Shin-Etsu Chemical Co., Ltd.

# Annual Report 2016

**Financial Section** 

## **Eleven-Year Summary**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES For the fiscal years ended March 31, 2006 through 2016

			Millions of yen		
	2006	2007	2008	2009	2010
For the year:					
Net sales	¥1,127,915	¥1,304,695	¥1,376,364	¥1,200,813	¥916,837
Cost of sales	831,333	933,199	946,940	853,433	700,902
Selling, general and administrative expenses	111,262	130,467	142,278	114,453	98,718
Operating income	185,320	241,028	287,145	232,927	117,215
Ordinary income	185,040	247,018	300,040	250,533	127,019
Profit attributable to owners of parent	115,045	154,010	183,580	154,731	83,852
Capital expenditures	145,329	210,613	268,479	159,406	123,793
R&D costs	32,003	41,737	47,944	37,469	33,574
Depreciation and amortization	111,637	138,462	141,269	119,457	87,722
At year-end:					
Total assets	¥1,671,280	¥1,859,995	¥1,918,544	¥1,684,944	¥1,769,139
Working capital	572,205	628,986	638,806	606,632	612,447
Common stock	119,419	119,419	119,419	119,419	119,419
Net assets	_	1,360,315	1,483,669	1,407,353	1,474,212
Stockholders' equity	1,173,679	_	_	_	_
Interest-bearing debt	83,838	45,143	34,045	23,827	20,052
Per share (Yen and U.S. dollars):					
Earnings per share—basic	¥266.63	¥357.78	¥426.63	¥362.39	¥197.53
Earnings per share—fully diluted <sup>2</sup>	266.07	357.32	426.35	362.35	197.50
Cash dividends	35.00	70.00	90.00	100.00	100.00
Payout ratio (%)	13.1	19.6	21.1	27.6	50.6
Net assets	2,730.94	3,065.80	3,344.17	3,218.28	3,370.56
General:					
Operating income to net sales ratio (%)	16.4	18.5	20.9	19.4	12.8
Profit attributable to owners of parent to net sales ratio (%)	10.2	11.8	13.3	12.9	9.1
ROE (%) <sup>3</sup>	10.6	12.4	13.3	11.0	6.0
ROA (%)	11.8	14.0	15.9	13.9	7.4
Equity ratio (%)	70.2	71.0	75.0	81.1	80.9
Number of employees	18,888	19,177	20,241	19,170	16,955
Number of shares issued (Thousands)	432,106	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 ¥113 = US\$1, the approximate rate of exchange on March 31, 2016.

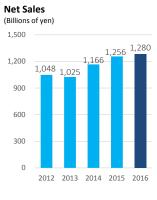
2. Diluted earnings per share for the fiscal year ended March 31, 2012 is not presented as there were no securities with dilutive effect.

3. Stockholders' equity used for calculation of indices from the fiscal year ended March 31, 2007 consists of "stockholders' equity" and "accumulated other comprehensive income."

Thousands o U.S. dollars <sup>1</sup>			fyen	Millions o		
2016	2016	2015	2014	2013	2012	2011
\$11,325,3	¥1,279,807	¥1,255,543	¥1,165,819	¥1,025,409	¥1,047,731	¥1,058,257
8,230,2	930,019	940,399	873,879	769,427	798,592	803,574
1,250,3	141,262	129,814	118,130	98,938	99,505	105,460
1,845,3	208,525	185,329	173,809	157,043	149,632	149,221
1,946,9	220,005	198,025	180,605	170,207	165,237	160,338
1,317,3	148,840	128,606	113,617	105,714	100,643	100,119
1,192,5	134,753	109,903	83,155	86,841	87,165	119,884
470,4	53,165	47,165	43,546	37,671	35,725	37,321
889,0	100,466	96,918	91,445	80,961	82,868	93,732
\$22,213,:	¥2,510,085	¥2,452,306	¥2,198,912	¥1,920,903	¥1,809,841	¥1,784,166
10,359,9	1,170,679	1,100,999	981,667	832,878	694,803	638,493
1,056,8	119,419	119,419	119,419	119,419	119,419	119,419
18,411,2	2,080,465	2,012,711	1,822,135	1,623,176	1,494,573	1,469,429
	_	-	_	_	_	_
119,3	13,470	14,328	15,638	13,929	15,732	14,574
\$3.0	¥349.46	¥302.05	¥267.20	¥248.94	¥237.03	¥235.80
3.0	349.42	301.98	267.07	248.92	_	235.80
0.9	110.00	100.00	100.00	100.00	100.00	100.00
3	31.5	33.1	37.4	40.2	42.2	42.4
42.:	4,761.48	4,602.80	4,165.28	3,709.19	3,422.93	3,360.39
1	16.3	14.8	14.9	15.3	14.3	14.1
1	11.6	10.2	9.7	10.3	9.6	9.5
	7.5	6.9	6.8	7.0	7.0	7.0
	8.9	8.5	8.8	9.1	9.2	9.0
8	80.8	79.9	80.6	82.0	80.3	80.0
18,4	18,407	18,276	17,892	17,712	16,167	16,302
432,:	432,106	432,106	432,106	432,106	432,106	432,106

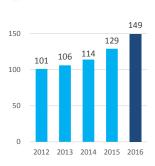
## **Management's Discussion and Analysis**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

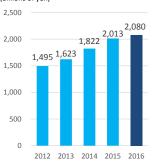


Profit attributable to owners of parent





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

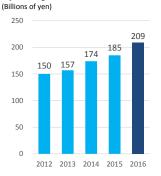


Capital Expenditures

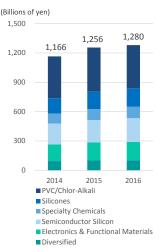




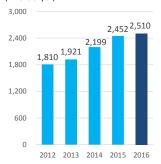




Net Sales by Business Segment



Total Assets (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"), 127 subsidiaries and 14 affiliates (as of March 31, 2016). There are six business segments: PVC/Chlor-Alkali, Silicones, Specialty Chemicals, Semiconductor Silicon, Electronics & Functional Materials, and Diversified 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 2016 (April 1, 2015 to March 31, 2016), although in the United States the recovery of the economy continued, the European economy turned out to be lacking in strength, and an economic slowdown tendency was seen in the emerging economies, such as those in the Asian region. In Japan, the economy moved along a gradual recovery track, and in addition to consumer spending continuing to be steady, supported by an improvement in the employment situation, a recovery in capital investment was seen.

In these circumstances, the Shin-Etsu Group aggressively developed its sales activities to its wide range of customers around the world, and at the same time, we assiduously worked on developing products with special characteristics as well as enhancing our technologies and product quality. Furthermore, we focused on building a strong business foundation by such means as making full use at an early stage of our new global manufacturing plants, expanding our manufacturing bases both in Japan and globally and also focusing on stably securing raw materials.

As a result, compared with the previous fiscal year, net sales for FY 2016 increased by 1.9% (¥24,264 million) to ¥1,279,807 million. Operating income was ¥208,525 million, an increase of 12.5% (¥23,196 million) from the previous fiscal year. Ordinary income also increased by 11.1% (¥21,980 million) to ¥220,005 million over the previous fiscal year. Profit attributable to owners of parent was ¥148,840 million, an increase of 15.7% (¥20,234 million) compared with the previous fiscal year.

## Business Segment Overview PVC/Chlor-Alkali Business

With regard to the PVC business, despite North American demand decreasing by 2% year-on-year in the whole industry, Shintech in the U.S. expanded its domestic sales and at the same time aggressively carried out sales to its worldwide customers, and its shipments continued to firm. Shin-Etsu PVC in the Netherlands was affected by facility problems that occurred at a raw materials supplier during the latter half of the previous fiscal year. In Japan, although exports increased, domestic housing-related demand was slow.

As a result, compared with the previous fiscal year, net sales for this business segment decreased by 2.4% (¥10,955 million) to ¥441,701 million and operating income decreased by 11.1% (¥5,574 million) to ¥44,690 million.

#### Silicones Business

With regard to the silicones business, in Japan, although a demand slowdown was seen in some product applications in the electric and electronics fields, in a wide range of fields, including cosmetics and automobile applications, shipments were firm. Our silicones business outside of Japan continued to do well, particularly for highly functional silicone products for Europe, the United States and Southeast Asia.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 5.8% (¥10,310 million) to ¥187,748 million and operating income increased by 24.2% (¥8,086 million) to ¥41,500 million.

#### **Specialty Chemicals Business**

With regard to cellulose derivatives, in Japan, shipments of pharmaceutical-use products and products for construction materials were firm. The business of SE Tylose in Germany continued to be steady, mainly for coatings products. Furthermore, in the silicon metal business of Simcoa Operations in Australia shipments continued to be firm.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 4.0% (¥4,502 million) to ¥116,849 million and operating income increased by 19.1% (¥2,912 million) to ¥18,190 million.

#### **Semiconductor Silicon Business**

With regard to semiconductor silicon, the business was affected by inventory adjustments of logic devices caused by a slowdown in demand for electronics equipment, including for smartphones. However, applications for memory devices on the whole continued to be firm.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 5.8% (¥13,310 million) to ¥243,326 million and operating income increased by 31.7% (¥11,302 million) to ¥46,911 million.

#### **Electronics & Functional Materials Business**

With regard to the rare earth magnets business, although products for applications in industrial equipment were slow, products for applications in automobiles continued to be firm, including those for hybrid cars. With regard to the photoresist products business, ArF resists and trilayer materials continued to be steady. Shipments of photomask blanks greatly increased. The business of materials for LED packaging continued to be firm, and optical fiber preform also continued good shipments.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 1.8% (¥3,260 million) to ¥186,765 million and operating income increased by 11.4% (¥5,245 million) to ¥51,453 million.

#### **Diversified Business**

Shin-Etsu Polymer Co., Ltd.'s business of input devices for automobiles and semiconductor wafer-related containers continued to do well. In addition, the engineering business of Shin-Etsu Engineering Co., Ltd. also continued to be steady.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 3.9% (¥3,836 million) to ¥103,415 million and operating income increased by 16.7% (¥805 million) to ¥5,631 million.

