Shin-Etsu Chemical Co., Ltd.

# Annual Report 2018

**Financial Section** 

## **Ten-Year Summary**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES
For the fiscal years ended March 31, 2009 through 2018

		Millions	f yen	
	2009	2010	2011	2012
For the year:				
Net sales	¥1,200,813	¥916,837	¥1,058,257	¥1,047,731
Cost of sales	853,433	700,902	803,574	798,592
Selling, general and administrative expenses	114,453	98,718	105,460	99,505
Operating income	232,927	117,215	149,221	149,632
Ordinary income	250,533	127,019	160,338	165,237
Net income attributable to owners of parent	154,731	83,852	100,119	100,643
Capital expenditures	159,406	123,793	119,884	87,165
R&D costs	37,469	33,574	37,321	35,725
Depreciation and amortization	119,457	87,722	93,732	82,868
At year-end:				
Total assets	¥1,684,944	¥1,769,139	¥1,784,166	¥1,809,841
Working capital (Current assets - Current liabilities)	606,632	612,447	638,493	694,803
Common stock	119,419	119,419	119,419	119,419
Net assets	1,407,353	1,474,212	1,469,429	1,494,573
Interest-bearing debt	23,827	20,052	14,574	15,732
Per share (Yen and U.S. dollars):				
Net income per share—basic	¥362.39	¥197.53	¥235.80	¥237.03
Net income per share—fully diluted (Note 2)	362.35	197.50	235.80	_
Cash dividends	100.00	100.00	100.00	100.00
Payout ratio (%)	27.6	50.6	42.4	42.2
Net assets	3,218.28	3,370.56	3,360.39	3,422.93
General:				
Operating income to net sales ratio (%)	19.4	12.8	14.1	14.3
Net income attributable to owners of parent to net sales ratio (%)	12.9	9.1	9.5	9.6
ROE (%)	11.0	6.0	7.0	7.0
ROA (%)	13.9	7.4	9.0	9.2
Equity ratio (%)	81.1	80.9	80.0	80.3
Number of employees	19,170	16,955	16,302	16,167
Number of shares issued (Thousands)	432,106	432,106	432,106	432,106

Notes: 1. The U.S. dollar amounts represent conversion of yen, for convenience only, at the rate of ¥106 = US\$1, the approximate rate of exchange on March 31, 2018.

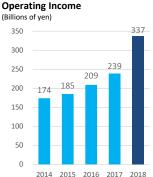
<sup>2.</sup> Diluted net income per share for the fiscal year ended March 31, 2012 is not presented as there were no securities with dilutive effect.

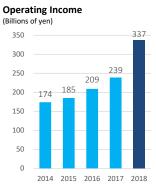
		Millions o	of yen			Thousands of U.S. dollars (Note 1)
2013	2014	2015	2016	2017	2018	2018
¥1,025,409	¥1,165,819	¥1,255,543	¥1,279,807	¥1,237,405	¥1,441,432	\$13,598,423
769,427	873,879	940,399	930,019	868,404	963,008	9,084,984
98,938	118,130	129,814	141,262	130,383	141,601	1,335,867
157,043	173,809	185,329	208,525	238,617	336,822	3,177,572
170,207	180,605	198,025	220,005	242,133	340,308	3,210,457
105,714	113,617	128,606	148,840	175,912	266,235	2,511,657
86,841	83,155	109,903	134,753	145,647	176,283	1,663,056
37,671	43,546	47,165	53,165	49,020	51,768	488,386
80,961	91,445	96,918	100,466	93,087	112,016	1,056,762
¥1,920,903	¥2,198,912	¥2,452,306	¥2,510,085	¥2,655,636	¥2,908,328	\$27,437,057
832,878	981,667	1,100,999	1,170,679	1,232,607	1,356,638	12,798,478
119,419	119,419	119,419	119,419	119,419	119,419	1,126,600
1,623,176	1,822,135	2,012,711	2,080,465	2,190,082	2,413,025	22,764,390
13,929	15,638	14,328	13,470	14,642	15,814	149,191
¥248.94	¥267.20	¥302.05	¥349.46	¥412.86	¥624.28	\$5.889
248.92	267.07	301.98	349.42	412.83	624.10	5.888
100.00	100.00	100.00	110.00	120.00	140.00	1.321
40.2	37.4	33.1	31.5	29.1	22.4	22.4
3,709.19	4,165.28	4,602.80	4,761.48	5,002.16	5,511.98	52.000
15.3	14.9	14.8	16.3	19.3	23.4	23.4
10.3	9.7	10.2	11.6	14.2	18.5	18.5
7.0	6.8	6.9	7.5	8.5	11.9	11.9
9.1	8.8	8.5	8.9	9.4	12.2	12.2
82.0	80.6	79.9	80.8	80.3	80.8	80.8
17,712	17,892	18,276	18,407	19,206	20,155	20,155
432,106	432,106	432,106	432,106	432,106	432,106	432,106

#### Management's Discussion and Analysis

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

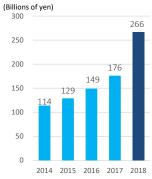
#### **Net Sales** (Billions of yen) 1 441 1.500 1,256 1,280 1,237 1,200 900 600 300 0 2016 2017







#### Net Income Attributable to **Owners of Parent**







#### **Consolidated Operating Performance**

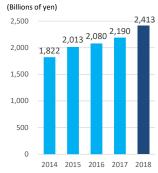
During FY 2018 (April 1, 2017 to March 31, 2018), the world economy was on a gradual recovery track. In the U.S., the steady recovery of the economy continued. Economies in Japan, Europe and even in developing countries also experienced slight recoveries. In China, the movement toward economic recovery continued.

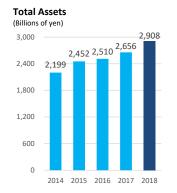
Given these conditions, to achieve ongoing improvements in business results, the Shin-Etsu Group endeavored to (1) deepen relationships with customers and further expand the global customer base; (2) continuously engage in product development to solidly support customer needs, improve product quality and achieve further technological differentiation; (3) continue our policies of maintaining precise delivery schedules and engaging in strict cost management, and (4) make investments appropriate for supporting increased demand.

As a result, compared with the previous fiscal year, net sales in FY 2018 increased 16.5% (¥204,027 million) to ¥1,441,432 million. Operating income was ¥336,822 million, an increase of 41.2% (¥9,825 million) from the previous fiscal year. Ordinary income increased 40.5% (¥98,175 million) to ¥340,308 million over the previous fiscal year. Net income attributable to owners of parent was ¥266,235 million, an increase of 51.3% (¥90,323 million) compared with the previous fiscal year.

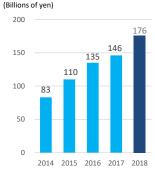
Additionally, net income attributable to owners of parent in the fiscal year under review includes a reversal of deferred tax assets and liabilities of ¥29,891 million (gain) due to tax reform legislation in the United States.

#### **Total Net Assets**

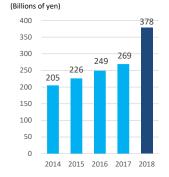




#### Capital Expenditures



#### Net Cash Flow<sup>3</sup>



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

#### **Business Segment Overview**

#### **PVC/Chlor-Alkali Business**

Mainly comprising the manufacture and sales of PVC and caustic soda

With regard to the PVC/Chlor-Alkali Business, in the U.S. Shintech continued at full operation, while at the same time, in addition to PVC, the supply and demand relationship with respect to caustic soda also improved, resulting in significant growth. Bases in Japan and Europe also achieved favorable business results. Thorough sales efforts resulted in increased sales, both in the regions surrounding our production bases and globally, contributing to growth in profit.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 21.8% (¥89,746 million) to ¥501,346 million and operating income increased by 75.3% (¥40,050 million) to ¥93,236 million.

