolution	Type of shares	Source of dividends	Record date	Effective date	Total amount of dividends		Cash dividends per share	
Fiscal year ended March 31, 2016								
Ordinary general meeting of shareholders held on June 29, 2016	Common stock	Retained earnings	March 31, 2016	June 30, 2016	¥23,428		¥55.00	
					Millions of yen		Thousands of U.S. dollars	U.S. dollars
Resolution	Type of shares	Source of dividends	Record date	Effective date	Total amount of dividends	Cash dividends per share	Total amount of dividends	Cash dividends per share
Fiscal year ended March 31, 2017								
Ordinary general meeting of shareholders held on June 29, 2017	Common stock	Retained earnings	March 31, 2017	June 30, 2017	¥25,582	¥60.00	\$228,419	\$0.54

### 13. SHARE SUBSCRIPTION RIGHTS

Fiscal year ended March 31, 2016

Issuer	Description	Type of shares subject to share subscription rights	Number of shares subject to share subscription rights				Millions of yen
			Beginning balance	Increase	Decrease	Ending balance	Balance at March 31, 2016
The Company	Stock options	Common stock	102,500	773,000	93,500	782,000	¥221
Consolidated subsidiary	—	—	—	—	—	—	15
<b>Total</b>							<b>¥237</b>

Fiscal year ended March 31, 2017

Issuer	Description	Type of shares subject to share subscription rights	Number of shares subject to share subscription rights				Millions of yen	Thousands of U.S. dollars
			Beginning balance	Increase	Decrease	Ending balance	Balance at March 31, 2017	Balance at March 31, 2017
The Company	Stock options	Common stock	782,000	—	415,000	367,000	¥101	\$907
Consolidated subsidiary	—	—	—	—	—	—	51	456
<b>Total</b>							<b>¥152</b>	<b>\$1,364</b>

### 14. STOCK OPTIONS

#### (1) Shin-Etsu Chemical Co., Ltd.

There were no stock option expenses recorded for the fiscal year ended March 31, 2017. The stock option expenses for the fiscal year ended March 31, 2016 of ¥214 million were included in selling, general and administrative expenses in the consolidated statements of income. Gains on forfeited stock options for the fiscal years ended March 31, 2016 and 2017 were ¥9 million and ¥7 million (\$63 thousand), respectively.

Stock options as of March 31, 2017 were as follows:

	2015
Grantees	18 directors of the Company 82 employees of the Company
Number of stock options granted by category of stock (in shares)	773,000 shares of common stock
Grant date	September 24, 2015
Vesting conditions	None
Exercise period	September 25, 2016 through March 31, 2020

Movement in stock options during the fiscal year ended March 31, 2017 was as follows:

	Number of shares	
	2016	2015
Beginning balance (Stock options outstanding)	9,000	773,000
Granted	—	—
Exercised	—	406,000
Forfeited	9,000	—
Ending balance (Stock options outstanding)	—	367,000
	Yen	
Exercise price	—	¥7,339
Weighted average market value per share at the exercise date	—	9,272
Fair value per share at the grant date	—	277
	U.S. dollars	
Exercise price	—	\$65.53
Weighted average market value per share at the exercise date	—	82.79
Fair value per share at the grant date	—	2.47

**(2) Shin-Etsu Polymer Co., Ltd.**

The stock option expenses for the fiscal year ended March 31, 2017 of ¥49 million (\$438 thousand) were included in selling, general and administrative expenses in the consolidated statements of income. There were no stock option expenses recorded for the fiscal year ended March 31, 2016. Gains on forfeited stock options for the fiscal years ended March 31, 2016 and 2017 were ¥27 million and ¥4 million (\$37 thousand), respectively.