#### **Analysis of Financial Position**

#### Information on Assets, Liabilities and Net Assets

At the end of fiscal 2016, total assets increased by  $\pm 57.8$  billion compared with the previous fiscal year, to  $\pm 2,510.1$  billion. This increase was mainly due to an increase in cash and time deposits.

Total liabilities decreased by ¥10.0 billion to ¥429.6 billion.

Total net assets amounted to ¥2,080.5 billion. This was mainly due to the increase in retained earnings, resulting from profit attributable to owners of parent of ¥148.8 billion for fiscal 2016, offset by a decrease in foreign currency translation adjustments due to the appreciation of the yen.

The equity ratio was 80.8%, up 0.9 percentage points from 79.9%, and net assets per share increased by  $\pm$ 158.68 compared with the previous fiscal year, to  $\pm$ 4,761.48.

#### **Cash Flows**

The balance of cash and cash equivalents at the end of fiscal 2016 increased by 15.0% (¥63,757 million) compared to the previous fiscal year, to ¥487,604 million.

#### **Cash Flows from Operating Activities**

Net cash provided by operating activities amounted to ¥281,643 million, an increase of ¥38,184 million from the previous fiscal year. This was mainly attributable to ¥220,005 million in income before income taxes, ¥100,466 million in depreciation and amortization, a decrease of ¥20,180 million in accounts receivable-trade and ¥73,635 million for the payment of income taxes.

#### **Cash Flows from Investing Activities**

Net cash used for investing activities was  $\pm$ 166,599 million, a decrease of  $\pm$ 543 million over the previous fiscal year, mainly attributable to cash outflows of  $\pm$ 147,227 million for purchases of property, plant and equipment and a  $\pm$ 79,555 million increase in time deposits, as well as a cash inflow of  $\pm$ 265,146 million in proceeds from redemption of investments in securities.

#### **Cash Flows from Financing Activities**

Net cash used for financing activities decreased ¥4,604 million from the previous fiscal year to ¥38,941 million. This was mainly due to a cash dividend payment of ¥44,720 million.

#### **Capital Expenditures**

Capital expenditures totaled ¥134,753 million. The largest expenditures of ¥62,488 million were in the PVC/Chlor-Alkali Business for projects to build an ethylene manufacturing plant and enhance integrated manufacturing operations at Shintech. In the Specialty Chemicals Business, capital expenditures were ¥12,382 million, due to the construction of a cellulose derivatives plant in the U.S. by SE Tylose. In other business segments, capital expenditures were ¥20,462 million in the Silicones Business, ¥17,675 million in the Semiconductor Silicon Business, ¥16,682 million in the Electronics & Functional Materials Business and ¥5,505 million in the Diversified Business.

#### **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 ¥55 per share, the same amount as the interim dividend of ¥55 per share. Accordingly, the total annual dividend per share for FY 2016 will be an increase of ¥10 over the annual dividend of the previous fiscal year (¥100) to become ¥110 per share.

#### Outlook for Fiscal 2017 (Ending March 31, 2017)

With regard to business prospects going forward, in the world economy, although an economic recovery is expected in the U.S., there are concerns about the effects of the economic slowdown in emerging economies, such as those in the Asian region, and there are uncertainties about the future direction of the world economy. In Japan as well, the situation is such that it does not allow for optimism because of such concerns as the effects of the world economy's downward movement.

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 the growth 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 and strengthening and expanding existing facilities. Furthermore, we will aim to build a strong business foundation by such means as further focusing on enhancing productivity and product quality and striving to assure the stable securing of raw materials.

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 in demand and supply 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 stage to make a reasonable business forecast for the coming fiscal year. Therefore, we have decided to refrain from making a forecast for FY 2017's consolidated operating performance. We will disclose the consolidated business forecast for FY 2017 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 74.0% of the consolidated net sales of the Group in fiscal 2016, 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 Sheets**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES As of March 31, 2016 and 2015

		s of yen	Thousands of U.S. dollars (Note 3)
	2016	2015	2016
ASSETS			
Current Assets:			
Cash and time deposits (Note 20)	¥597,048	¥461,489	\$5,283,612
Notes and accounts receivable—trade	268,905	292,748	2,379,692
Securities (Notes 5 and 20)	236,486	304,180	2,092,803
Merchandise and finished goods	133,664	139,133	1,182,873
Work in process	13,367	12,533	118,295
Raw materials and supplies	133,981	125,243	1,185,678
Deferred taxes, current (Note 18)	36,330	36,721	321,507
Other	47,689	38,370	422,035
Less: Allowance for doubtful accounts (Note 2 (5))	(14,840)	(10,575)	(131,335)
Total current assets	1,452,633	1,399,846	12,855,163
Fixed Assets:			
Property, Plant and Equipment (Notes 2 (8) and 8):			
Buildings and structures, net	170,478	175,857	1,508,662
Machinery and equipment, net	410,322	441,123	3,631,171
Land	83,108	79,679	735,469
Construction in progress	133,551	80,230	1,181,874
Other, net	7,510	7,519	66,468
Total property, plant and equipment	804,972	784,409	7,123,646
Intangible Assets	13,152	18,012	116,395
Investments and Other Assets:			
Investments in securities (Notes 5 and 7)	130,202	145,726	1,152,238
Net defined benefit asset (Note 10)	1,551	2,040	13,725
Deferred taxes, non-current (Note 18)	16,458	15,858	145,646
Other (Note 7)	92,923	87,808	822,328
Less: Allowance for doubtful accounts (Note 2 (5))	(1,807)	(1,394)	(15,998)
Total investments and other assets	239,327	250,038	2,117,940
Total fixed assets	1,057,451	1,052,460	9,357,981
Total Assets	¥2,510,085	¥2,452,306	\$22,213,145

	Million	s of yen	Thousands of U.S. dollars (Note 3)
	2016	2015	2016
LIABILITIES			
Current Liabilities:			
Notes and accounts payable-trade	¥115,557	¥120,694	\$1,022,630
Short-term borrowings (Note 9)	7,873	6,825	69,678
Accounts payable-other	49,071	60,692	434,261
Accrued expenses	56,824	60,233	502,867
Accrued income taxes	29,519	33,554	261,235
Accrued bonuses for employees	2,627	2,721	23,248
Accrued bonuses for directors	547	513	4,848
Other (Note 18)	19,933	13,611	176,400
Total current liabilities	281,954	298,846	2,495,170
Long-Term Liabilities:			
Long-term debt (Note 9)	5,288	7,116	46,804
Deferred taxes, non-current (Note 18)	96,183	93,571	851,183
Net defined benefit liability (Note 10)	33,319	33,401	294,865
Other	12,872	6,659	113,920
Total long-term liabilities	147,665	140,748	1,306,772
Total Liabilities	429,619	439,594	3,801,943
Commitment and Contingent Liabilities (Note 11)			
NET ASSETS			
Stockholders' Equity:			
Common stock:	119,419	119,419	1,056,811
Authorized: 1,720,000,000 shares			
Issued: 432,106,693 shares as of March 31, 2016 and 2015, respectively			
Additional paid-in capital	128,759	128,572	1,139,461
Retained earnings (Note 12)	1,731,042	1,626,873	15,318,963
Less: Treasury stock, at cost	(33,407)	(33,837)	(295,645
6,127,692 shares and 6,207,027 shares as of March 31, 2016 and 2015, respectively	(55,467)	(55,557)	(255,645
Total stockholders' equity	1,945,813	1,841,029	17,219,590
Accumulated Other Comprehensive Income:			
Unrealized gains (losses) on available-for-sale securities (Note 2 (7))	13,780	22,349	121,949
Deferred gains (losses) on hedges	1,611		14,263
Foreign currency translation adjustments		(91)	606,786
Foreign currency translation adjustments Remeasurements of defined benefit plans	68,566	100,425	
	(1,480)	(3,382)	(13,104
Total accumulated other comprehensive income	82,478	119,300	729,895
Share Subscription Rights	237	139	2,099
Non-controlling Interests in Consolidated Subsidiaries	51,936	52,242	459,616
Total net assets	2,080,465	2,012,711	18,411,201
Total Liabilities and Net Assets	¥2,510,085	¥2,452,306	\$22,213,145

## **Consolidated Statements of Income**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

For the fiscal years ended March 31, 2016, 2015 and 2014

		Millions of yen		Thousands of U.S. dollars (Note 3)
	2016	2015	2014	2016
Net Sales (Note 21)	¥1,279,807	¥1,255,543	¥1,165,819	\$11,325,727
Cost of Sales (Notes 10 and 16)	930,019	940,399	873,879	8,230,260
Gross profit	349,787	315,143	291,939	3,095,466
Selling, General and Administrative Expenses (Notes 10, 15 and 16)	141,262	129,814	118,130	1,250,107
Operating income (Note 21)	208,525	185,329	173,809	1,845,359
Other Income (Expenses):				
Interest income	4,011	3,867	3,454	35,499
Dividend income	4,506	1,913	1,725	39,879
Equity in earnings (losses) of affiliates	3,302	(383)	1,499	29,228
Subsidy income	2,837	_	_	25,112
Interest expenses	(452)	(790)	(872)	(4,000)
Loss on disposal of property, plant and equipment	(1,329)	(976)	(1,386)	(11,769)
Foreign exchange gain (loss)	(2,760)	15,164	9,006	(24,425)
Other, net	1,363	(6,099)	(6,630)	12,064
Ordinary income	220,005	198,025	180,605	1,946,948
Income before income taxes and non-controlling interests	220,005	198,025	180,605	1,946,948
Income Taxes (Note 18):				
Current	65,342	71,330	67,138	578,255
Deferred	4,284	(3,207)	(1,370)	37,916
	69,627	68,122	65,768	616,171
Profit	150,377	129,902	114,837	1,330,776
Profit attributable to non-controlling interests	(1,537)	(1,295)	(1,219)	(13,607)
Profit attributable to owners of parent	¥148,840	¥128,606	¥113,617	\$1,317,169
		Yen		U.S. dollars (Note 3)
Earnings Per Share (Note 2 (14)):				
Profit attributable to owners of parent—basic	¥349.46	¥302.05	¥267.20	\$3.092
Profit attributable to owners of parent—fully diluted	349.42	301.98	267.07	3.092
Cash dividends	110.00	100.00	100.00	0.973
Weighted-Average Number of Shares Outstanding (Thousands)	425,919	425,784	425,222	425,919