#### Silicones Business

Mainly comprising the manufacture and sales of silicones
Demand increased for all product lines and applications, and
in addition to functional products, sales of general-purpose
products also expanded worldwide, which increased
segment performance.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 15.1% (¥26,993 million) to ¥206,268 million and operating income increased by 22.1% (¥9,405 million) to ¥51,954 million.

#### **Specialty Chemicals Business**

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

With regard to cellulose derivatives, pharmaceutical-use products, construction material products and coating products continued to perform strongly, while pheromone, POVAL and other products also generally achieved strong results.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 8.5% (¥9,139 million) to ¥117,197 million and operating income increased by 15.7% (¥3,496 million) to ¥25,729 million.

#### **Semiconductor Silicon Business**

Mainly comprising the manufacture and sales of semiconductor silicon

With regard to semiconductor silicon, driven by robust demand for semiconductor devices, 300mm and other diameter silicon wafers also experienced strong demand, while the implementation of product price adjustments substantially enhanced segment performance.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 22.1% (¥55,778 million) to ¥308,390 million and operating income increased by 66.0% (¥36,972 million) to ¥92,963 million.

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

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

With regard to rare earth magnets, shipments of products for automotive applications, including hybrid cars and industrial equipment, remained strong as sales expanded. With regard to photoresist products, KrF resists, ArF resists and trilayer materials all performed favorably as photomask blanks also expanded. Optical fiber preform sales were increased by taking advantage of a rise in global demand as well as by contributions from the production at our new joint-venture company in China starting in the second half of FY 2018. Shipments of materials for LED packaging were also firm.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 10.4% ( $\pm$ 19,516 million) to  $\pm$ 207,454 million and operating income increased by 11.6% ( $\pm$ 6,422 million) to  $\pm$ 61,631 million.

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

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

Shin-Etsu Polymer Co., Ltd., input devices for automobiles and semiconductor wafer-related containers continued to perform well.

As a result, compared with the previous fiscal year, net sales for this business segment increased by 2.9% (¥2,856 million) to ¥100,775 million and operating income increased by 19.8% (¥1,898 million) to ¥11,482 million.

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

At the end of FY 2018, total assets increased by  $\pm 252,600$  million compared with the end of the previous fiscal year, to  $\pm 2,908,300$  million. This was mainly due to an increase in cash and time deposits and fixed assets.

Total liabilities increased by ¥29,700 million from the end of the previous fiscal year to ¥495,300 million.

Total net assets amounted to ¥2,413,000 million due to an increase in retained earnings, resulting from net income attributable to owners of parent of ¥266,200 million.

As a result, the equity ratio was 80.8%, up 0.5 percentage points from 80.3%, and net assets per share increased by ¥509.82 compared with the previous fiscal year, to ¥5,511.98.

We were able to achieve increases in both return on invested capital (ROIC) which was 18.2%, up 4.2 percentage points from 14.0%, and return on equity (ROE), which was 11.9%, up 3.4 percentage points from 8.5%. The full-year dividend per share was increased by ¥20 compared to the previous fiscal year, to ¥140 per share. Also, in May 2018, we canceled treasury stock equivalent to 1% of the total number of shares issued before cancellation.

#### **Cash Flows**

The balance of cash and cash equivalents at the end of FY 2018 increased by 6.4% (¥471,043 million) compared with that at the end of the previous fiscal year to ¥780,449 million.

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

Net cash provided by operating activities amounted to \$332,776 million, an increase of \$41,904 million from the previous fiscal year. This was mainly attributable to \$340,308 million in income before income taxes and non-controlling interests, \$112,016 million in depreciation and amortization, an increase of \$42,287 million in accounts receivable-trade and \$74,791 million for the payment of income taxes.

#### Cash Flows from Investing Activities

As a result of investing activities in the fiscal year under review, net cash used for investing activities was ¥237,602 million (compared to ¥1,281 million provided in the previous fiscal year). This was mainly attributable to cash outflows of ¥162,311 million for purchases of property, plant and equipment and ¥95,000 million for purchases of securities, as well as a cash inflow of ¥50,560 million in proceeds from the redemption of securities.

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

Net cash used for financing activities increased by ¥12,807 million from the previous fiscal year to ¥50,006 million. This was mainly due to a cash dividend payment of ¥53,301 million.

With regard to plans for important capital expenditures and the procurement source of said capital, in the one-year period following the end of the current fiscal year, we expect capital expenditures to total ¥250,000 million, an approximately 40% increase compared to capital expenditures in the fiscal year under review. We plan to use our own capital to fund these investments.

#### Capital Expenditures

In the fiscal year under review, capital expenditures totaled ¥176,283 million overall for the PVC/Chlor-Alkali Business, Silicones Business, Specialty Chemicals Business, Semiconductor Silicon Business, Electronics & Functional Materials Business and the Processing, Trading & Specialized Services Business.

Capital expenditure in the PVC/Chlor-Alkali Business totaled ¥63,610 million. This was mainly due to the construction of a new ethylene manufacturing plant (currently under construction) at Shintech.

In the Silicones Business, capital expenditures were ¥29,167 million. This was mainly due to the enhancement and rationalization of silicone product manufacturing equipment.

In the Specialty Chemicals Business, capital expenditures were ¥7,052 million.

In the Semiconductor Silicon Business, capital expenditures were ¥51,584 million. This was mainly due to investments to improve the quality of semiconductor silicon wafers and improve productivity at Shin-Etsu Handotai Co., Ltd.

In the Electronics & Functional Materials Business, capital expenditures were ¥20,246 million. This was mainly due to the construction of a new plant (currently under construction) for the production of photoresists at Shin-Etsu YOFC (Hubei) Optical Preform Co., Ltd.

In the Processing, Trading & Specialized Services Business, capital expenditures were ¥5,004 million.

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

#### **Basic Policy Concerning Profit-sharing**

Our basic policy is to adopt a long-term perspective focused on expanding company earnings and strengthening the Group's structure to distribute dividends that appropriately share the achievement of successful management efforts with our shareholders. Regarding financial reserves, we strive to enhance corporate value by allocating reserves for capital investments and research and development, while proactively utilizing reserves to strengthen Shin-Etsu's global competitiveness and for future business developments.

In accordance with this policy, we plan to increase the year-end dividend by ¥10 per share from the interim dividend amount (¥65 per share) distributed at the end of the second quarter, for a total year-end dividend of ¥75 per share. As a result, the total annual dividend per share for FY 2018 will be an increase of ¥20 over the annual dividend of the previous fiscal year (¥120) to become ¥140 per share.

Furthermore, in line with a resolution by the Board of Directors at a meeting held on April 27, 2018, 4,500,000 shares of treasury stock (totaling 5,536,807 shares as of March 31, 2018) excluding shares corresponding to stock options were canceled on May 2, 2018.

#### Outlook for Fiscal 2019 (Ending March 31, 2019)

The world economy is generally good, but its many uncertainties make it impossible to predict.

The Shin-Etsu Group will focus on developments in world markets and aggressively develop sales activities while accurately capturing trends in demand. At the same time, we will further accelerate the development of our global business by constructing manufacturing bases in optimal locations throughout the world and strengthening and expanding existing facilities. We will continue to focus on enhancing productivity and product quality while striving to develop products that are valued by customers and ensuring a stable supply of products. To achieve these goals, we will maintain a sound financial base that will be used to conduct appropriate investments in a timely manner.

Going forward, we will continue to meet customer, market and societal needs, create value over the long-term and target sustainable business growth.