Stock options as of March 31, 2017 were as follows:

	2011	2012	2016
Grantees	9 Directors 13 Employees 8 Directors of its subsidiaries	10 Directors 15 Employees 11 Directors of its subsidiaries	10 Directors 17 Employees 7 Directors of its subsidiaries
Number of stock options granted by category of stock (in shares)	440,000 shares of common stock	475,000 shares of common stock	491,000 shares of common stock
Grant date	October 5, 2011	September 5, 2012	September 12, 2016
Vesting conditions	None	None	None
Exercise period	December 1, 2011 through November 30, 2016	December 1, 2012 through November 30, 2017	September 13, 2018 through March 31, 2022

Movement in stock options during the fiscal year ended March 31, 2017 was as follows:

	Number of shares		
	2011	2012	2016
Beginning balance (Stock options outstanding)	217,200	170,000	—
Granted	—	—	491,000
Exercised	128,900	110,500	—
Forfeited	88,330	—	—
Ending balance (Stock options outstanding)	—	59,500	491,000
	Yen		
Exercise price	¥414	¥342	¥702
Weighted average market value per share at the exercise date	684	789	—
Fair value per share at the grant date	47	34	100
	U.S. dollars		
Exercise price	\$3.70	\$3.05	\$6.27
Weighted average market value per share at the exercise date	6.11	7.04	—
Fair value per share at the grant date	0.42	0.30	0.89

The fair value of options granted was estimated using the Black-Scholes option pricing model with the following assumptions.

Stock options granted on September 12, 2016

Expected volatility		24.83%
Expected remaining life		3.78 years
Expected dividend		9 yen
Risk-free interest rate		(0.176)%

## 15. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses for the fiscal years ended March 31, 2016 and 2017 mainly consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Shipping expenses	¥35,430	¥34,452	\$307,614
Salaries and allowances	24,333	23,658	211,240
Provision for bonuses for employees	1,429	1,532	13,683
Provision for bonuses for directors	563	627	5,601
Retirement benefit expenses	501	337	3,012
Depreciation and amortization	2,250	2,042	18,234
Technical research expenses	16,455	15,009	134,016
<Including retirement benefit expenses>	<118>	<115>	<1,029>
Provision of allowance for doubtful accounts	5,610	376	3,361

## 16. RESEARCH AND DEVELOPMENT COSTS

Research and development costs incurred and charged to income for the fiscal years ended March 31, 2016 and 2017 were ¥53,165 million and ¥49,020 million (\$437,680 thousand), respectively.

## 17. LEASE TRANSACTIONS

The amounts of outstanding future lease payments due in respect of operating lease contracts at March 31, 2016 and 2017 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
<b>Future Lease Payments:</b>			
Within one year	¥2,465	¥2,080	\$18,579
Over one year	7,112	6,138	54,807
	¥9,578	¥8,219	\$73,387



## 18. INCOME TAXES

The Company and its domestic subsidiaries are subject to a number of Japanese income taxes, which, in the aggregate, resulted in statutory tax rates of approximately 32.8% and 30.7% for the fiscal years ended March 31, 2016 and 2017, respectively.

The tax effects of significant temporary differences and tax loss carry forwards that resulted in deferred tax assets or liabilities at March 31, 2016 and 2017 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
<b>Deferred Tax Assets:</b>			
Depreciation and amortization	¥13,959	¥11,996	\$107,113
Net defined benefit liability	9,803	11,152	99,576
Unrealized profit	6,411	6,441	57,509
Maintenance costs	5,473	5,006	44,704
Allowance for doubtful accounts	3,695	4,264	38,079
Unsettled accounts receivable and payable	2,465	3,989	35,616
Accrued bonuses	3,155	3,289	29,372
Accrued enterprise taxes	1,721	1,090	9,738
Tax loss carryforwards	769	664	5,936
Unrealized gains/losses on available-for-sale securities	68	151	1,352
Other	23,367	30,132	269,039
Valuation allowance	(5,117)	(5,237)	(46,760)
<b>Total</b>	<b>¥65,775</b>	<b>¥72,943</b>	<b>\$651,279</b>
<b>Deferred Tax Liabilities:</b>			
Depreciation and amortization	¥98,049	¥97,949	\$874,552
Unrealized gains/losses on available-for-sale securities	6,789	10,245	91,480
Reserve for special depreciation	105	70	630
Other	7,475	7,117	63,552
<b>Total</b>	<b>¥112,420</b>	<b>¥115,384</b>	<b>\$1,030,216</b>
<b>Net deferred tax assets (liabilities)</b>	<b>¥(46,645)</b>	<b>¥(42,440)</b>	<b>\$(378,936)</b>