## **Consolidated Statements of Comprehensive Income**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

For the fiscal years ended March 31, 2016, 2015 and 2014

		Millions of yen		Thousands of U.S. dollars (Note 3)
	2016	2015	2014	2016
Profit	¥150,377	¥129,902	¥114,837	\$1,330,776
Other Comprehensive Income (Note 19):				
Unrealized gains (losses) on available-for-sale securities	(8,589)	11,978	(1,122)	(76,013
Deferred gains (losses) on hedges	1,703	(585)	309	15,073
Foreign currency translation adjustments	(33,370)	92,686	125,605	(295,314
Remeasurements of defined benefit plans	1,905	(1,936)	_	16,866
Share of other comprehensive income of affiliates accounted for using the equity method	(141)	271	1,835	(1,248
Total other comprehensive income	(38,491)	102,414	126,627	(340,636
Comprehensive Income	¥111,885	¥232,316	¥241,465	\$990,140
(Breakdown)				
Comprehensive income attributable to owners of parent	¥112,017	¥228,992	¥236,409	\$991,309
Comprehensive income attributable to non-controlling interests	(132)	3,324	5,056	(1,168

## **Consolidated Statements of Changes in Net Assets**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

	Thousands	Millions of yen						
				Stockholders' Equity	/			
	Number of shares of common stock	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total		
Balance at April 1, 2013	432,106	¥119,419	¥128,234	¥1,470,015	¥(39,167)	¥1,678,502		
Cash dividends (Note 12)				(42,505)	1	(42,505)		
Profit attributable to owners of parent				113,617		113,617		
Purchase of treasury stock					(150)	(150)		
Disposal of treasury stock			391		4,362	4,754		
Net changes of items other than stockholders' equity								
Balance at March 31, 2014	432,106	¥119,419	¥128,625	¥1,541,127	¥(34,954)	¥1,754,218		

				Millions	of yen			
		Accumul	ated Other Compreh	ensive Income				
	Unrealized gains (losses) on available-for-sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Share subscription rights	Non-controlling interests in consolidated subsidiaries	Total net assets
Balance at April 1, 2013	¥11,591	¥174	¥(114,172)	¥ —	¥(102,406)	¥2,149	¥44,931	¥1,623,176
Cash dividends (Note 12)								(42,505)
Profit attributable to owners of parent								113,617
Purchase of treasury stock								(150)
Disposal of treasury stock								4,754
Net changes of items other than stockholders' equity	(1,152)	319	123,624	(1,470)	121,321	(1,722)	3,643	123,242
Balance at March 31, 2014	¥10,439	¥493	¥9,451	¥(1,470)	¥18,914	¥426	¥48,574	¥1,822,135

	Thousands		Millions of yen						
				Stockholders' Equit	Ý				
	Number of shares of common stock	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total			
Balance at April 1, 2014	432,106	¥119,419	¥128,625	¥1,541,127	¥(34,954)	¥1,754,218			
Cumulative effects of changes in accounting policies				(287	)	(287)			
Cash dividends (Note 12)				(42,573	)	(42,573)			
Profit attributable to owners of parent				128,606		128,606			
Purchase of treasury stock					(24)	(24)			
Disposal of treasury stock			(53)		1,141	1,088			
Net changes of items other than stockholders' equity									
Balance at March 31, 2015	432,106	¥119,419	¥128,572	¥1,626,873	¥(33,837)	¥1,841,029			

				Millions o	f yen			
		Accumula	ated Other Compreh	ensive Income				
	Unrealized gains (losses) on available-for- sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Share subscription rights	Non-controlling interests in consolidated subsidiaries	Total net assets
Balance at April 1, 2014	¥10,439	¥493	¥9,451	¥(1,470)	¥18,914	¥426	¥48,574	¥1,822,135
Cumulative effects of changes in accounting policies								(287)
Cash dividends (Note 12)								(42,573)
Profit attributable to owners of parent								128,606
Purchase of treasury stock								(24)
Disposal of treasury stock								1,088
Net changes of items other than stockholders' equity	11,909	(585)	90,973	(1,912)	100,385	(287)	3,667	103,766
Balance at March 31, 2015	¥22,349	¥(91)	¥100,425	¥(3,382)	¥119,300	¥139	¥52,242	¥2,012,711

	Thousands	ousands Millions of yen							
				Stockholders' Equ	ity				
	Number of shares of common stock	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total			
Balance at April 1, 2015	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									
Balance at March 31, 2016	432,106	¥119,419	¥128,759	¥1,731,042	¥(33,407)	¥1,945,813			

				Million	s of yen			
		Accumul	ated Other Comprehe	nsive Income				
	Unrealized gains (losses) on available-for- sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Share subscription rights	Non-controlling interests in consolidated subsidiaries	Total net assets
Balance at April 1, 2015	¥22,349	¥(91)	¥100,425	¥(3,382)	¥119,300	¥139	¥52,242	¥2,012,711
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)	(37,030)
Balance at March 31, 2016	¥13,780	¥1,611	¥68,566	¥(1,480)	¥82,478	¥237	¥51,936	¥2,080,465

	Thousands		Th	ousands of U.S. dollars	(Note 3)				
		Stockholders' Equity							
	Number of shares of common stock	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total			
Balance at April 1, 2015	432,106	\$1,056,811	\$1,137,809	\$14,397,114	\$(299,442)	\$16,292,292			
Cash dividends (Note 12)				(395,754)		(395,754)			
Profit attributable to owners of parent				1,317,169		1,317,169			
Purchase of treasury stock					(143)	(143)			
Disposal of treasury stock			(172)		3,940	3,767			
Others			1,824	433		2,257			
Net changes of items other than stockholders' equity									
Balance at March 31, 2016	432,106	\$1,056,811	\$1,139,461	\$15,318,963	\$(295,645)	\$17,219,590			

				Thousands of U.	S. dollars (Note 3)			
		Accumul	ated Other Comprehe					
	Unrealized gains (losses) on available-for- sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Share subscription rights	Non-controlling interests in consolidated subsidiaries	Total net assets
Balance at April 1, 2015	\$197,779	\$(810)	\$888,718	\$(29,931)	\$1,055,755	\$1,235	\$462,325	\$17,811,609
Cash dividends (Note 12)								(395,754)
Profit attributable to owners of parent								1,317,169
Purchase of treasury stock								(143)
Disposal of treasury stock								3,767
Others								2,257
Net changes of items other than stockholders' equity	(75,829)	15,073	(281,932)	16,827	(325,860)	863	(2,709)	(327,706)
Balance at March 31, 2016	\$121,949	\$14,263	\$606,786	\$(13,104)	\$729,895	\$2,099	\$459,616	\$18,411,201

## **Consolidated Statements of Cash Flows**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES For the fiscal years ended March 31, 2016, 2015 and 2014

		Millions of yen		Thousands of U.S. dollars (Note 3)
	2016	2015	2014	2016
Cash Flows from Operating Activities:		2010	2021	
Income before income taxes and non-controlling interests	¥220,005	¥198,025	¥180,605	\$1,946,948
Adjustments to reconcile income before income	· · · · ·	,	,	
taxes to net cash provided by operating activities:				
Depreciation and amortization	100,466	96,918	91,445	889,084
Loss on impairment of fixed assets	3,343	4,679	_	29,587
Increase (decrease) in net defined benefit liability	2,461	(573)	4,007	21,783
(Gain) loss on sales of investments in securities	(145)	(45)	(1)	(1,288
(Gain) loss on write-down of investments in securities	40	1,379	175	360
Increase (decrease) in allowance for doubtful accounts	4,128	4,296	(32)	36,534
Interest and dividend income	(8,517)	(5,780)	(5,180)	(75,379
Interest expenses	452	790	872	4,000
Exchange (gain) loss	4,451	(2,152)	660	39,396
Equity in (earnings) losses of affiliates	(3,302)	383	(1,499)	(29,228
Changes in assets and liabilities:				
(Increase) decrease in notes and accounts receivable	20,180	(13,990)	(561)	178,592
(Increase) decrease in inventories	(8,510)	7,967	18,246	(75,313
(Increase) decrease in long-term advance payment	3,900	7,398	2,830	34,520
Increase (decrease) in notes and accounts payable	(4,610)	6,674	3,593	(40,797
Other, net	12,270	507	1,081	108,585
Subtotal	346,614	306,477	296,245	3,067,385
Proceeds from interest and dividends	9,133	6,529	5,931	80,826
Payments of interest	(468)	(782)	(887)	(4,148
Payments of income taxes	(73,635)	(68,765)	(41,554)	(651,639
Net cash provided by operating activities	281,643	243,459	259,734	2,492,423
Cash Flows from Investing Activities:	(	(	(15,010)	(
(Increase) decrease in time deposits	(79,555)	(15,278)	(15,019)	(704,027
Purchases of securities	(190,901)	(216,654)	(450,429)	(1,689,393
Proceeds from redemption of securities	265,146	170,359	285,380	2,346,427
Purchases of property, plant and equipment	(147,227)	(86,709)	(66,814)	(1,302,895
Proceeds from sales of property, plant and equipment	271	820	175	2,404
Purchases of intangible fixed assets	(818)	(659)	(2,444)	(7,240
Purchases of investments in securities Proceeds from sales of investments in securities	(1,854)	(7,528)	(3,836)	(16,410
	310	122 0	2,277	2,745
Proceeds from redemption of investments in securities	5,000	0	5,000	44,247
Purchases of investments in subsidiaries resulting in	(2,516)	_	(7,296)	(22,273
change in scope of consolidation				
Payments of loans	(2,858)	(333)	(5)	(25,300
Proceeds from collection of loans	698	462	561	6,182
Other, net	(12,294)	(11,743)	5,558	(108,804
Net cash used for investing activities	(166,599)	(167,142)	(246,894)	(1,474,335
Cash Flows from Financing Activities:	454	(010)	(602)	1.242
Net increase (decrease) in short-term borrowings	151	(918)	(693)	1,342
Proceeds from long-term debt	(075)	16	306	- (7.740
Repayments of long-term debt Purchases of treasury stock	(875)	(244)	(1,203)	(7,748
Proceeds from sales of treasury stock	(16)	(24)	(150)	(143
Cash dividends paid	361 (44,720)	920	3,806	3,198
•		(42,573)	(42,505)	(395,753
Cash dividends paid to non-controlling interests	(576)	(508)	(496)	(5,099
Other, net	6,733	(213)	(425)	59,591
Net cash used for financing activities iffect of Exchange Rate Changes on Cash and Cash Equivalents	(38,941) (12,513)	(43,545) 28,515	(41,361) 28,052	(344,614 (110,734
let Increase (Decrease) in Cash and Cash Equivalents		-		
ash and Cash Equivalents at Beginning of Year	63,589 423,846	61,286 362,560	(468) 363,028	562,739 3,750,857
aon and Caon Equivalence at DEBIIIIIIS OF IEdi	+23,040	302,300	505,020	5,750,657
ncrease (Decrease) in Cash and Cash Equivalents Resulting from Changes in Scope of Consolidation	167	_	_	1,486
	¥487,604	¥ 423,846	¥362,560	\$4,315,083