At the same time, among the main products of the Shin-Etsu Group, some will be greatly affected by factors including fluctuations in raw material prices, market conditions and supply and demand. In addition, over 70% of the Group's sales come from outside Japan, thus exchange rate fluctuations impact our business. Exchange rate fluctuations also affect us when converting Shin-Etsu Chemical overseas Group company earnings into Japanese yen.

Given the potential for these external factors to cause such fluctuations, at present it is difficult to make a reasonable business forecast for the coming fiscal year. For this reason, we have decided to refrain from making a consolidated operating performance forecast for FY 2019. We will disclose the consolidated business forecast as soon as it becomes possible to do so.

#### **Business Risks**

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

This section contains a list of significant items that the Group considers are risk factors at the end of the fiscal year under review (as of March 31, 2018), 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% of the consolidated net sales of the Group in fiscal 2018, and it is expected that this ratio will remain at a high level. The Japanese yen equivalent amounts of items in the financial statement items of overseas consolidated subsidiaries, which are included in the Group's consolidated financial statements, are influenced by fluctuations in foreign exchange rates.

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

## 3) Influence of Natural Disasters and Disastrous Accidents

To minimize the damage that could result from an interruption of production activities, the Group performs regular disaster-prevention inspections, carries out a constant program of facility maintenance activities at its production facilities and makes facility investments to enhance safety and establish multiple manufacturing bases.

However, if a natural disaster or disastrous accident or other unforeseen event damages production facilities or other areas, such circumstances could have a major impact on the Group's business operations results.

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

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

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

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

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

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

#### 7) Influence of Environmental Issues

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

#### 8) Influence of Product Liability

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

## **Consolidated Balance Sheet**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES As of March 31, 2017 and 2018

	Millions	of yen	Thousands of U.S. dollars (Note 3)
	2017	2018	2018
ASSETS			
Current Assets:			
Cash and time deposits (Note 21)	¥752,675	¥854,506	\$8,061,381
Notes and accounts receivable-trade (Note 4)	287,853	332,880	3,140,384
Securities (Notes 6 and 21)	186,591	197,339	1,861,693
Merchandise and finished goods	126,026	135,033	1,273,902
Work in process	12,234	13,235	124,864
Raw materials and supplies	128,896	133,808	1,262,347
Deferred taxes, current (Note 19)	35,937	36,475	344,108
Other	33,941	48,313	455,783
Less: Allowance for doubtful accounts (Note 2 (5))	(14,549)	(12,201)	(115,105)
Total current assets	1,549,607	1,739,392	16,409,361
Fixed Assets:			
Property, Plant and Equipment (Notes 2 (8) and 9):	474.000	476 222	4 662 420
Buildings and structures, net	174,923	176,323	1,663,430
Machinery and equipment, net	437,775	454,846	4,291,009
Land	86,953	88,746	837,232
Construction in progress	139,180	170,810	1,611,417
Other, net	7,737	9,001	84,915
Total property, plant and equipment	846,570	899,728	8,488,005
Intangible Assets	10,229	9,405	88,729
Investments and Other Assets:			
Investments in securities (Notes 6 and 8)	135,311	145,455	1,372,222
Net defined benefit asset (Note 11)	1,928	2,440	23,025
Deferred taxes, non-current (Note 19)	22,562	21,584	203,624
Other (Note 8)	91,265	92,518	872,816
Less: Allowance for doubtful accounts (Note 2 (5))	(1,840)	(2,197)	(20,727)
Total investments and other assets	249,228	259,801	2,450,961
Total fixed assets	1,106,028	1,168,935	11,027,696
Total Assets	¥2,655,636	¥2,908,328	\$27,437,057

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

	Millions	Thousands of U.S. dollars (Note 3)	
	2017	2018	2018
LIABILITIES	2017	2010	2010
Current Liabilities:			
Notes and accounts payable-trade (Note 4)	¥123,823	¥136,834	\$1,290,889
Short-term borrowings (Note 10)	12,788	7,094	66,931
Accounts payable-other	54,671	65,750	620,287
Accrued expenses	61,611	68,805	649,111
Accrued income taxes	32,711	58,972	556,342
Accrued bonuses for employees	2,898	3,147	29,688
Accrued bonuses for directors	612	674	6,360
Other (Notes 4 and 19)	27,881	41,474	391,270
Total current liabilities	317,000	382,753	3,610,882
Long-Term Liabilities:			
Long-term debt (Note 10)	1,578	8,430	79,535
Deferred taxes, non-current (Note 19)	98,228	62,335	588,072
Net defined benefit liability (Note 11)	35,809	32,282	304,554
Other	12,936	9,499	89,621
Total long-term liabilities	148,553	112,549	1,061,784
Total Liabilities	465,553	495,302	4,672,666
Commitment and Contingent Liabilities (Note 12)			
NET ASSETS			
Stockholders' Equity:			
Common stock:	119,419	119,419	1,126,600
Authorized: 1,720,000,000 shares Issued: 432,106,693 shares as of March 31, 2017			
and 2018, respectively			
Additional paid-in capital	129,626	129,937	1,225,821
Retained earnings (Note 13)	1,857,857	2,070,779	19,535,659
Less: Treasury stock, at cost	(31,213)	(30,207)	(284,975)
5,724,030 shares and 5,536,807 shares as of			
March 31, 2017 and 2018, respectively	2.075.600	0.000.000	24 502 405
Total stockholders' equity	2,075,690	2,289,929	21,603,106
Accumulated Other Comprehensive Income:			
Unrealized gains (losses) on available-for-sale securities (Note 2 (7))	22,887	26,446	249,496
Deferred gains (losses) on hedges	862	1,671	15,773
Foreign currency translation adjustments	35,154	34,611	326,523
Remeasurements of defined benefit plans	(1,761)	(1,416)	(13,362)
Total accumulated other comprehensive income	57,142	61,313	578,430
Share Subscription Rights	152	524	4,946
Non-controlling Interests in Consolidated Subsidiaries	57,096	61,258	577,908
Total net assets	2,190,082	2,413,025	22,764,390
Total Liabilities and Net Assets	¥2,655,636	¥2,908,328	\$27,437,057

## **Consolidated Statement of Income**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES For the fiscal years ended March 31, 2017 and 2018

	Millions	of yen	Thousands of U.S. dollars (Note 3)
	2017	2018	2018
Net Sales (Note 22)	¥1,237,405	¥1,441,432	\$13,598,423
Cost of Sales (Notes 11 and 17)	868,404	963,008	9,084,984
Gross profit	369,001	478,424	4,513,439
Selling, General and Administrative Expenses (Notes 11, 16 and 17)	130,383	141,601	1,335,867
Operating income (Note 22)	238,617	336,822	3,177,572
Other Income (Expenses):			
Interest income	4,714	6,122	57,758
Dividend income	2,602	4,817	45,444
Equity in earnings (losses) of affiliates	2,788	3,762	35,498
Interest expenses	(529)	(621)	(5,863)
Loss on disposal of property, plant and equipment	(974)	(3,239)	(30,557)
Foreign exchange gain (loss)	(3,697)	(6,140)	(57,930)
Other, net	(1,388)	(1,215)	(11,463)
Ordinary income	242,133	340,308	3,210,457
Income before income taxes and non-controlling interests	242,133	340,308	3,210,457
Income Taxes (Note 19):			
Current	67,187	103,240	973,963
Deferred	(3,363)	(32,990)	(311,229)
Total Income Taxes	63,823	70,249	662,734
Net Income	178,309	270,058	2,547,722
Net Income Attributable to Non-Controlling Interests	(2,397)	(3,822)	(36,065)
Net Income Attributable to Owners of Parent	¥175,912	¥266,235	\$2,511,657
	Yei	n	U.S. dollars (Note 3)
Earnings per Share (Note 2 (14)):			
Net income attributable to owners of parent—basic	¥412.86	¥624.28	\$5.889
Net income attributable to owners of parent—fully diluted	412.83	624.10	5.888
Cash dividends	120.00	140.00	1.321
Weighted-Average Number of Shares Outstanding (Thousands)	426,086	426,470	426,470