Net deferred tax assets (liabilities) are included in the following accounts:

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Current assets: Deferred taxes, current	¥36,330	¥35,937	\$320,866
Fixed assets: Deferred taxes, non-current	16,458	22,562	201,449
Current liabilities: Other	(3,249)	(2,711)	(24,210)
Long-term liabilities: Deferred taxes, non-current	(96,183)	(98,228)	(877,042)

A reconciliation of the difference between the statutory tax rate and effective rate on taxable income for the fiscal years ended March 31, 2016 and 2017 is as follows:

	2016	2017
Statutory tax rate	32.8 %	30.7 %
Rate difference from foreign subsidiaries	(0.5)	0.0
Equity in (earnings) losses of affiliates	(0.5)	(0.4)
Dividend and other non-taxable income	(2.7)	(1.9)
Elimination of intercompany dividend income	2.5	1.9
Tax deduction for research expenses	(1.6)	(1.3)
Entertainment and other non-deductible expenses	0.2	0.2
Adjustment on deferred tax assets due to change in income tax rate	1.3	—
Other, net	0.4	(2.9)
<b>Effective tax rate</b>	<b>31.6</b>	<b>26.4</b>

## 19. OTHER COMPREHENSIVE INCOME

Reclassification adjustments and tax effects of each component of other comprehensive income for the fiscal years ended March 31, 2016 and 2017 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Unrealized gains (losses) on available-for-sale securities			
Amount arising during the year	¥(13,166)	¥12,468	\$111,329
Reclassification adjustment for gains and losses included in profit or loss	45	27	249
Unrealized gains (losses) on available-for-sale securities before tax	(13,121)	12,496	111,579
Tax effect	4,531	(3,347)	(29,891)
Unrealized gains (losses) on available-for-sale securities	(8,589)	9,149	81,688
Deferred gains (losses) on hedges			
Amount arising during the year	2,232	1,431	12,782
Reclassification adjustment for gains and losses included in profit or loss	246	(2,463)	(21,996)
Deferred gains (losses) on hedges before tax	2,479	(1,031)	(9,213)
Tax effect	(775)	278	2,486
Deferred gains (losses) on hedges	1,703	(753)	(6,726)
Foreign currency translation adjustments			
Amount arising during the year	(33,370)	(34,265)	(305,944)
Remeasurements of defined benefit plans			
Amount arising during the year	1,008	(2,062)	(18,412)
Reclassification adjustment for gains and losses included in profit or loss	2,039	1,363	12,174
Remeasurements of defined benefit plans before tax	3,048	(698)	(6,238)
Tax effect	(1,142)	418	3,734
Remeasurements of defined benefit plans	1,905	(280)	(2,504)
Share of other comprehensive income (loss) of affiliates accounted for using the equity method			
Amount arising during the year	(128)	(205)	(1,837)
Reclassification adjustment for gains and losses included in profit or loss	(12)	—	—
Share of other comprehensive income (loss) of affiliates accounted for using the equity method	(141)	(205)	(1,837)
<b>Total other comprehensive income (loss)</b>	<b>¥(38,491)</b>	<b>¥(26,356)</b>	<b>\$ (235,324)</b>

## 20. SUPPLEMENTAL CASH FLOW INFORMATION

Cash and cash equivalents on the consolidated statements of cash flows consist of cash in hand, deposits that can be withdrawn on demand and liquid investments easily convertible into cash that mature within approximately three months from the acquisition date and that have insignificant risk exposure in terms of fluctuation in value.