## **Notes to Consolidated Financial Statements**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

For the fiscal years ended March 31, 2016, 2015 and 2014

#### **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 127 majority-owned subsidiaries as of March 31, 2016 (124 and 123 as of March 31, 2015 and 2014, respectively). The consolidated financial statements include the accounts of the Company and 91 (87 and 87 for 2015 and 2014, respectively) majority-owned subsidiaries (collectively, the "Companies"), of which the principal firms are listed on page 37 with their respective fiscal year-ends.

The remaining 36 (37 and 36 for 2015 and 2014, respectively) 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 yearend 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 noncontrolling 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.

SE Tylose Louisiana, LLC and other subsidiaries, which had previously been unconsolidated subsidiaries, 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 36 (37 and 36 for 2015 and 2014, respectively) unconsolidated subsidiaries (majority-owned) and 14 (14 and 14 for 2015 and 2014, respectively) affiliates (meaning 20% to 50% ownership of a company's equity interest). The equity method is applied to the investments in 3 (3 and 3 for 2015 and 2014, respectively) 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 2015.

#### (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 earthquake derivatives.

#### 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 and currency swaps. The related hedged items are interest rate transactions tied to funding activities, marketable securities and forecasted foreign currency transactions.

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. 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 domestic 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 ¥113 to US\$1, the approximate effective rate of exchange on March 31, 2016. 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 ¥113 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 2015, the book value, fair value and the difference between the two are as follows:

As of Watch S1, 2010 and 2013, the book value,		1illions of yen			ands of U.S. dolla	ars
		2016			2016	
	Book value	Fair value	Difference	Book value	Fair value	Difference
Assets:						
(1) Cash and time deposits	¥597,048	¥597,048	¥—	\$5,283,612	\$5,283,612	\$—
(2) Notes and accounts receivable—trade	268,905	268,905	—	2,379,692	2,379,692	-
(3) Securities and investments in securities						
i) Held-to-maturity debt securities	9,137	9,163	26	80,866	81,097	230
<li>ii) Investments in and advances to unconsolidated subsidiaries and affiliates</li>	23,572	14,586	(8,986)	208,610	129,084	(79,526)
iii) Available-for-sale securities	298,979	298,979	_	2,645,837	2,645,837	_
(4) Long-term loans	7,091	7,034	(57)	62,756	62,248	(508)
Total	¥1,204,735	¥1,195,717	¥(9,017)	\$10,661,376	\$10,581,571	\$(79,804)
Liabilities:						
(1) Notes and accounts payable—trade	¥115,557	¥115,557	¥—	\$1,022,630	\$1,022,630	\$—
(2) Short-term borrowings	7,873	7,873	—	69,678	69,678	—
(3) Accounts payable—other	49,071	49,071	—	434,261	434,261	—
(4) Accrued expenses	56,824	56,824	_	502,867	502,867	—
(5) Accrued income taxes	29,519	29,519	_	261,235	261,235	_
(6) Long-term debt	5,288	5,289	0	46,804	46,809	4
Total	¥264,135	¥264,135	¥0	\$2,337,477	\$2,337,482	\$4
Derivative transactions:						
Hedge accounting not applied	¥3,137	¥3,137	¥—	\$27,761	\$27,761	\$—
Hedge accounting applied	2,325	2,325	_	20,579	20,579	-
Total	¥5,462	¥5,462	¥—	\$48,340	\$48,340	\$—

	N	1illions of yen	
		2015	
	Book value	Fair value	Difference
Assets:			
(1) Cash and time deposits	¥461,489	¥461,489	¥—
(2) Notes and accounts receivable—trade	292,748	292,748	_
(3) Securities and investments in securities			
i) Held-to-maturity debt securities	8,895	8,938	43
<li>ii) Investments in and advances to unconsolidated subsidiaries and affiliates</li>	22,709	18,391	(4,318)
iii) Available-for-sale securities	379,508	379,508	_
(4) Long-term loans	7,604	7,742	138
Total	¥1,172,957	¥1,168,820	¥(4,136)
Liabilities:			
	¥420.004	V/100 C0 /	X
<ol> <li>Notes and accounts payable—trade</li> <li>Short-term borrowings</li> </ol>	¥120,694 6,825	¥120,694 6,825	¥—
(3) Accounts payable—other	60,692	60,692	_
(4) Accrued expenses	60,233	60,233	_
(5) Accrued income taxes	33,554	33,554	_
(6) Long-term debt	7,116	7,111	(4)
Total	¥289,115	¥289,110	¥(4)
, otal		1205)110	
Derivative transactions:			
Hedge accounting not applied	¥(1,848)	¥(1,848)	¥—
Hedge accounting applied	(136)	(136)	
Total	¥(1,984)	¥(1,984)	¥—

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.

	Million	s of yen	Thousands of U.S. dollars
Description	2016	2015	2016
Non-listed equity securities	¥34,531	¥33,482	\$305,592
Investments in securities, etc.	467	5,309	4,134
Total	¥34,999	¥38,792	\$309,727

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.

		Millions of yen					Thousands of U.S. dollars				
	2016				2016						
	Within Over one year Over five years					Within	Over one year	Over five years			
Description	one year	within five years	within ten years	Over ten years		one year	within five years	within ten years	Over ten years		
Time deposits	¥596,986	¥—	¥—	¥—		\$5,283,069	\$—	\$—	\$—		
Notes and accounts receivable-trade	268,905	-	-	—		2,379,692	-	-	—		
Securities and investments in securities	236,486	3,533	5,123	—		2,092,803	31,272	45,336	—		
Long-term loans	—	2,671	572	3,847		—	23,639	5,069	34,047		
Total	¥1,102,378	¥6,205	¥5,695	¥3,847		\$9,755,565	\$54,912	\$50,405	\$34,047		

		Millions	of yen	
		202	15	
	Within	Over one year	Over five years	
Description	one year	within five years	within ten years	Over ten years
Time deposits	¥461,454	¥—	¥—	¥—
Notes and accounts receivable-trade	292,748	-	_	_
Securities and investments in securities	304,180	3,045	5,123	—
Long-term loans	_	2,595	1,163	3,846
Total	¥1,058,383	¥5,640	¥6,286	¥3,846

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

			Millions	of yen		
			201	6		
	Within Over one year Over two years Over three years Over four years					
Description	one year	within two years	within three years	within 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
Total	¥8,009	¥5,299	¥69	¥36	¥23	¥32

			Thousands of	U.S. dollars				
			201	6				
	Within	Within Over one year Over two years Over three years Over four years						
Description	one year	within two years	within three years	within four years	within five years	Over five years		
Short-term borrowings	\$57,611	\$—	\$—	\$—	\$—	\$—		
Long-term debt	12,067	46,135	212	56	118	281		
Lease obligations	1,198	763	403	264	88	9		
Total	\$70,877	\$46,898	\$616	\$320	\$206	\$290		

			Millions	of yen		
			201	5		
	Within	Over one year	Over two years	Over three years	Over four years	
Description	one year	within two years	within three years	within four years	within five years	Over five years
Short-term borrowings	¥6,371	¥—	¥—	¥—	¥—	¥—
Long-term debt	453	1,594	5,395	68	6	50
Lease obligations	158	110	71	30	14	1
Total	¥6,983	¥1,705	¥5,467	¥99	¥21	¥51

#### **5. SECURITIES**

#### Securities as of March 31, 2016 and 2015 consisted of the following:

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

Millions of yen							Thousands of U.S. dollars		
		2016			2015			2016	
	Book	Fair		Book	Fair		Book	Fair	
Description	value	value	Difference	value	value	Difference	value	value	Difference
Securities with fair value that exceeds book value	¥5,860	¥5,919	¥59	¥6,106	¥6,176	¥70	\$51,861	\$52,388	\$527
Securities with fair value that does not exceed book value	3,277	3,244	(33)	2,789	2,762	(26)	29,005	28,708	(296)
Total	¥9,137	¥9,163	¥26	¥8,895	¥8,938	¥43	\$80,866	\$81,097	\$230

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

Millions of yen						Th	ousands of U.S. do	llars	
	2016			2015				2016	
	Book	Acquisition		Book	Acquisition		Book	Acquisition	
Description	value	cost	Difference	value	cost	Difference	value	cost	Difference
Securities with book value that exceed acquisition cost	¥52,853	¥28,475	¥24,377	¥72,945	¥37,755	¥35,190	\$467,73	\$251,999	\$215,734
Securities with book value that does not exceed acquisition cost	246,125	248,411	(2,285)	306,563	306,667	(104)	2,178,10	2,198,331	(20,228)
Total	¥298,979	¥276,887	¥22,092	¥379,508	¥344,422	¥35,085	\$2,645,83	\$2,450,330	\$195,506

Note: Non-listed equity securities, with a book value of ¥3,800 million (\$33,632 thousand) and ¥3,949 million, and other investment securities with a book value of ¥467 million (\$4,134 thousand) and ¥5,309 million, as of March 31, 2016 and 2015, respectively, whose fair value is extremely difficult to estimate are excluded from the above.