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

## **Consolidated Statement of Comprehensive Income**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES For the fiscal years ended March 31, 2017 and 2018

	Million	s of yen	Thousands of U.S. dollars (Note 3)
	2017	2018	2018
Net Income	¥178,309	¥270,058	\$2,547,722
Other Comprehensive Income (Note 20):			
Unrealized gains (losses) on available-for-sale securities	9,149	3,549	33,482
Deferred gains (losses) on hedges	(753)	806	7,610
Foreign currency translation adjustments	(34,265)	14	135
Remeasurements of defined benefit plans	(280)	337	3,183
Share of other comprehensive income (loss) of affiliates accounted for using the equity method	(205)	370	3,498
Total other comprehensive income (loss)	(26,356)	5,078	47,910
Comprehensive Income	¥151,953	¥275,137	\$2,595,633
(Breakdown)			
Comprehensive income attributable to owners of parent	¥150,576	¥270,406	\$2,551,006
Comprehensive income attributable to non-controlling interests	1,376	4,730	44,626

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

## Consolidated Statement of Changes in Net Assets SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

	Thousands									
		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, 2016	432,106	¥119,419	¥128,759	¥1,731,042	¥(33,407)	¥1,945,813				
Cash dividends (Note 13)				(48,987)	)	(48,987)				
Net income attributable to owners of parent				175,912		175,912				
Purchase of treasury stock					(19)	(19)				
Disposal of treasury stock			878		2,213	3,092				
Others			(11)	(109)	)	(121)				
Net changes of items other than stockholders' equity										
Balance at March 31, 2017	432,106	¥119,419	¥129,626	¥1,857,857	¥(31,213)	¥2,075,690				

	Millions of 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, 2016	¥13,780	¥1,611	¥68,566	¥(1,480)	¥82,478	¥237	¥51,936	¥2,080,465	
Cash dividends (Note 13)								(48,987)	
Net income attributable to owners of parent								175,912	
Purchase of treasury stock								(19)	
Disposal of treasury stock								3,092	
Others								(121)	
Net changes of items other than stockholders' equity	9,106	(749)	(33,412)	(280)	(25,335)	(84)	5,160	(20,259)	
Balance at March 31, 2017	¥22,887	¥862	¥35,154	¥(1,761)	¥57,142	¥152	¥57,096	¥2,190,082	

	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, 2017	432,106	¥119,419	¥129,626	¥1,857,857	¥(31,213)	¥2,075,690				
Cash dividends (Note 13)				(53,301)		(53,301)				
Net income attributable to owners of parent				266,235		266,235				
Purchase of treasury stock					(30)	(30)				
Disposal of treasury stock			410		1,036	1,447				
Others			(99)	(12)		(112)				
Net changes of items other than stockholders' equity										
Balance at March 31, 2018	432,106	¥119,419	¥129,937	¥2,070,779	¥(30,207)	¥2,289,929				

		Millions of yen							
		Accumu	lated Other Comprehensive	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, 2017	¥22,887	¥862	¥35,154	¥(1,761)	¥57,142	¥152	¥57,096	¥2,190,082	
Cash dividends (Note 13)								(53,301)	
Net income attributable to owners of parent								266,235	
Purchase of treasury stock								(30)	
Disposal of treasury stock								1,447	
Others								(112)	
Net changes of items other than stockholders' equity	3,559	809	(543)	344	4,171	371	4,161	8,703	
Balance at March 31, 2018	¥26,446	¥1,671	¥34,611	¥(1,416)	¥61,313	¥524	¥61,258	¥2,413,025	

	Thousands		Thousar	nds of U.S. dollars (Note 3	:)	_
			S	tockholders' Equity		
	Number of shares of common stock	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total
Balance at April 1, 2017	432,106	\$1,126,600	\$1,222,888	\$17,526,961	\$(294,467)	\$19,581,982
Cash dividends (Note 13)				(502,842)		(502,842)
Net income attributable to owners of parent				2,511,657		2,511,657
Purchase of treasury stock					(284)	(284)
Disposal of treasury stock			3,874		9,776	13,651
Others			(940)	(116)		(1,057)
Net changes of items other than stockholders' equity						
Balance at March 31, 2018	432,106	\$1,126,600	\$1,225,821	\$19,535,659	\$(284,975)	\$21,603,106

		Thousands of U.S. dollars (Note 3)								
		Accumulated Other Comprehensive 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, 2017	\$215,915	\$8,133	\$331,646	\$(16,613)	\$539,080	\$1,441	\$538,649	\$20,661,154		
Cash dividends (Note 13)								(502,842)		
Net income attributable to owners of parent								2,511,657		
Purchase of treasury stock								(284)		
Disposal of treasury stock								13,651		
Others								(1,057)		
Net changes of items other than stockholders' equity	33,580	7,640	(5,122)	3,251	39,349	3,504	39,258	82,112		
Balance at March 31, 2018	\$249,496	\$15,773	\$326,523	\$(13,362)	\$578,430	\$4,946	\$577,908	\$22,764,390		

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

## **Consolidated Statement of Cash Flows**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES For the fiscal years ended March 31, 2017 and 2018

	Millions of	fyen	Thousands of U.S. dollars (Note 3)
<del>-</del>	2017	2018	2018
Cash Flows from Operating Activities:			
Income before income taxes and non-controlling interests	¥242,133	¥340,308	\$3,210,457
Adjustments to reconcile income before income			
taxes to net cash provided by operating activities:			
Depreciation and amortization	93,087	112,016	1,056,762
Loss on impairment of fixed assets	2,028	1,460	13,782
Increase (decrease) in net defined benefit liability	1,384	(4,469)	(42,169)
(Gain) loss on sales of investments in securities	(0)	(17)	(164)
Increase (decrease) in allowance for doubtful accounts	(165)	(2,019)	(19,049)
Interest and dividend income	(7,317)	(10,939)	(103,202)
Interest expenses	529	621	5,863
Exchange (gain) loss	2,370	6,148	58,001
Equity in (earnings) losses of affiliates	(2,788)	(3,762)	(35,498)
Changes in assets and liabilities:	, ,	, ,	` ' '
(Increase) decrease in notes and accounts receivable	(23,501)	(42,287)	(398,937)
(Increase) decrease in inventories	10,621	(13,595)	(128,259)
(Increase) decrease in long-term advance payment	3,180	3,196	30,150
Increase (decrease) in notes and accounts payable	9,606	12,017	113,369
Other, net	15,351	(2,256)	(21,288)
Subtotal	346,522	396,420	3,739,818
Proceeds from interest and dividends	7,774	11,746	110,819
Payments of interest	(528)	(599)	(5,657)
Payments of income taxes	(62,895)	(74,791)	(705,584)
Net cash provided by operating activities	290,872	332,776	3,139,397
Cash Flows from Investing Activities:	,	,	, ,
(Increase) decrease in time deposits	30,289	(22,649)	(213,675)
Purchases of securities	(74,001)	(95,000)	(896,226)
Proceeds from redemption of securities	186,381	50,560	476,990
Purchases of property, plant and equipment	(134,897)	(162,311)	(1,531,242)
Proceeds from sales of property, plant and equipment	235	2,390	22,550
Purchases of intangible fixed assets	(1,377)	(1,407)	(13,276)
Purchases of investments in securities	(1,613)	(7,516)	(70,908)
Proceeds from sales of investments in securities	53	26	246
Proceeds from redemption of investments in securities	0	5,000	47,172
Payments of loans	(481)	(809)	(7,633)
Proceeds from collection of loans	3,494	1,301	12,280
Other, net	(6,802)	(7,188)	(67,813)
Net cash provided by (used for) investing activities	1,281	(237,602)	(2,241,536)
Cash Flows from Financing Activities:	,	(==:,/===/	(-///
Net increase (decrease) in short-term borrowings	520	(114)	(1,083)
Proceeds from long-term debt	25	2,012	18,987
Repayments of long-term debt	(212)	(792)	(7,476)
Purchases of treasury stock	(19)	(30)	(284)
Proceeds from sales of treasury stock	2,979	1,394	13,154
Cash dividends paid	(48,987)	(53,301)	(502,842)
Cash dividends paid to non-controlling interests	(615)	(750)	(7,082)
Other, net	9,110	1,575	14,867
Net cash used for financing activities	(37,199)	(50,006)	(471,759)
Effect of Exchange Rate Changes on Cash and Cash Equivalents	(13,584)	1,952	18,421
Net Increase (Decrease) in Cash and Cash Equivalents	241,369	47,119	444,522
Cash and Cash Equivalents at Beginning of Year	487,604	733,306	6,917,983
Increase (Decrease) in Cash and Cash Equivalents Resulting from Changes in Scope of Consolidation	4,332	24	229
Cash and Cash Equivalents at End of Year (Note 21)	¥733,306	¥780,449	\$7,362,735