Reconciliations between cash and cash equivalents and the related accounts shown in the consolidated balance sheets as of March 31, 2016 and 2017 are presented below:

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Cash and time deposits	¥597,048	¥752,675	\$6,720,319
Securities	236,486	186,591	1,665,997
Time deposits (maturities over three months)	(163,943)	(135,369)	(1,208,656)
Securities (maturities over three months)	(181,986)	(70,591)	(630,283)
<b>Cash and cash equivalents</b>	<b>¥487,604</b>	<b>¥733,306</b>	<b>\$6,547,377</b>

## 21. SEGMENT AND RELATED INFORMATION

### 1. Segment information

#### (1) Overview of reportable segments

The reportable segments in the Shin-Etsu Group are defined as individual units for which discrete financial information is available and that are subject to regular review to evaluate their operating results and allocate management resources by the highest decision making body of the Company, such as the Managing Directors' Meeting.

The Shin-Etsu Group conducts business through each business division and affiliated companies based on specific products and services, consisting of the following six segments: "PVC/Chlor-Alkali Business", "Silicones Business", "Specialty Chemicals Business", "Semiconductor Silicon Business", "Electronics & Functional Materials Business" and "Processing, Trading & Specialized Services Business". Consequently, these six businesses are specified as reportable segments.

The main products and services of each segment are as follows:

Segment	Main products and services
PVC/Chlor-Alkali Business	Polyvinyl chloride, Caustic soda, Methanol, Chloromethane
Silicones Business	Silicones
Specialty Chemicals Business	Cellulose derivatives, Silicon metal, Polyvinyl alcohol, Synthetic pheromones
Semiconductor Silicon Business	Semiconductor silicon
Electronics & Functional Materials Business	Rare-earth magnets for electronics industry and general applications, Semiconductor encapsulating materials, Packaging materials for LEDs, Photoresists, Photomask blanks, Synthetic quartz products, Liquid fluoroelastomers, Pellicles
Processing, Trading & Specialized Services Business*	Processed plastics, Export of plant equipment, Technology licensing, International trading, Engineering

\*The name of this business segment was changed from the previous name of the "Diversified Business" to "Processing, Trading & Specialized Services Business" in the fiscal year ended March 31, 2017. This change was made in order to make clearer the contents of this business segment. There is no change in the products and services that come under this business segment.

#### (2) Calculation of income, assets and liabilities of reportable segments

Segment income denotes operating income, and the accounting methods applied are identical to those stated in the "Basis of presenting consolidated financial statements". Internal revenues and transfers arising from transactions among the segments are based on market prices in general.

Assets and liabilities are not allocated to business segments.

#### (3) Information on sales, income (loss) and other items of reportable segments

	Millions of yen								
	2016								
	PVC/Chlor-Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Total	Adjustment <sup>(1)</sup>	Figures in consolidated financial statements
Sales to outside customers	¥441,701	¥187,748	¥116,849	¥243,326	¥186,765	¥103,415	¥1,279,807	¥—	¥1,279,807
Intersegment sales	3,210	9,264	12,665	3	7,490	72,247	104,882	(104,882)	—
<b>Total</b>	¥444,912	¥197,012	¥129,515	¥243,329	¥194,256	¥175,662	¥1,384,689	¥(104,882)	¥1,279,807
Segment income (Operating income)	¥44,690	¥41,500	¥18,190	¥46,911	¥51,453	¥5,631	¥208,377	¥147	¥208,525
Depreciation and amortization	¥32,543	¥11,723	¥10,148	¥23,496	¥16,267	¥4,516	¥98,696	¥(268)	¥98,427
Amortization of goodwill	¥794	¥177	¥1,066	¥—	¥—	¥—	¥2,039	¥—	¥2,039
Increase in property, plant and equipment and intangible assets	¥62,488	¥20,462	¥12,382	¥17,675	¥16,682	¥5,505	¥135,196	¥(442)	¥134,753