#### (3) Loss on impairment of securities

Impairment loss on available-for-sale securities for the fiscal year ended March 31, 2016 is not presented as the amount is immaterial. Impairment loss on available-for-sale securities of ¥1,379 million was recognized for the fiscal year ended March 31, 2015.

#### 6. DERIVATIVE TRANSACTIONS

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

1) Currency related: As of March 31, 2016

	M	illions of ye	า	Thousands of U.S. dollars		
Description	Contract	Fair	Unrealized	Contract	Fair	Unrealized
Description	amounts	value	gain (loss)	amounts	value	gain (loss)
Forward foreign exchange contracts						
Sales contracts:						
USD	¥107,837	¥3,117	¥3,117	\$954,312	\$27,584	\$27,584
EUR	1,781	53	53	15,762	476	476
Other	1,640	15	15	14,518	135	135
Purchase contracts:						
USD	1,190	(16)	(16)	10,538	(148)	(148)
Other	3,004	110	110	26,588	982	982
Total	¥115,454	¥3,280	¥3,280	\$1,021,720	\$29,029	\$29,029

#### As of March 31, 2015

	Millions of yen				
	Contract	Fair	Unrealized		
Description	amounts	value	gain (loss)		
Forward foreign exchange contracts					
Sales contracts:					
USD	¥71,417	¥(1,412)	¥(1,412)		
EUR	3,538	94	94		
Other	1,684	4	4		
Purchase contracts:					
USD	553	(2)	(2)		
Other	7,761	(530)	(530)		
Total	¥84,955	¥(1,847)	¥(1,847)		

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

2) Interest related: As of March 31, 2016 Not applicable.

#### As of March 31, 2015

		Millions of yen			
	Contract	Fair	Unrealized		
Description	amounts	value	gain (loss)		
Interest rate swap contracts					
Receive floating, pay fixed	¥91	¥(0)	¥(0)		
Total	¥91	¥(0)	¥(0)		

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

#### 3) Commodity related:

As of March 31, 2016

	1	Millions of yen			Thousands of U.S. dollars		
	Contract	Fair	Unrealized	Contract	Fair	Unrealized	
Description	amounts	value	gain (loss)	amounts	value	gain (loss)	
Commodity swap contracts							
Receive floating, pay fixed	¥2,279	¥(143)	¥(143)	\$20,170	\$(1,268)	\$(1,268)	
Total	¥2,279	¥(143)	¥(143)	\$20,170	\$(1,268)	\$(1,268)	

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

As of March 31, 2015 Not applicable.

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

Currency related: As of March 31, 2016

		-		Millions of yen			ousands of U.S. dolla	ars
Hedge accounting method	Transaction	Hedged items	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	¥26,191	¥—	¥2,308	\$231,786	\$—	\$20,425
	Purchase contracts EUR	Accounts payable-trade	874	-	17	7,735	-	154
Total			¥27,065	¥—	¥2,325	\$239,521	\$—	\$20,579

#### As of March 31, 2015

				Millions of yen		
Hedge accounting method	Transaction	Hedged items	Contract amounts	Contract amounts over one year	Fair value	
	Forward foreign exchang	ge				
Deferral hedge	contracts:	Accounts receivable-trade	V1E 420	¥—	V(12C)	
accounting	Sales contracts	Accounts receivable-trade	¥15,438	±	¥(136)	
	USD					
Total			¥15,438	¥—	¥(136)	

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 2015 consisted of the following:

			Thousands of
	Millions	U.S. dollars	
	2016	2015	2016
Investments in securities (Stocks)	¥54,304	¥52,243	\$480,570
Other (Investments in capital)	10,934	6,536	96,737

#### 8. ACCUMULATED DEPRECIATION

Accumulated depreciation of property, plant and equipment as of March 31, 2016 and 2015 was ¥1,903,907 million (\$16,848,741 thousand) and ¥1,862,014 million, 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 2015 consisted of the following:

					Thousands	, ot
	Average		Millions	of yen	U.S. dollar	rs
	interest rate	Due date	2016	2015	2016	
Short-term borrowings	0.8%	—	¥6,510	¥6,371	\$57	7,611
Current portion of long-term debt	0.9%	—	1,363	453	12	2,067
Current portion of lease obligations	—	—	135	158	1	1,198
Long-term debt, excluding current portion	0.7%	anuary 2017 – ⁄Iay 2022	5,288	7,116	46	6,804
Lease obligations, excluding current portion	_	anuary 2017 – September 2021	172	228	:	1,528
Total			¥13,470	¥14,328	\$119	9,209

Notes: 1. Average interest rate is the weighted average rate based on the balance as of March 31, 2016.

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

3. Repayment schedule subsequent to March 31, 2016 for long-term debt and lease obligations, excluding the current portion, is as follows:

	Millions of	yen	Thousands o	f U.S. dollars
	Long-term debt	Lease obligations	Long-term debt	Lease obligations
Years ending March 31,				
2017	¥5,213	¥86	\$46,135	\$763
2018	24	45	212	403
2019	6	29	56	264
2020	13	9	118	88

#### **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 2015 is as follows:

#### **1. Defined Benefit Pension Plans**

#### (1) Changes in Benefit Obligations

			Thousands of
	Millions	of yen	U.S. dollars
	2016	2015	2016
Beginning balance of benefit obligations	¥61,807	¥47,551	\$546,968
Cumulative effects of changes in accounting policies	0	563	0
Restated balance	61,807	48,115	546,968
Service costs	4,116	3,612	36,429
Interest costs	1,431	1,376	12,663
Actuarial differences arising during the year	(2,391)	5,494	(21,166)
Retirement benefits paid	(2,527)	(2,379)	(22,364)
Other*	(1,107)	5,588	(9,799)
Ending balance of benefit obligations	¥61,328	¥61,807	\$542,731
*Mainly foreign currency translation adjustments			

## (2) Changes in Pension Assets

			Thousands of		
	Millions	Millions of yen U.S			
	2016	2015	2016		
Beginning balance of pension assets	¥30,446	¥21,810	\$269,439		
Expected return on pension assets	1,054	1,020	9,333		
Actuarial differences arising during the year	(1,383)	1,109	(12,243)		
Contributions made by the Company and consolidated subsidiaries	915	2,873	8,098		
Retirement benefits paid	(634)	(795)	(5,611)		
Other*	(838)	4,428	(7,423)		
Ending balance of pension assets	¥29,559	¥30,446	\$261,591		

\*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

			Thousands of
	Millions	of yen	U.S. dollars
	2016	2015	2016
Funded benefit obligations	¥54,684	¥55,159	\$483,934
Pension assets	(29,559)	(30,446)	(261,591)
Net	25,124	24,713	222,342
Unfunded benefit obligations	6,644	6,647	58,796
Net amount of liability and asset on Consolidated Balance Sheets	¥31,768	¥31,360	\$281,139

	Millions	of ven	Thousands of U.S. dollars
	2016	2015	2016
Net defined benefit liability	¥33,319	¥33,401	\$294,865
Net defined benefit asset	(1,551)	(2,040)	(13,725)
Net amount of liability and asset on Consolidated Balance Sheets	¥31,768	¥31,360	\$281,139

#### (4) Retirement Benefit Expenses

			Thousands of
	Millions	s of yen	U.S. dollars
	2016	2015	2016
Service costs	¥4,116	¥3,612	\$36,429
Interest costs	1,431	1,376	12,663
Expected return on pension assets	(1,054)	(1,020)	(9,333)
Amortization of actuarial differences	2,020	1,464	17,883
Amortization of prior service cost	19	16	169
Retirement benefit expenses for defined benefit pension plans	¥6,532	¥5,450	\$57,813

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

	Million	s of yen	Thousands of U.S. dollars
	2016	2015	2016
Actuarial differences	¥3,029	¥(2,913)	\$26,807
Prior service cost	19	28	169
Total	¥3,048	¥(2,885)	\$26,976

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

			Thousands of
	Millions	s of yen	U.S. dollars
	2016	2015	2016
Unrecognized actuarial differences	¥(1,757)	¥(4,786)	\$(15,554)
Unrecognized prior service cost	(40)	(35)	(359)
Total	¥(1,798)	¥(4,821)	\$(15,914)

#### (7) Pension Assets

Breakdown

	2016	2015
Bonds	42%	39%
Stocks	32%	34%
Other	26%	27%
Total	100%	100%

(Note) 19% and 21% of total pension assets amount were in a "Retirement Benefit Trust" for lump-sum severance payment plans as of March 31, 2016 and 2015, 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	2015
Discount rate	Mainly 0.2%	Mainly 0.4%
Expected rate of return on pension assets	Mainly 1.5%	Mainly 2.0%

#### 2. Defined Contribution Pension Plans

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

Millions	s of yen	Thousands of U.S. dollars
2016	2015	2016
¥2,282	¥2,186	\$20,202

#### **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 2015 in the aggregate amounts of ¥257 million (\$2,279 thousand) and ¥324 million, 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, 2015 and 2014 are as follows:

				Millions of		Thousands of	
				yen	Yen	U.S. dollars	U.S. dollars
				Total	Cash	Total	Cash
	Type of			amount of	dividends	amount of	dividends
Resolution	shares	Record date	Effective date	dividends	per share	dividends	per share
Fiscal year ended March 31, 2016							
Ordinary general meeting of	Common	March 31,	June 29, 2015	¥21,294	¥50.00	\$188,451	\$0.44
shareholders held on June 26, 2015	stock	2015					
Board of directors meeting held on	Common	September	November	23,425	55.00	207,302	0.49
October 27, 2015	stock	30, 2015	18, 2015				
Total				¥44,720		\$395,753	

			-	Millions of yen	Yen
	Type of			Total amount of	
Resolution	shares	Record date	Effective date	dividends	Cash dividends per share
Fiscal year ended March 31, 2015					
Ordinary general meeting of	Common	March 31,	June 30, 2014	¥21,284	¥50.00
shareholders held on June 27, 2014	stock	2014			
Board of directors meeting held on	Common	September	November	21,288	50.00
October 28, 2014	stock	30, 2014	18, 2014		
Total				¥42,573	
Fiscal year ended March 31, 2014					
Ordinary general meeting of	Common	March 31,	-	V21 245	YE0.00
shareholders held on June 27, 2013	stock	2013	June 28, 2013	¥21,245	¥50.00
Board of directors meeting held on	Common	September	November	21.250	50.00
October 24, 2013	stock	30, 2013	18, 2013	21,259	50.00
Total				¥42,505	1