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

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

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES For the fiscal years ended March 31, 2017 and 2018

#### 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 126 majority-owned subsidiaries as of March 31, 2018 (128 as of March 31, 2017). The consolidated financial statements include the accounts of the Company and 91 (94 for 2017) majority-owned subsidiaries (collectively, the "Companies"), of which the principal firms are listed on page 38 with their respective fiscal year-ends.

Moreover, from the fiscal year ended March 31, 2018, Shin-Etsu Polymer Vietnam Co., Ltd., and other companies were included in the scope of consolidation due to their materiality and other considerations. In addition, Shinano Polymer Co., Ltd., and other companies that up to now had been consolidated subsidiaries have been dissolved following their absorption by consolidated subsidiary Shin-Etsu Polymer Co., Ltd., and removed from the scope of consolidation.

The remaining 35 (34 for 2017) unconsolidated subsidiaries, including Shin-Etsu Electronics (Malaysia) Sdn. Bhd., whose total assets, net sales, net income and retained earnings in the aggregate are not material to the consolidated financial statements have been excluded from the scope of consolidation. For consolidation of subsidiaries whose fiscal year-ends are not the same as the Company, necessary adjustments are made for significant intercompany transactions occurring during the periods between the fiscal year-end of respective consolidated subsidiaries and that of the Company.

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

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

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

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

The Company had 35 (34 for 2017) unconsolidated subsidiaries (majority-owned) and 14 (14 for 2017) affiliates (meaning 20% to 50% ownership of a company's equity interest). The equity method is applied to the investments in 3 (3 for 2017) 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

 $For eign \ currency \ transactions \ are \ generally \ translated \ into \ yen \ at \ the \ rates \ prevailing \ at \ the \ respective \ transaction \ dates.$ 

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, 2017 and 2018.

#### (5) Allowance for doubtful accounts

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

#### (6) Inventories

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

#### (7) Financial instruments

#### Securities:

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

#### Derivatives:

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

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

#### Hedge accounting:

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

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

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

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

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

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

#### (9) Repairs and maintenance

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

#### (10) Accrued bonuses for employees

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

#### (11) Accrued bonuses for directors

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

#### (12) Accrued retirement benefits

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

Actuarial differences are amortized over a five-year period, which is within the average remaining service period of employees, using the straight-line method from the fiscal year when the difference was generated. Prior service cost is amortized as incurred over a 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 13).

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 ¥106 to US\$1, the approximate effective rate of exchange on March 31, 2018. 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 ¥106 to US\$1 or at any other rate.

#### 4. NOTES AND ACCOUNTS RECEIVABLE AND PAYABLE

The Companies recognize settlements of trade notes receivable and trade notes payable when the bank clearance of the notes is actually made. As March 31, 2018 was a holiday for financial institutions, the following accounts include the unsettled balances of trade notes receivable and trade notes payable due on that date in the accompanying consolidated balance sheet as of March 31, 2018.

Million			
Millions of yen			U.S. dollars
2017	2018		2018
¥—	¥2,193		\$20,695
_	1,796		16,946 10,753
_	1,139		10,753
			·
	¥—	¥— ¥2,193 — 1,796	¥— ¥2,193 — 1,796

#### **5. 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,

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

As of March 31, 2017 and 2018, the book value, fair value and the difference between the two are as follows:

	N	1illions of yen	
		2017	
	Book value	Fair value	Difference
Assets:			
(1) Cash and time deposits	¥752,675	¥752,675	¥—
(2) Notes and accounts receivable—trade	287,853	287,853	_
(3) Securities and investments in securities			
i) Held-to-maturity debt securities	9,263	9,226	(37)
<ul><li>ii) Investments in and advances to unconsolidated subsidiaries and affiliates</li></ul>	24,250	24,860	610
iii) Available-for-sale securities	260,071	260,071	_
(4) Long-term loans	6,422	6,182	(240)
Total	¥1,340,537	¥1,340,870	¥332
Liabilities:			
(1) Notes and accounts payable—trade	¥123,823	¥123,823	¥—
(2) Short-term borrowings	12,788	12,788	_
(3) Accounts payable—other	54,671	54,671	_
(4) Accrued expenses	61,611	61,611	_
(5) Accrued income taxes	32,711	32,711	_
(6) Long-term debt	1,578	1,559	(19)
Total	¥287,185	¥287,166	¥(19)
Derivative transactions:			
Hedge accounting not applied	¥(3,941)	¥(3,941)	¥—
Hedge accounting applied	1,149	1,149	
Total	¥(2,791)	¥(2,791)	¥—

	N	lillions of yen		TI	nousands of U.S. do	llars
		2018			2018	
	Book value	Fair value	Difference	Book value	Fair value	Difference
Assets:						
(1) Cash and time deposits	¥854,506	¥854,506	¥—	\$8,061,38	1 \$8,061,381	\$-
(2) Notes and accounts receivable—trade	332,880	332,880	_	3,140,38	4 3,140,384	_
(3) Securities and investments in securities						
i) Held-to-maturity debt securities	7,564	7,491	(73)	71,36	0 70,670	(690)
<ul><li>ii) Investments in and advances to unconsolidated subsidiaries and affiliates</li></ul>	25,202	27,143	1,940	237,76	0 256,071	18,310
iii) Available-for-sale securities	279,442	279,442	_	2,636,25	2 2,636,252	_
(4) Long-term loans	5,885	5,291	(593)	55,52	1 49,919	(5,602)
Total	¥1,505,482	¥1,506,756	¥1,273	\$14,202,66	2 \$14,214,679	\$12,017
Liabilities:						
(1) Notes and accounts payable—trade	¥136,834	¥136,834	_	\$1,290,88	9 \$1,290,889	_
(2) Short-term borrowings	7,094	7,094	_	66,93	1 66,931	_
(3) Accounts payable—other	65,750	65,750	_	620,28	7 620,287	_
(4) Accrued expenses	68,805	68,805	_	649,11	1 649,111	_
(5) Accrued income taxes	58,972	58,972	_	556,34	2 556,342	_
(6) Long-term debt	8,430	8,433	2	79,53	5 79,557	22
Total	¥345,888	¥345,890	¥2	\$3,263,09	7 \$3,263,120	\$22
Derivative transactions:						
Hedge accounting not applied	¥2,329	¥2,329	_	\$21,97	7 \$21,977	_
Hedge accounting applied	2,192	2,192	_	20,68	6 20,686	_
Total	¥4,522	¥4,522	¥—	\$42,66	3 \$42,663	\$-