Millions of yen									
2017									
	PVC/Chlor-Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Total	Adjustment <sup>(1)</sup>	Figures in consolidated financial statements
Sales to outside customers	¥411,600	¥179,275	¥108,058	¥252,612	¥187,938	¥97,919	¥1,237,405	¥—	¥1,237,405
Intersegment sales	2,858	6,043	13,940	1	6,554	79,823	109,221	(109,221)	—
<b>Total</b>	<b>¥414,458</b>	<b>¥185,318</b>	<b>¥121,998</b>	<b>¥252,614</b>	<b>¥194,493</b>	<b>¥177,743</b>	<b>¥1,346,627</b>	<b>¥(109,221)</b>	<b>¥1,237,405</b>
Segment income (Operating income)	¥53,186	¥42,549	¥22,233	¥55,991	¥55,209	¥9,584	¥238,756	¥(138)	¥238,617
Depreciation and amortization	¥30,256	¥11,349	¥8,903	¥20,798	¥17,240	¥3,956	¥92,504	¥(270)	¥92,234
Amortization of goodwill	¥—	¥154	¥698	¥—	¥—	¥—	¥853	¥—	¥853
Increase in property, plant and equipment and intangible assets	¥57,232	¥23,182	¥7,806	¥14,982	¥38,190	¥4,431	¥145,825	¥(177)	¥145,647

Thousands of U.S. dollars									
2017									
	PVC/Chlor-Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Total	Adjustment <sup>(1)</sup>	Figures in consolidated financial statements
Sales to outside customers	\$3,675,006	\$1,600,670	\$964,806	\$2,255,471	\$1,678,026	\$874,285	\$11,048,267	\$—	\$11,048,267
Intersegment sales	25,519	53,961	124,464	13	58,524	712,708	975,192	(975,192)	—
<b>Total</b>	<b>\$3,700,526</b>	<b>\$1,654,631</b>	<b>\$1,089,271</b>	<b>\$2,255,485</b>	<b>\$1,736,550</b>	<b>\$1,586,993</b>	<b>\$12,023,459</b>	<b>\$(975,192)</b>	<b>\$11,048,267</b>
Segment income (Operating income)	\$474,878	\$379,909	\$198,515	\$499,928	\$492,944	\$85,575	\$2,131,753	\$(1,238)	\$2,130,514
Depreciation and amortization	\$270,143	\$101,334	\$79,499	\$185,696	\$153,933	\$35,324	\$825,931	\$(2,411)	\$823,520
Amortization of goodwill	\$—	\$1,383	\$6,236	\$—	\$—	\$—	\$7,620	\$—	\$7,620
Increase in property, plant and equipment and intangible assets	\$511,000	\$206,986	\$69,701	\$133,768	\$340,985	\$39,568	\$1,302,011	\$(1,587)	\$1,300,423

Notes: [1] Elimination of intersegment transactions.

**2. Related information**  
**Geographic information**

**(1) Net sales**

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Net sales			
Japan	¥331,427	¥342,002	\$3,053,592
U.S.	295,687	275,033	2,455,654
China	122,521	123,683	1,104,317
Asia / Oceania (excluding China)	272,165	268,747	2,399,529
Europe	144,713	135,802	1,212,522
Other	113,291	92,136	822,650
<b>Total</b>	<b>¥1,279,807</b>	<b>¥1,237,405</b>	<b>\$11,048,267</b>

**(2) Property, plant and equipment**

	Millions of yen		Thousands of U.S. dollars
	2016	2017	2017
Property, plant and equipment			
Japan	¥239,079	¥253,904	\$2,267,004
U.S.	439,667	456,093	4,072,267
Other	126,224	136,572	1,219,397
<b>Total</b>	<b>¥804,972</b>	<b>¥846,570</b>	<b>\$7,558,669</b>

### 3. Loss on impairment of fixed assets

Millions of yen								
2016								
	PVC/Chlor-Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Total
Loss on impairment of fixed assets	¥—	¥—	¥2,298	¥—	¥—	¥1,045	¥—	¥3,343