#### (2) Cash dividends for the fiscal years ended March 31, 2016 and 2015 with an effective date in the subsequent fiscal year are as follows:

					Millions of yen	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, 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	\$207,334	\$0.49
					Million	s of yen	Ye	n
Resolution	Type of shares	Source of dividends	Record date	Effective date	Total an divid	nount of ends	Cash dividend	ds per share
Fiscal year ended March 31, 2015 Ordinary general meeting of	Common stock	Retained earnings	March 31,	June 29, 2015	¥21,	294	¥50.	00

#### **13. SHARE SUBSCRIPTION RIGHTS**

		Type of shares		Number				Thousands o
		subject to share	subje	ct to share s	ubscription I	ights	Millions of yen	U.S. dollars
lssuer	Description	subscription	Beginning			Ending	Balance at	Balance at
		rights	balance	Increase	Decrease	balance	March 31,	March 31,
		5					2016	2016
The Company	Stock options	Common stock	102,500	773,000	93,500	782,000	¥221	\$1,957
Consolidated subsidiary	_	_	_	_	_	—	15	141
Total							¥237	\$2,099
	31, 2015	Type of shares		Number	of shares			
Fiscal year ended March		Type of shares subject to share	subje		of shares ubscription r	ights	¥237 Millions	
	31, 2015 Description	/1	subje Beginning balance			ights Ending balance		
Fiscal year ended March	Description	subject to share subscription	Beginning	ct to share s	ubscription r	Ending	Millions	of yen Irch 31, 2015
Fiscal year ended March Issuer	Description Stock options	subject to share subscription rights	Beginning balance	ct to share s	ubscription Decrease	Ending balance	Millions Balance at Ma	of yen Irch 31, 2015

#### **14. STOCK OPTIONS**

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

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. The expenses for the fiscal year ended March 31, 2015 were not recorded. Gains on forfeited stock options for the fiscal years ended March 31, 2016 and 2015 were ¥9 million (\$87 thousand) and ¥43 million, respectively.

Stock options as of March 31, 2016 v	vere as follows:	
	2015	2011
Grantees	18 directors of the Company 82 employees of the Company	75 employees of the Company
Number of stock options granted by category of stock (in shares)	773,000 shares of common stock	293,000 shares of common stock
Grant date	September 24, 2015	July 27, 2011
Vesting conditions	None	None
Exercise period	September 25, 2016 through March 31, 2020	July 28, 2012 through March 31, 2016

#### Movement in stock options during the fiscal year ended March 31, 2016 was as follows:

	Number of shares		es
	2015	2011	2010
Beginning balance (Stock options outstanding)	_	90,500	12,000
Granted	773,000	_	_
Exercised	_	81,500	_
Forfeited	_	_	12,000
Ending balance (Stock options outstanding)	773,000	9,000	_
		Yen	
Exercise price	¥7,339	¥4,423	¥—
Weighted average market value per share at the exercise date	_	6,259	_
Fair value per share at the grant date	277	789	_
		U.S. dollars	
Exercise price	\$64.95	\$39.14	\$—
Weighted average market value per share at the exercise date	_	55.39	_
Fair value per share at the grant date	2.45	6.98	_

The fair value of options granted was estimated using the Black-Scholes option pricing model with the following assumptions. Stock options granted on September 24, 2015

Expected volatility	18.98%
Expected remaining life	2.76 years
Expected dividend	110 yen
Risk-free interest rate	0.020%

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

There were no stock option expenses recorded for the fiscal years ended March 31, 2016 and 2015. Gains on forfeited stock options for the fiscal years ended March 31, 2016 and 2015 were ¥27 million (\$241 thousand) and ¥62 million, respectively.

	2012	2011	2010
	10 Directors	9 Directors	9 Directors
Grantees	15 Employees	13 Employees	14 Employees
	11 Directors of its subsidiaries	8 Directors of its subsidiaries	10 Directors of its subsidiaries
Number of stock options granted	475,000 shares of	440,000 shares of	455,000 shares of
by category of stock (in shares)	common stock	common stock	common stock
Grant date	September 5, 2012	October 5, 2011	September 2, 2010
Vesting conditions	None	None	None
	December 1, 2012	December 1, 2011	December 1, 2010
Exercise period	through	through	through
	November 30, 2017	November 30, 2016	November 30, 2015

#### Stock options as of March 31, 2016 were as follows:

Movement in stock options during the fiscal year ended March 31, 2016 was as follows:

	Nu	umber of shares	
	2012	2012 2011	
Beginning balance (Stock options outstanding)	¥295,000	¥327,200	¥411,300
Granted	_	_	_
Exercised	115,000	91,300	85,000
Forfeited	10,000	18,700	326,300
Ending balance (Stock options outstanding)	170,000	217,200	_
		Yen	
Exercise price	¥342	¥414	¥505
Weighted average market value per share at the exercise date	617	626	626
Fair value per share at the grant date	34	47	80
		U.S. dollars	
Exercise price	\$3.03	\$3.66	\$4.47
Weighted average market value per share at the exercise date	5.46	5.54	5.54
Fair value per share at the grant date	0.30	0.42	0.71

#### 15. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative exp			
Selling general and administrative evi	henses for the fiscal vears ender	INJarch 31 2016 2015 and 20	14 mainly consisted of the following.

		Millions of yen		
	2016	2015	2014	2016
Shipping expenses	¥35,430	¥33,667	¥29,399	\$313,546
Salaries and allowances	24,333	23,206	21,370	215,337
Provision for bonuses for employees	1,429	1,452	1,403	12,648
Provision for bonuses for directors	563	529	439	4,985
Retirement benefit expenses	501	441	517	4,435
Depreciation and amortization	2,250	2,152	1,965	19,913
Technical research expenses	16,455	18,138	18,132	145,624
<including benefit="" expenses="" retirement=""></including>	<118>	<138>	<127>	<1,049>
Provision of allowance for doubtful accounts	5,610	1,607	81	49,647

#### **16. RESEARCH AND DEVELOPMENT COSTS**

Research and development costs incurred and charged to income for the fiscal years ended March 31, 2016, 2015 and 2014 were ¥53,165 million (\$470,494 thousand), ¥47,165 million and ¥43,546 million, respectively.

#### **17. LEASE TRANSACTIONS**

Lease expenses on finance lease contracts under which ownership of the leased assets is not transferred to the lessee charged to income for the fiscal years ended March 31, 2016 and 2015 amounted to ¥0 million (\$0 thousand) and ¥3 million, respectively. Lease expenses corresponding to depreciation expenses, not charged to income, for the fiscal years ended March 31, 2016 and 2015, which were computed by the straight-line method over the terms of the relevant lease contracts with no residual value, amounted to ¥0 million (\$0 thousand) and ¥3 million, respectively.

Pro forma information regarding leased assets, such as acquisition cost and accumulated depreciation, as of March 31, 2016 and 2015 is as follows:

			Thousands of
	Millions	s of yen	U.S. dollars
	2016	2015	2016
Acquisition cost	¥—	¥29	\$—
Accumulated depreciation	—	29	—
Net book value	¥—	¥—	\$—

There are no amount of outstanding future lease payments due in respect of finance lease contracts at March 31, 2016 and 2015.

The amounts of outstanding future lease payments due in respect of operating lease contracts at March 31, 2016 and 2015 are summarized as follows:

			Thousands of	
	Million	Millions of yen		
	2016	2015	2016	
Future Lease Payments:				
Within one year	¥2,465	¥1,662	\$21,816	
Over one year	7,112	3,651	62,945	
	¥9,578	¥5,314	\$84,761	

#### **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 35.4% for the fiscal years ended March 31, 2016 and 2015, 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 2015 are as follows:

			Thousands of U.S
	Million	ns of yen	dollars
	2016	2015	2016
Deferred Tax Assets:			
Depreciation and amortization	¥13,959	¥14,033	\$123,537
Net defined benefit liability	9,803	9,946	86,760
Unrealized profit	6,411	6,107	56,741
Maintenance costs	5,473	4,818	48,442
Allowance for doubtful accounts	3,695	2,734	32,702
Accrued bonuses	3,155	3,376	27,926
Unsettled accounts receivable and payable	2,465	2,684	21,815
Accrued enterprise taxes	1,721	2,237	15,236
Tax loss carryforwards	769	985	6,808
Unrealized gains/losses on available-for-sale securities	68	99	603
Other	23,367	22,382	206,796
Valuation allowance	(5,117)	(5,173)	(45,290
Total	¥65,775	¥64,233	\$582,080
Deferred Tax Liabilities:			
Depreciation and amortization	¥98,049	¥89,729	\$867,694
Unrealized gains/losses on available-for-sale securities	6,789	11,354	60,084
Reserve for special depreciation	105	112	934
Other	7,475	8,058	66,154
Total	¥112,420	¥109,254	\$994,868
Net deferred tax assets (liabilities)	¥(46,645)	¥(45,021)	\$(412,788

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

			Thousands of U.S.
	Millior	is of yen	dollars
	2016	2015	2016
Current assets: Deferred taxes, current	¥36,330	¥36,721	\$321,507
Fixed assets: Deferred taxes, non-current	16,458	15,858	145,646
Current liabilities: Other	(3,249)	(4,029)	(28,759)
Long-term liabilities: Deferred taxes, non-current	(96,183)	(93,571)	(851,183)

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 2015 is as follows:

	2016	2015
Statutory tax rate	32.8 %	35.4 %
Rate difference from foreign subsidiaries	(0.5)	(1.3)
Equity in (earnings) losses of affiliates	(0.5)	0.1
Dividend and other non-taxable income	(2.7)	(2.1)
Elimination of intercompany dividend income	2.5	2.1
Tax deduction for research expenses	(1.6)	(1.6)
Entertainment and other non-deductible expenses	0.2	0.2
Adjustment on deferred tax assets due to change in income tax rate	1.3	1.7
Other, net	0.4	(0.2)
Effective tax rate	31.6	34.4

#### Change in statutory effective tax rate

The "Act for Partial Amendment of the Income Tax Act, etc." (Act No. 15 of 2016) and the "Act for Partial Amendment of the Local Tax Act, etc." (Act No. 13 of 2016) were passed through the Diet on March 29, 2016 and, as a result, tax rates became or will become lower from fiscal years beginning on or after April 1, 2016.