#### 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.

 $\underline{\ \ } 2. \ The \ following \ table \ summarizes \ financial \ instruments \ whose \ fair \ value \ is \ extremely \ difficult \ to \ estimate.$ 

				Thousands of
	Millio	Millions of yen		
Description	2017	2018		2018
Non-listed equity securities	¥27,81	¥30,205	1	\$284,955
Investments in securities, etc.	500	380		3,586
Total	¥28,31	¥30,585		\$288,541

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	
		201	17	
	Within	Over one year	Over five years	
Description	one year	within five years	within ten years	Over ten years
Time deposits	¥752,639	¥—	¥—	¥—
Notes and accounts receivable-trade	287,853	_	_	_
Securities and investments in securities	186,591	3,560	5,118	_
Long-term loans	_	2,546	160	3,715
Total	¥1,227,085	¥6,107	¥5,279	¥3,715

		Millions	s of yen			Thousands o	f U.S. dollars	
		20	18			20:	18	
	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	¥854,475	¥—	¥—	¥—	\$8,061,090	\$—	\$—	\$-
Notes and accounts receivable-trade	332,880	_	_	_	3,140,384	<b>–</b>	_	_
Securities and investments in securities	197,339	4,233	1,000	_	1,861,693	39,934	9,433	_
Long-term loans	_	2,054	226	3,604	_	- 19,381	2,138	34,002
Total	¥1,384,695	¥6,287	¥1,226	¥3,604	\$13,063,168	\$59,315	\$11,572	\$34,002

#### ${\it 4. Repayment schedule of short-term borrowings, long-term debt and lease obligations.}$

	Millions of yen							
			201	7				
	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	¥6,976	¥—	¥—	¥—	¥—	¥—		
Long-term debt	5,812	6	355	5	1,178	31		
Lease obligations	110	66	51	31	11	4		
Total	¥12,899	¥73	¥406	¥37	¥1,190	¥36		

			Millions	of yen		
			201	8		
	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	¥6,876	¥—	¥—	¥—	¥—	¥—
Long-term debt	218	430	777	1,611	5,576	34
Lease obligations	85	66	48	28	19	40
Total	¥7,180	¥497	¥826	¥1,640	¥5,595	¥74

			Thousands of	U.S. dollars		
			201	8		
	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	\$64,868	\$—	\$-	\$-	\$—	\$-
Long-term debt	2,063	4,064	7,334	15,201	52,611	323
Lease obligations	805	628	460	270	179	380
Total	\$67,737	\$4,692	\$7,794	\$15,472	\$52,790	\$703

#### 6. SECURITIES

Securities as of March 31, 2017 and 2018 consisted of the following:

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

			Millions	Thousands of U.S. dollars					
	2017			2018			2018		
	Book	Fair		Book	Fair		Book	Fair	
Description	value	value	Difference	value	value	Difference	value	value	Difference
Securities with fair value that	¥6.102	¥6,120	¥18	¥284	¥285	¥1	\$2.680	\$2,693	\$13
exceeds book value	+0,102	+0,120	+10	¥20 <del>4</del>	<b>#20</b> 3	±1	72,000	72,093	213
Securities with fair value that	3.161	3.106	(55)	7.280	7.205	(74)	68.680	67,976	(704)
does not exceed book value	3,101	3,100	(55)	7,200	7,203	(74)	00,000	07,570	(704)
Total	¥9,263	¥9,226	¥(37)	¥7,564	¥7,491	¥(73)	\$71,360	\$70,670	\$(690)

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

_	Millions of yen						Thousands of U.S. dollars			
	2017				2018			2018		
	Book	Acquisition		Book	Acquisition		Book	Acquisition		
Description	value	cost	Difference	value	cost	Difference	value	cost	Difference	
Securities with book value that exceed acquisition cost	¥70,421	¥36,879	¥33,542	¥82,047	¥43,493	¥38,553	\$774,032	\$410,315	\$363,716	
Securities with book value that does not exceed acquisition cost	189,649	189,993	(343)	197,395	197,653	(257)	1,862,220	1,864,652	(2,432)	
Total	¥260,071	¥226,872	¥33,198	¥279,442	¥241,146	¥38,296	\$2,636,252	\$2,274,968	\$361,284	

Note: Non-listed equity securities, with a book value of ¥2,018 million and ¥1,911 million (\$18,036 thousand), and other investment securities with a book value of ¥506 million and ¥380 million (\$3,586 thousand), as of March 31, 2017 and 2018, respectively, whose fair value is extremely difficult to estimate are excluded from the above.

#### 7. DERIVATIVE TRANSACTIONS

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

Currency related:

As of March 31, 2017

	N	Millions of yen		
	Contract	Fair	Unrealized	
Description	amounts	value	gain (loss)	
Forward foreign exchange contracts				
Sales contracts:				
USD	¥109,052	¥(3,727)	¥(3,727)	
EUR	3,101	(32)	(32)	
Other	2,342	31	31	
Purchase contracts:				
USD	1,303	22	22	
Other	7,083	(234)	(234)	
Total	¥122,882	¥(3,941)	¥(3,941)	

#### As of March 31, 2018

	Millions of yen			Thousands of U.S. dollars		
	Contract	Fair	Unrealized	Contract	Fair	Unrealized
Description	amounts	value	gain (loss)	amounts	value	gain (loss)
Forward foreign exchange contracts						
Sales contracts:						
USD	¥90,877	¥2,895	¥2,895	\$857,335	\$27,319	\$27,319
EUR	3,843	(25)	(25)	36,263	(242)	(242)
Other	2,477	22	22	23,371	209	209
Purchase contracts:						
USD	927	(15)	(15)	8,752	(147)	(147)
Other	10,968	(547)	(547)	103,479	(5,161)	(5,161)
Total	¥109,095	¥2,329	¥2,329	\$1,029,201	\$21,977	\$21,977

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

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

1) Currency related: As of March 31, 2017

				Millions of yen			
Hedge accounting method	Transaction	Hedged items	Contract amounts	Contract amounts over one year	Fair value		
	Forward foreign exchan	ge					
Deferral hedge	contracts:						
accounting	Sales contracts						
	USD	Accounts receivable-trade	¥31,419	¥—	¥415		
	Purchase contracts						
	EUR	Accounts payable-trade	1,509	_	85		
Total	_	_	¥32,929	¥—	¥501		

As of March 31, 2018

			Millions of yen			Tł	nousands of U.S. dolla	rs .
Hedge accounting	5		Contract	Contract amounts	Fair	Contract	Contract amounts	Fair
method	Transaction	Hedged items	amounts	over one year	value	amounts	over one year	value
Deferral hedge accounting	Forward foreign exchange contracts: Sales contracts USD Purchase contracts EUR	Accounts receivable- trade Accounts payable-trade	¥39,217 129	¥—	¥1,831	\$369,971 1,219	\$— —	\$17,279 0
Total			¥39,346	¥—	¥1,831	\$371,190	\$—	\$17,280

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

#### 2) Commodity related: As of March 31, 2017

				Millions of yen	
Hedge accounting			Contract	Contract amounts	Fair
method	Transaction	Hedged items	amounts	over one year	value
Deformal hadge accounting	Commodity swap contracts	Accounts payable-trade	¥2,201	¥2,201	¥642
Deferral hedge accounting	Commodity option contracts	Accounts payable-trade	1,697	1,263	6
Total			¥3.898	¥3.465	¥648

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

#### As of March 31, 2018

				Millions of yen	
Hedge accounting			Contract	Contract amounts	Fair
method	Transaction	Hedged items	amounts	over one year	value
Deferral hedge accounting	Commodity swap contracts	Accounts payable-trade	¥2,263	¥1,830	¥394
	Commodity option contracts	Accounts payable-trade	1,226	805	(32)
Total			¥3,489	¥2,635	¥361
			-	•	