Millions of yen								
2017								
	PVC/Chlor-Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Total
Loss on impairment of fixed assets	¥—	¥—	¥1,489	¥—	¥—	¥539	¥—	¥2,028

Thousands of U.S. dollars								
2017								
	PVC/Chlor-Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Total
Loss on impairment of fixed assets	\$—	\$—	\$13,301	\$—	\$—	\$4,813	\$—	\$18,115

### 4. Amortization of goodwill and unamortized balance

Millions of yen								
2016								
	PVC/Chlor-Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Figures in consolidated financial statements
Amortization of goodwill	¥794	¥177	¥1,066	¥—	¥—	¥—	¥—	¥2,039
Unamortized balance	¥—	¥1,690	¥5,360	¥—	¥—	¥—	¥—	¥7,051

Millions of yen								
2017								
	PVC/Chlor-Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Figures in consolidated financial statements
Amortization of goodwill	¥—	¥154	¥698	¥—	¥—	¥—	¥—	¥853
Unamortized balance	¥—	¥1,502	¥2,818	¥—	¥—	¥—	¥—	¥4,321

Thousands of U.S. dollars								
2017								
	PVC/Chlor-Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Figures in consolidated financial statements
Amortization of goodwill	\$—	\$1,383	\$6,236	\$—	\$—	\$—	\$—	\$7,620
Unamortized balance	\$—	\$13,416	\$25,168	\$—	\$—	\$—	\$—	\$38,584

## 22. RELATED PARTY TRANSACTIONS

There were no transactions between the Company and related parties during the fiscal year ended March 31, 2016.

Transactions between the Company and related parties during the fiscal year ended March 31, 2017 are as follows:

Type	Name	Percentage of voting rights	Relationship	Transactions	Millions of yen			Thousands of U.S. dollars
					Transaction amount (Thousands of shares)	Account	Balance at the fiscal year end	Transaction amount (Thousands of shares)
Director	Fumio Akiya	Direct Ownership 0.00%	Representative Director-Vice Chairman	Exercise of stock options (Note)	¥264 (36)	—	—	\$2,358 (36)
Director	Toshinobu Ishihara	Direct Ownership 0.00%	Senior Managing Director	Exercise of stock options (Note)	¥161 (22)	—	—	\$1,441 (22)
Director	Susumu Ueno	Direct Ownership 0.00%	Senior Managing Director	Exercise of stock options (Note)	¥124 (17)	—	—	\$1,113 (17)
Director	Koji Takasugi	Direct Ownership 0.00%	Managing Director	Exercise of stock options (Note)	¥124 (17)	—	—	\$1,113 (17)
Director	Masahiko Todoroki	Direct Ownership 0.00%	Managing Director	Exercise of stock options (Note)	¥58 (8)	—	—	\$524 (8)
Director	Toshiya Akimoto	Direct Ownership 0.00%	Managing Director	Exercise of stock options (Note)	¥44 (6)	—	—	\$393 (6)
Director	Fumio Arai	Direct Ownership 0.00%	Managing Director	Exercise of stock options (Note)	¥124 (17)	—	—	\$1,113 (17)
Director	Yukihiro Matsui	Direct Ownership 0.00%	Managing Director	Exercise of stock options (Note)	¥102 (14)	—	—	\$917 (14)
Director	Masaki Miyajima	Direct Ownership 0.01%	Managing Director	Exercise of stock options (Note)	¥29 (4)	—	—	\$262 (4)
Director	Shunzo Mori	Direct Ownership 0.00%	Director-Adviser	Exercise of stock options (Note)	¥513 (70)	—	—	\$4,586 (70)
Director	Toshiyuki Kasahara	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥44 (6)	—	—	\$393 (6)
Director	Hidenori Onezawa	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥66 (9)	—	—	\$589 (9)
Director	Kazumasa Maruyama	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥58 (8)	—	—	\$524 (8)
Director	Kenji Ikegami	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥73 (10)	—	—	\$655 (10)
Director	Toshio Shiobara	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥44 (6)	—	—	\$393 (6)
Director	Yoshimitsu Takahashi	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥51 (7)	—	—	\$458 (7)

(Note) Share subscription rights were approved at the board of directors meeting held on September 8, 2015.