As a result, the effective statutory tax rate used to measure the Company's deferred tax assets and liabilities was changed from 32.1% to 30.7% for the temporary differences expected to be realized or settled from fiscal years beginning on April 1, 2016 and 2017, and to 30.5% for the temporary differences expected to be realized or settled from fiscal years beginning on or after April 1, 2018.

The effect of the announced reduction of the effective statutory tax rate was to decrease deferred tax assets (after offsetting deferred tax liabilities) and remeasurements of defined benefit plans by ¥2,040 million (\$18,055 thousand) and ¥9 million (\$83 thousand), respectively, and increase unrealized gains on available-for-sale securities, deferred gains on hedges and deferred income taxes by ¥696 million (\$6,166 thousand), ¥49 million (\$440 thousand) and ¥2,777 million (\$24,579 thousand), respectively, as of and for the fiscal year ended March 31, 2016.

#### **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 2015 are as follows:

			Thousands of
	Millions	of yen	U.S. dollars
	2016	2015	2016
Unrealized gains (losses) on available-for-sale securities			
Amount arising during the year	¥(13,166)	¥15,616	\$(116,518)
Reclassification adjustment for gains and losses included in profit or loss	45	985	399
Unrealized gains (losses) on available-for-sale securities before tax	(13,121)	16,602	(116,119)
Tax effect	4,531	(4,623)	40,105
Unrealized gains (losses) on available-for-sale securities	(8,589)	11,978	(76,013)
Deferred gains (losses) on hedges			
Amount arising during the year	2,232	(378)	19,755
Reclassification adjustment for gains and losses included in profit or loss	246	(555)	2,184
Deferred gains (losses) on hedges before tax	2,479	(934)	21,939
Tax effect	(775)	348	(6,865)
Deferred gains (losses) on hedges	1,703	(585)	15,073
Foreign currency translation adjustments			
Amount arising during the year	(33,370)	92,686	(295,314)
Remeasurements of defined benefit plans			
Amount arising during the year	1,008	(4,391)	8,923
Reclassification adjustment for gains and losses included in profit or loss	2,039	1,481	18,052
Remeasurements of defined benefit plans before tax	3,048	(2,910)	26,976
Tax effect	(1,142)	973	(10,109)
Remeasurements of defined benefit plans	1,905	(1,936)	16,866
Share of other comprehensive income of affiliates accounted for			
using the equity method			
Amount arising during the year	(128)	259	(1,139)
Reclassification adjustment for gains and losses included in profit or loss	(12)	12	(109)
Share of other comprehensive income of affiliates accounted for	(0.00)	271	
using the equity method	(141)	271	(1,248)
Total other comprehensive income	¥(38,491)	¥102,414	\$(340,636)

#### 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, 2015 and 2014 are presented below:

				Thousands of
	1	Villions of yen		U.S. dollars
	2016	2015	2014	2016
Cash and time deposits	¥597,048	¥461,489	¥363,339	\$5,283,612
Securities	236,486	304,180	274,282	2,092,803
Time deposits (maturities over three months)	(163,943)	(86,572)	(66,831)	(1,450,829)
Securities (maturities over three months)	(181,986)	(255,250)	(208,230)	(1,610,502)
Cash and cash equivalents	¥487,604	¥423,846	¥362,560	\$4,315,083

#### **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 "Diversified 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
Diversified Business	Processed plastics, Export of plant equipment, Technology licensing, International trading, Engineering

#### (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 yer	n			
					2016				
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Diversified	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)	—
Total	¥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 ye	en			
					2015				
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Diversified	Total	Adjustment <sup>(1)</sup>	Figures in consolidated financial statements
Sales to outside customers	¥452,656	¥177,438	¥112,347	¥230,016	¥183,505	¥99,579	¥1,255,543	¥—	¥1,255,543
Intersegment sales	3,906	5,859	12,582	2	7,058	71,725	101,135	(101,135)	_
Total	¥456,563	¥183,297	¥124,930	¥230,019	¥190,563	¥171,304	¥1,356,679	¥(101,135)	¥1,255,543
Segment income (Operating income)	¥50,264	¥33,414	¥15,278	¥35,609	¥46,208	¥4,826	¥185,601	¥(272)	¥185,329
Depreciation and amortization	¥29,375	¥11,805	¥9,595	¥24,412	¥15,236	¥5,413	¥95,839	¥(234)	¥95,604
Amortization of goodwill	¥—	¥162	¥1,115	¥—	¥—	¥35	¥1,313	¥—	¥1,313
Increase in property, plant and equipment and intangible assets	¥44,422	¥12,947	¥16,147	¥15,889	¥16,407	¥4,516	¥110,331	¥(427)	¥109,903

					Millions of ye 2014	en			
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Diversified	Total	Adjustment <sup>(1)</sup>	Figures in consolidated financial statements
Sales to outside customers	¥427,845	¥156,437	¥103,204	¥213,233	¥170,986	¥94,113	¥1,165,819	¥—	¥1,165,819
Intersegment sales	3,814	5,045	9,942	14	4,411	56,909	80,138	(80,138)	_
Total	¥431,660	¥161,482	¥113,146	¥213,247	¥175,398	¥151,022	¥1,245,957	¥(80,138)	¥1,165,819
Segment income (Operating income)	¥60,150	¥31,807	¥12,757	¥24,459	¥40,969	¥3,669	¥173,813	¥(4)	¥173,809
Depreciation and amortization	¥26,507	¥10,858	¥9,137	¥24,603	¥14,672	¥4,345	¥90,123	¥(239)	¥89,884
Amortization of goodwill	¥—	¥119	¥1,030	¥357	¥—	¥53	¥1,560	¥—	¥1,560
Increase in property, plant and equipment and intangible assets <sup>(2)</sup>	¥15,174	¥11,295	¥11,883	¥14,580	¥14,417	¥3,237	¥70,590	¥(34)	¥70,555

					Thousands of l	J.S. dollars			
					2016	5			
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Diversified	Total	Adjustment <sup>(1)</sup>	Figures in consolidated financial statements
Sales to outside customers	\$3,908,864	\$1,661,491	\$1,034,067	\$2,153,329	\$1,652,793	\$915,180	\$11,325,727	\$—	\$11,325,727
Intersegment sales	28,415	81,983	112,084	32	66,290	639,357	928,163	(928,163)	—
Total	\$3,937,279	\$1,743,474	\$1,146,152	\$2,153,362	\$1,719,083	\$1,554,538	\$12,253,891	\$(928,163)	\$11,325,727
Segment income (Operating income)	\$395,487	\$367,258	\$160,975	\$415,150	\$455,341	\$49,838	\$1,844,051	\$1,307	\$1,845,358
Depreciation and amortization	\$287,997	\$103,749	\$89,806	\$207,933	\$143,962	\$39,966	\$873,416	\$(2,378)	\$871,038
Amortization of goodwill	\$7,031	\$1,572	\$9,442	\$—	\$—	\$—	\$18,046	\$—	\$18,046
Increase in property, plant and equipment and intangible assets	\$552,993	\$181,082	\$109,576	\$156,422	\$147,631	\$48,718	\$1,196,424	\$(3,919)	\$1,192,505

Notes: [1] Elimination of intersegment transactions. [2] During FY 2014, the Company acquired additional shares of Asia Silicones Monomer Limited (Silicones Business), which had been an equity-method affiliate until FY 2013. From FY 2014, it newly became a consolidated subsidiary. The expenditures (excluding goodwill) related to the additional acquisition of its shares of ¥12,600 million are not included in the table above. The total capital expenditures for FY 2014, including this acquisition, amounted to ¥83,155 million. (Capital expenditures for the Silicones Business amounted to ¥23,896 million.)

#### 2. Related information

#### **Geographic information**

(1) Net sales

				Thousands of
		Millions of yen		U.S. dollars
	2016	2015	2014	2016
Net sales				
Japan	¥331,427	¥351,203	¥335,632	\$2,932,986
U.S.	295,687	271,742	236,805	2,616,702
China	122,521	122,897	115,862	1,084,265
Asia / Oceania (excluding China)	272,165	243,439	216,453	2,408,548
Europe	144,713	147,506	141,865	1,280,646
Other	113,291	118,754	119,200	1,002,579
Total	¥1,279,807	¥1,255,543	¥1,165,819	\$11,325,727

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

		Millions of yen		Thousands of U.S. dollars
	2016	2015	2014	2016
Property, plant and equipment				
Japan	¥239,079	¥238,969	¥239,827	\$2,115,748
U.S.	439,667	404,120	336,574	3,890,864
Other	126,224	141,319	144,397	1,117,033
Total	¥804,972	¥784,409	¥720,799	\$7,123,646

#### 3. Loss on impairment of fixed assets

-											
				Millions	of yen						
		2016									
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Diversified	Elimination or common asset	Total			
Loss on impairment of fixed assets	¥—	¥—	¥2,298	¥—	¥—	¥1,045	¥—	¥3,343			
				Millions	of yen						
				201	15						
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional	Diversified	Elimination or common asset	Total			

				N	/laterials			
Loss on impairment of fixed	¥—	¥4,679*	¥—	¥—	¥—	¥—	¥—	¥4 679
assets	+	++,075	+	+	+	+	+	±4,079

				Thousands of	U.S. dollars						
		2016									
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Diversified	Elimination or common asset	Total			
Loss on impairment of fixed assets	\$—	\$—	\$21,330	\$—	\$—	\$9,249	\$—	\$30,580			

Silicones Business segment: \*Shin-Etsu Silicone (Nantong) Co., Ltd., a manufacturing and sales subsidiary in China, booked a ¥4,679 million impairment loss as cost of sales in the consolidated statement of income.