			Thousands of U.S. dollars		
Hedge accounting			Contract	Contract amounts	Fair
method	Transaction	Hedged items	amounts	over one year	value
Deferral hedge accounting	Commodity swap contracts	Accounts payable-trade	\$21,356	\$17,264	\$3,717
	Commodity option contracts	Accounts payable-trade	11,566	7,600	(311)
Total			\$32,922	\$24,865	\$3,405

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

#### 8. INVESTMENTS IN UNCONSOLIDATED SUBSIDIARIES AND AFFILIATES

Investments in unconsolidated subsidiaries and affiliates as of March 31, 2017 and 2018 consisted of the following:

	Millions	of yen	Thousands of U.S. dollars
	2017	2018	2018
Investments in securities (Stocks)	¥50,043	¥53,496	\$504,679
Other (Investments in capital)	4,130	4,128	38,944

#### 9. ACCUMULATED DEPRECIATION

Accumulated depreciation of property, plant and equipment as of March 31, 2017 and 2018 was ¥1,939,277 million and ¥2,013,300 million (\$18,993,401 thousand), respectively.

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

Short-term borrowings, long-term debt and lease obligations as of March 31, 2017 and 2018 consisted of the following:

					Thousands of
	Average		Millions	of yen	U.S. dollars
	interest rate	Due date	2017	2018	2018
Short-term borrowings	1.2%	_	¥6,976	¥6,876	\$64,868
Current portion of long-term debt	3.7%	_	5,812	218	2,063
Current portion of lease obligations	_	_	110	85	805
Long-term debt, excluding current portion	1.2%	January 2019- April 2028	1,578	8,430	79,535
Lease obligations, excluding current portion	_	January 2019- November 2027	164	203	1,919
Total		_	¥14,642	¥15,814	\$149,191

Lease obligations

\$628

460

270

179

<sup>2.</sup> Average interest rate of lease obligations is not shown as the balance includes the interest portion. 3. Repayment schedule subsequent to March 31, 2018 for long-term debt and lease obligations, excluding the current portion, is as follows:

	Millions o	Millions of yen			f U.S. dollars
	Long-term debt	Lease obligations		Long-term debt	Lease oblig
Years ending March 31,					
2020	¥430	¥66		\$4,064	\$
2021	777	48		7,334	
2022	1,611	28		15,201	
2023	5,576	19		52,611	

Notes: 1. Average interest rate is the weighted average rate based on the balance as of March 31, 2018

#### 11. 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, 2017 and 2018 is as follows:

#### 1. Defined Benefit Pension Plans

#### (1) Changes in Benefit Obligations

			rnousands of
	Millions o	of yen	U.S. dollars
	2017	2018	2018
Beginning balance of benefit obligations	¥61,328	¥64,500	\$608,493
Service costs	3,641	4,453	42,010
Interest costs	1,271	1,347	12,714
Actuarial differences arising during the year	2,315	2,761	26,055
Retirement benefits paid	(2,893)	(2,268)	(21,396)
Other*	(1,164)	(605)	(5,713)
Ending balance of benefit obligations	¥64,500	¥70,189	\$662,164

<sup>\*</sup>Mainly foreign currency translation adjustments

#### (2) Changes in Pension Assets

			Thousands of
	Millions	of yen	U.S. dollars
	2017	2018	2018
Beginning balance of pension assets	¥29,559	¥30,619	\$288,861
Expected return on pension assets	1,224	1,370	12,927
Actuarial differences arising during the year	279	1,194	11,264
Contributions made by the Company and consolidated subsidiaries	1,079	8,973	84,659
Retirement benefits paid	(1,115)	(1,988)	(18,755)
Other*	(409)	177	1,678
Ending balance of pension assets	¥30,619	¥40,347	\$380,635

<sup>\*</sup>Mainly foreign currency translation adjustments

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

	Millions o	of yen	Thousands of U.S. dollars
	2017	2018	2018
Funded benefit obligations	¥57,408	¥62,276	\$587,517
Pension assets	(30,619)	(40,347)	(380,635)
Net	26,789	21,929	206,881
Unfunded benefit obligations	7,091	7,912	74,647
Net amount of liability and asset on Consolidated Balance Sheets	¥33,881	¥29,842	\$281,529

	Millions	of yen	Thousands of U.S. dollars
	2017	2018	2018
Net defined benefit liability	¥35,809	¥32,282	\$304,554
Net defined benefit asset	(1,928)	(2,440)	(23,025)
Net amount of liability and asset on Consolidated Balance Sheets	¥33,881	¥29,842	\$281,529

(4) Retirement Benefit Expenses

				Thousands of
	Millions	_	U.S. dollars	
	2017	2018		2018
Service costs	¥3,641	¥4,453	Ī	\$42,010
Interest costs	1,271	1,347		12,714
Expected return on pension assets	(1,224)	(1,370)		(12,927)
Amortization of actuarial differences	1,346	1,014		9,567
Amortization of prior service cost	17	0		5
Retirement benefit expenses for defined benefit pension plans	¥5,052	¥5,445		\$51,370

#### (5) Remeasurements of Defined Benefit Plans (Other Comprehensive Income)

Breakdown (before deduction of tax effects)

	Million	Millions of ven			
	2017	2018	U.S. dollars 2018		
Actuarial differences	¥(693)	¥(551)	\$(5,205)		
Prior service cost	(5)	119	1,123		
Total	¥(698)	¥(432)	\$(4,082)		

#### (6) Remeasurements of Defined Benefit Plans (Accumulated Other Comprehensive Income)

Breakdown (before deduction of tax effects)

	Million:	Millions of yen				
	2017	2018	2018			
Unrecognized actuarial differences	¥(2,451)	¥(3,002)	\$(28,328)			
Unrecognized prior service cost	(46)	73	689			
Total	¥(2,497)	¥(2,929)	\$(27,639)			

#### (7) Pension Assets

#### Breakdown

	2017	2018
Bonds	41%	40%
Stocks	34%	33%
Other	25%	27%
Total	100%	100%

(Note) 20% and 14% of total pension assets amount were in a "Retirement Benefit Trust" for lump-sum severance payment plans as of March 31, 2017 and 2018, 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

	2017	2018
Discount rate	Mainly 0.2%	Mainly 0.2%
Expected rate of return on pension assets	Mainly 1.5%	Mainly 1.5%

#### 2. Defined Contribution Pension Plans

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

			Thousands of
_	Million	s of yen	U.S. dollars
_	2017	2018	2018
	¥2,191	¥2,339	\$22,071

#### 12. 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, 2017 and 2018 in the aggregate amounts of ¥191 million and ¥144 million (\$1,367 thousand), respectively.