## 23. CHANGES IN ACCOUNTING POLICIES

### **Application of Practical Solution on a Change in Depreciation Method due to Tax Reform 2016**

Effective the first quarter of the fiscal year ended March 31, 2017, the “Practical Solution on a change in depreciation method due to Tax Reform 2016” (ASBJ PITF No. 32, issued June 17, 2016) was adopted, in accordance with the revision of the Corporation Tax Law of Japan. As a result, the depreciation method for facilities attached to buildings and for structures acquired on or after April 1, 2016 was changed from the declining-balance method to the straight-line method.

The impact of this change on operating income, ordinary income, and income before income taxes and non-controlling interests for the fiscal year ended March 31, 2017 was immaterial.

## 24. SUPPLEMENTARY INFORMATION

### **Application of Revised Implementation Guidance on Recoverability of Deferred Tax Assets**

Effective the first quarter of the fiscal year ended March 31, 2017, the “Revised Implementation Guidance on Recoverability of Deferred Tax Assets” (ASBJ Guidance No. 26, issued March 28, 2016) was adopted.

The amounts in the accompanying consolidated financial statements and the notes thereto, including the amounts for prior fiscal years, are stated in millions of yen with amounts less than ¥1 million omitted.

## Consolidated Subsidiaries

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

Principal Consolidated Subsidiaries	Percentage of Voting Rights	Fiscal Year-End
Shintech Inc.*	100.0	December 31
Shin-Etsu Handotai Co., Ltd.	100.0	March 31
S.E.H. Malaysia Sdn. Bhd.*	100.0	December 31
Shin-Etsu Handotai America, Inc.*	100.0	December 31
Shin-Etsu PVC B.V.*	100.0	December 31
Shin-Etsu Polymer Co., Ltd.	52.5	March 31
SE Tylose GmbH & Co. KG*	100.0	December 31
Shin-Etsu Astech Co., Ltd.	99.6	March 31
Shin-Etsu Engineering Co., Ltd.	100.0	March 31
Shin-Etsu Handotai Taiwan Co., Ltd.*	70.0	December 31
Simcoa Operations Pty. Ltd.*	100.0	December 31
Shin-Etsu Silicones (Thailand) Ltd.*	100.0	December 31
Asia Silicones Monomer Limited*	100.0	December 31
Nagano Electronics Industrial Co., Ltd.	90.0	February 28
Naoetsu Electronics Co., Ltd.	100.0	February 28
Shin-Etsu Handotai Europe, Ltd.*	100.0	December 31
S-E, Inc.*	100.0	December 31
Shin-Etsu Electronics Materials Singapore Pte. Ltd.*	100.0	December 31
Shin-Etsu Silicone International Trading (Shanghai) Co., Ltd.*	100.0	December 31
Shin-Etsu Finetech Co., Ltd.	100.0	March 31
Shin-Etsu Magnetics Philippines., Inc.*	100.0	December 31
JAPAN VAM & POVAL Co., Ltd.	100.0	March 31
CIRES, Lda.*	100.0	December 31
Shin-Etsu Singapore Pte. Ltd.*	100.0	December 31
Shin-Etsu Silicone Korea Co., Ltd.*	100.0	December 31
Shinano Polymer Co., Ltd.	100.0	March 31
Shin-Etsu (Malaysia) Sdn. Bhd.*	100.0	December 31
Nissin Chemical Industry Co., Ltd.	100.0	February 28
Shin-Etsu MicroSi, Inc.*	100.0	December 31
Shin-Etsu Silicone Taiwan Co., Ltd.*	93.3	December 31
Shin-Etsu Silicones of America, Inc.*	100.0	December 31
Shin-Etsu Silicones Europe B.V.*	100.0	December 31
Shin-Etsu Opto Electronic Co., Ltd.*	80.0	December 31
Shin-Etsu Polymer (Malaysia) Sdn. Bhd.*	100.0	December 31
Shin-Etsu Polymer Europe B.V.*	100.0	December 31
Shin-Etsu International Europe B.V.*	100.0	December 31
Nihon Resin Co., Ltd.	100.0	December 31