#### 4. Amortization of goodwill and unamortized balance

	Millions of yen									
		2016								
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Diversified	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 2015								
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Diversified	Elimination or common asset	Figures in consolidated financial statements	
Amortization of goodwill	¥—	¥162	¥1,115	¥—	¥—	¥35	¥—	¥1,313	
Unamortized balance	¥—	¥2,070	¥9,633	¥—	¥—	¥—	¥—	¥11,703	

				Millions	of yen					
		2014								
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Diversified	Elimination or common asset	Figures in consolidated financial statements		
Amortization of goodwill	¥—	¥119	¥1,030	¥357	¥—	¥53	¥—	¥1,560		
Unamortized balance	¥—	¥1,965	¥10,687	¥—	¥—	¥—	¥—	¥12,652		

				Thousands of	U.S. dollars				
	2016								
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Diversified	Elimination or common asset	Figures in consolidated financial statements	
Amortization of goodwill	\$7,031	\$1,572	\$9,442	\$—	\$—	\$—	- \$—	\$18,046	
Unamortized balance	\$—	\$14,962	\$47,439	\$—	\$—	\$-	- \$—	\$62,402	

### **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, 2015 are as follows:

_					Millions of yen				
Туре	Name	Percentage of voting rights	Relationship	Transaction	Transaction amount (Thousands of shares)	Account	Balance at the fiscal year end		
Director	Susumu Ueno	umu Ueno Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥30	_	_		
Director	Director Susaina Geno				(7)				
Director	or Kazumasa Direct Maruyama Ownership 0.00%	Director	Exercise of	¥13					
Director			stock options (Note)	(3)	_	—			

Note: Share subscription rights were approved at the board of directors meeting held on July 26, 2011 based on the resolution at the ordinary general meeting of shareholders held on June 29, 2011.

#### 23. CHANGES IN ACCOUNTING POLICIES

Effective from the beginning of FY 2016, Shin-Etsu Chemical adopted the "Revised Accounting Standard for Business Combinations" (Accounting Standards Board of Japan (ASBJ) Statement No. 21, issued September 13, 2013, hereinafter referred to as the "Accounting Standard for Business Combinations"), "Revised Accounting standard for Consolidated Financial Statements" (ASBJ Statement No. 22, issued September 13, 2013, hereinafter referred to as the "Accounting Standard for Consolidation") and "Revised Accounting Standard for Business Divestitures" (ASBJ Statement No. 7, issued September 13, 2013, hereinafter referred to as the "Accounting Standard for Business Divestitures").

In applying these revised accounting standards, the Company records any differences arising from changes in ownership interest in a subsidiary when it retains control as capital surplus and the corresponding acquisition-related costs are recognized as expenses when incurred. Also, regarding business combinations conducted after the beginning of FY 2016, the disclosure method was revised with regard to the retrospective adjustment of purchase price allocation based on provisional accounting applicable to the consolidated financial statements of the fiscal period in which the business combination occurred. In addition, the presentation method of net income was amended and the reference to "minority interests" was changed to "non-controlling interests". To reflect these changes in presentation, the consolidated financial statements in the previous fiscal year have been reclassified.

Concerning the application of the Accounting Standard for Business Combinations and others, based on the provisional treatment set out in Section 58-2 (4) of the Accounting Standard for Business Combinations, in Section 44-5 (4) of the Accounting Standard for Consolidation and in Section 57-4 (4) of the Accounting Standard for Business Divestitures, these changes are effective from the beginning of FY 2016. The impact of these changes on operating income, ordinary income and income before income taxes and non-controlling interests and per share information for FY 2016 and capital surplus as of the end of FY 2016 is immaterial.

#### 24. STANDARDS ISSUED BUT NOT YET EFFECTIVE

#### Implementation Guidance on Recoverability of Deferred Tax Assets

On March 28, 2016, the ASBJ issued "Revised Implementation Guidance on Recoverability of Deferred Tax Assets" (ASBJ Guidance No. 26).

#### (1) Overview

Regarding the treatment of the recoverability of deferred tax assets, a review was conducted following the framework of Japanese Institution of Certified Public Accountants Audit Committee Report No. 66 "Audit Treatment on Determining the Recoverability of Deferred Tax Assets," whereby companies are categorized into five categories and deferred tax assets are calculated based on each of these categories.

- Treatment of companies that do not satisfy any of the category requirements for (Category 1) through (Category 5)
- Category requirements for (Category 2) and (Category 3)
- Treatment related to future deductible temporary differences which cannot be scheduled in companies that qualify as (Category 2)
- Treatment related to the reasonable estimable period of future pre-adjusted taxable income in companies that qualify as (Category 3)
- Treatment in cases that companies that satisfy the category requirements for (Category 4) but qualify as (Category 2) or (Category 3)

#### (2) Scheduled date of adoption

The Company expects to adopt the revised implementation guidance from the beginning of the fiscal year ending March 31, 2017.

(3) Impact of adopting revised implementation guidance

The Company is currently evaluating the effect of adopting these revised implementation guidance on its consolidated financial statements.

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 As of March 31, 2016

Principal Consolidated Subsidiaries	Percentage of Voting Rights	Fiscal Year-End	Principal Consolidated Subsidiaries	Percentage of Voting Rights	Fiscal Year-End
Shintech Inc.*	100.0	December 31	Shin-Etsu International Europe B.V.*	100.0	December 31
Shin-Etsu Handotai Co., Ltd.	100.0	March 31	Nihon Resin Co., Ltd.	100.0	December 31
S.E.H. Malaysia Sdn. Bhd.*	100.0	December 31	Naoetsu Precision Co., Ltd.	100.0	February 29
Shin-Etsu Handotai America, Inc.*	100.0	December 31	Skyward Information System Co., Ltd.	100.0	March 31
Shin-Etsu PVC B.V.*	100.0	December 31	Shinano Electric Refining Co., Ltd.	100.0	March 31
Shin-Etsu Polymer Co., Ltd.	52.6	March 31	Fukui Environmental Analysis Center Co., Ltd.	100.0	February 29
SE Tylose GmbH & Co. KG*	100.0	December 31	Shin-Etsu Film Co., Ltd.	100.0	March 31
Shin-Etsu Astech Co., Ltd.	99.6	March 31	Shin-Etsu Technology Service Co., Ltd.	76.9	February 29
Shin-Etsu Engineering Co., Ltd.	100.0	March 31	Urawa Polymer Co., Ltd.	100.0	March 31
Shin-Etsu Handotai Taiwan Co., Ltd.*	70.0	December 31	Niigata Polymer Company Limited	100.0	March 31
Simcoa Operations Pty. Ltd.*	100.0	December 31	Shin-Etsu Polymer America, Inc.*	100.0	December 31
Shin-Etsu Silicones (Thailand) Ltd.*	100.0	December 31	Naoetsu Sangyo Limited	100.0	March 31
Asia Silicones Monomer Limited*	100.0	December 31	San-Ace Co., Ltd.	100.0	March 31
Nagano Electronics Industrial Co., Ltd.	90.0	February 29	Shinken Total Plant Co., Ltd.	100.0	February 29
Naoetsu Electronics Co., Ltd.	100.0	February 29	Saitama Shinkoh Mold Co., Ltd.	100.0	March 31
Shin-Etsu Handotai Europe, Ltd.*	100.0	December 31	Shinkoh Mold Co., Ltd.	100.0	March 31
S-E, Inc.*	100.0	December 31	Shin-Etsu Magnet Co., Ltd.	100.0	March 31
Shin-Etsu Electronics Materials Singapore Pte. Ltd.*	100.0	December 31	Shin-Etsu Polymer India Pvt. Ltd.*	100.0	December 31
Shin-Etsu Silicone International Trading (Shanghai) Co., Ltd.*	100.0	December 31	PT. Shin-Etsu Polymer Indonesia*	100.0	December 31
Shin-Etsu Finetech Co., Ltd.	100.0	March 31	Shin-Etsu Polymer Singapore Pte. Ltd.*	100.0	December 31
Shin-Etsu Magnetics Philippines., Inc.*	100.0	December 31	Shin-Etsu Polymer Shanghai Co., Ltd.*	100.0	December 31
JAPAN VAM & POVAL Co., Ltd.	100.0	March 31	Shin-Etsu Polymer Hong Kong Co., Ltd.*	100.0	December 31
CIRES, Lda.*	100.0	December 31	Shin-Etsu Polymer Hungary Kft.*	100.0	December 31
Shin-Etsu Singapore Pte. Ltd.*	100.0	December 31	Shin-Etsu Polymer (Thailand) Ltd.*	100.0	December 31
Shin-Etsu Silicone Korea Co., Ltd.*	100.0	December 31	Dongguan Shin-Etsu Polymer Co., Ltd.*	100.0	December 31
Shinano Polymer Co., Ltd.	100.0	March 31	Human Create Co., Ltd.	100.0	March 31
Shin-Etsu (Malaysia) Sdn. Bhd.*	100.0	December 31	Suzhou Shin-Etsu Polymer Co., Ltd.*	100.0	December 31
Nissin Chemical Industry Co., Ltd	100.0	February 29	S.E.H. (Shah Alam) Sdn. Bhd.*	100.0	December 31
Shin-Etsu MicroSi, Inc.*	100.0	December 31	SHIN-ETSU HANDOTAI SINGAPORE PTE. LTD.*	100.0	December 31
Shin-Etsu Silicone Taiwan Co., Ltd.*	93.3	December 31	SE Tylose USA, Inc.*	100.0	December 31
Shin-Etsu Silicones of America, Inc.*	100.0	December 31	K-Bin, Inc.*	100.0	December 31
Shin-Etsu Silicones Europe B.V.*	100.0	December 31	Shin-Etsu Silicone (Nantong) Co., Ltd.*	100.0	December 31
Shin-Etsu Opto Electronic Co., Ltd.*	80.0	December 31	Shin-Etsu (Jiangsu) Optical Preform Co., Ltd.*	75.0	December 31
Shin-Etsu Polymer (Malaysia) Sdn. Bhd.*	100.0	December 31	Kashima Chlorine & Alkali Co., Ltd.	79.0	March 31
Shin-Etsu Polymer Europe B.V.*	100.0	December 31	Kashima Vinyl Chloride Monomer Co., Ltd.	70.6	March 31
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\*Overseas subsidiary

21 other consolidated subsidiaries



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### 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, 2016, 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 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, 2016, 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 Shin Nihon LLC

June 29, 2016 Tokyo, Japan