\*Overseas subsidiary

Principal Consolidated Subsidiaries	Percentage of Voting Rights	Fiscal Year-End
Naoetsu Precision Co., Ltd.	100.0	February 28
Skyward Information System Co., Ltd.	100.0	March 31
Shinano Electric Refining Co., Ltd.	100.0	March 31
Fukui Environmental Analysis Center Co., Ltd.	100.0	February 28
Shin-Etsu Film Co., Ltd.	100.0	March 31
Shin-Etsu Technology Service Co., Ltd.	76.9	February 28
Urawa Polymer Co., Ltd.	100.0	March 31
Niigata Polymer Company Limited	100.0	March 31
Shin-Etsu Polymer America, Inc.*	100.0	December 31
Naoetsu Sangyo Limited	100.0	March 31
San-Ace Co., Ltd.	100.0	March 31
Shinken Total Plant Co., Ltd.	100.0	February 28
Saitama Shinkoh Mold Co., Ltd.	100.0	March 31
Shinkoh Mold Co., Ltd.	100.0	March 31
Shin-Etsu Magnet Co., Ltd.	100.0	March 31
Shin-Etsu Polymer India Pvt. Ltd.*	100.0	December 31
PT. Shin-Etsu Polymer Indonesia*	100.0	December 31
Shin-Etsu Polymer Singapore Pte. Ltd.*	100.0	December 31
Shin-Etsu Polymer Shanghai Co., Ltd.*	100.0	December 31
Shin-Etsu Polymer Hong Kong Co., Ltd.*	100.0	December 31
Shin-Etsu Polymer Hungary Kft.*	100.0	December 31
Shin-Etsu Polymer (Thailand) Ltd.*	100.0	December 31
Dongguan Shin-Etsu Polymer Co., Ltd.*	100.0	December 31
Human Create Co., Ltd.	100.0	March 31
Suzhou Shin-Etsu Polymer Co., Ltd.*	100.0	December 31
S.E.H. (Shah Alam) Sdn. Bhd.*	100.0	December 31
SHIN-ETSU HANDOTAI SINGAPORE PTE. LTD.*	100.0	December 31
SE Tylose USA, Inc.*	100.0	December 31
K-Bin, Inc.*	100.0	December 31
Shin-Etsu Silicone (Nantong) Co., Ltd.*	100.0	December 31
Shin-Etsu (Jiangsu) Optical Preform Co., Ltd.*	75.0	December 31
Kashima Chlorine & Alkali Co., Ltd.	79.0	March 31
Kashima Vinyl Chloride Monomer Co., Ltd.	70.6	March 31
Shin-Etsu Magnetic Materials Vietnam Co., Ltd.*	100.0	December 31
Shin-Etsu Electronics Materials Taiwan Co., Ltd.*	100.0	December 31
Shin-Etsu YOFC (Hubei) Optical Preform Co., Ltd.*	51.0	December 31

21 other consolidated subsidiaries

## Independent Auditor's Report

The Board of Directors  
Shin-Etsu Chemical Co., Ltd.

We have audited the accompanying consolidated financial statements of Shin-Etsu Chemical Co., Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2017, and the consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

### *Management's Responsibility for the Consolidated Financial Statements*

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

### *Auditor's Responsibility*

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### *Opinion*

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Shin-Etsu Chemical Co., Ltd. and its consolidated subsidiaries as at March 31, 2017, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

### *Convenience Translation*

We have reviewed the translation of these consolidated financial statements into U.S. dollars, presented for the convenience of readers, and, in our opinion, the accompanying consolidated financial statements have been properly translated on the basis described in Note 3.

*Ernst & Young ShinNihon LLC*

June 29, 2017  
Tokyo, Japan