#### 13. 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, 2017 and 2018 are as follows:

				Millions of yen	Yen
Resolution	Type of shares	Record date	Effective date	Total amount of dividends	Cash dividends per share
Fiscal year ended March 31, 2017	_	_	_		
Ordinary general meeting of	Common	March 31,	June 30, 2016	¥23,428	¥55.00
shareholders held on June 29, 2016	stock	2016			
Board of directors meeting held on	Common	September	November	25,558	60.00
October 28, 2016	stock	30, 2016	18, 2016		
Total	•	•	•	¥48,987	

				Millions of		Thousands of	U.S.
				yen	Yen	U.S. dollars	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, 2018							
Ordinary general meeting of	Common	March 31,	June 30, 2017	¥25,582	¥60.00	\$241,348	\$0.57
shareholders held on June 29, 2017	stock	2017					
Board of directors meeting held on	Common	September	November	27,718	65.00	261,494	0.61
October 27, 2017	stock	30, 2017	17, 2017				
Total				¥53,301		\$502,842	

(2) Cash dividends for the fiscal years ended March 31, 2017 and 2018 with an effective date in the subsequent fiscal year are as follows:

				Millions of yen	Yen
Resolution	Type of shares	Source of dividends Record da	ate Effective date	Total amount of dividends	Cash dividends per share
Fiscal year ended March 31, 2017 Ordinary general meeting of shareholders held on June 29, 2017	Common stock	Retained March 31 earnings 2017	., June 30, 2017	¥25,582	¥60.00

					Millions of		Thousands of	U.S.
					yen	Yen	U.S. dollars	dollars
					Total	Cash	Total	Cash
	Type of	Source of			amount of	dividends	amount of	dividends
Resolution	shares	dividends	Record date	Effective date	dividends	per share	dividends	per share
Fiscal year ended March 31, 2018								
Ordinary general meeting of	Common	Retained	March 31,	June 29, 2018	¥31,992	¥75.00	\$301,818	\$0.71
shareholders held on June 28, 2018	stock	earnings	2018					

#### 14. SHARE SUBSCRIPTION RIGHTS

Fiscal year ended March 31, 2017

		Type of shares subject to share	subje	Number of shares subject to share subscription rights			Millions of yen		
Issuer	Description	subscription rights	Beginning balance	Increase Decrease		Balance at March 31, 2017			
The Company	Stock options	Common stock	782,000	_	415,000	367,000	¥101		
Consolidated subsidiary	_	_	_	_	_	_	51		
Total							¥152		

Fiscal year ended March 31, 2018

	,	Type of shares subject to share	Number of shares			Millions of	Thousands of	
			subject to share subscription rights			yen	U.S. dollars	
Issuer	Description	subscription	Beginning			Ending	Balance at	Balance at
		rights	balance	Increase	e Decrease	balance	March 31,	March 31,
						pararice	2018	2018
The Company	Stock options	Common stock	367,000	235,000	190,000	412,000	¥396	\$3,741
Consolidated subsidiary	_	_	_	_	_	_	127	1,204
Total	_						¥524	\$4,946

#### **15. STOCK OPTIONS**

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

There were no stock option expenses recorded for the fiscal year ended March 31, 2017. The stock option expenses for the fiscal year ended March 31, 2018 of ¥347 million (\$3,278 thousand) were included in selling, general and administrative expenses in the consolidated statement of income. Gains on forfeited stock options for the fiscal year ended March 31, 2017 were ¥7 million. There were no gains on forfeited stock options for the fiscal year ended March 31, 2018.

Stock options as of March 31, 2018 were as follows:

	2015	2017
	18 directors of the Company	18 directors of the Company
Grantees	82 employees of the Company	90 employees of the Company
Number of stock options granted by category of stock (in shares)	773,000 shares of common stock	235,000 shares of common stock
Grant date	September 24, 2015	September 21, 2017
Vesting conditions	None	None
Exercise period	September 25, 2016 through March 31, 2020	September 22, 2018 through March 31, 2022

Movement in stock options during the fiscal year ended March 31, 2018 was as follows:

	Number (	of shares
	2015	2017
Beginning balance (Stock options outstanding)	367,000	_
Granted	_	235,000
Exercised	190,000	_
Forfeited	_	_
Ending balance (Stock options outstanding)	177,000	235,000
	Ye	n
Exercise price	¥7,339	¥10,000
Weighted average market value per share at the exercise date	11,501	_
Fair value per share at the grant date	277	1,479
	U.S. d	ollars
Exercise price	\$69.24	\$94.34
Weighted average market value per share at the exercise date	108.50	_
Fair value per share at the grant date	2.61	13.95

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

Stock options granted on September 21, 2017

Expected volatility

24.49%

Expected volatility	24.49%
Expected remaining life	2.76 years
Expected dividend	130 yen
Risk-free interest rate	(0.140)%

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

The stock option expenses for the fiscal years ended March 31, 2017 and 2018 of ¥49 million and ¥78 million (\$741 thousand), respectively, were included in selling, general and administrative expenses in the consolidated statements of income. Gains on forfeited stock options for the fiscal years ended March 31, 2017 and 2018 were ¥4 million and ¥0 million (\$6 thousand), respectively.

Stock options as of March 31, 2018 were as follows:

	2012	2016	2017	
	10 Directors	10 Directors	10 Directors	
Grantees	15 Employees	17 Employees	19 Employees	
	11 Directors of its subsidiaries	7 Directors of its subsidiaries	6 Directors of its subsidiaries	
Number of stock options granted	475,000 shares of	491,000 shares of	457,000 shares of	
by category of stock (in shares)	common stock	common stock	common stock	
Grant date	September 5, 2012	September 12, 2016	September 12, 2017	
Vesting conditions	None	None	None	
	December 1, 2012	September 13, 2018	September 13, 2019	
Exercise period	through	through	through	
	November 30, 2017	March 31, 2022	March 31, 2023	

Movement in stock options during the fiscal year ended March 31, 2018 was as follows:

	Number of shares			
	2012	2016	2017	
Beginning balance (Stock options outstanding)	59,500	491,000	_	
Granted	_	_	457,000	
Exercised	39,500	_	_	
Forfeited	20,000	_	_	
Ending balance (Stock options outstanding)	_	491,000	457,000	
		Yen		
Exercise price	¥342	¥702	¥1,056	
Weighted average market value per share at the exercise date	817	_	_	
Fair value per share at the grant date	34	100	172	
		U.S. dollars		
Exercise price	\$3.23	\$6.62	\$9.96	
Weighted average market value per share at the exercise date	7.71	_	_	
Fair value per share at the grant date	0.32	0.94	1.62	

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

The fall value of options granted was estimated using the black-scholes option	ion pricing model with the following assumptions.
Stock options granted on September 12, 2017	
Expected volatility	28.22%
Expected remaining life	3.78 years
Expected dividend	12 yen
Risk-free interest rate	(0.147)%

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

Selling, general and administrative expenses for the fiscal years ended March 31, 2017 and 2018 mainly consisted of the following:

			rnousands or	
	Millions	Millions of yen		
	2017	2018	2018	
Shipping expenses	¥34,452	¥40,906	\$385,911	
Salaries and allowances	23,658	26,054	245,798	
Provision for bonuses for employees	1,532	1,551	14,636	
Provision for bonuses for directors	627	686	6,472	
Retirement benefit expenses	337	370	3,492	
Depreciation and amortization	2,042	2,262	21,342	
Technical research expenses	15,009	13,600	128,302	
<including benefit="" expenses="" retirement=""></including>	<115>	<112>	<1,057>	
Provision of allowance for doubtful accounts	376	(2,275)	(21,471)	

#### 17. RESEARCH AND DEVELOPMENT COSTS

Research and development costs incurred and charged to income for the fiscal years ended March 31, 2017 and 2018 were ¥49,020 million and ¥51,768 million (\$488,386 thousand), respectively.

#### 18. LEASE TRANSACTIONS

The amounts of outstanding future lease payments due in respect of operating lease contracts at March 31, 2017 and 2018 are summarized as follows:

				Thousands of
	Million	Millions of yen		U.S. dollars
	2017	2018		2018
Future Lease Payments:			Ī	
Within one year	¥2,080	¥3,065		\$28,923
Over one year	6,138	10,403		98,142
	¥8,219	¥13,468		\$127,065

#### 19. 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 30.7% and 30.7% for the fiscal years ended March 31, 2017 and 2018, respectively.

The tax effects of significant temporary differences and tax loss carry forwards that resulted in deferred tax assets or liabilities at March 31, 2017 and 2018 are as follows:

			Thousands of
	Million	ns of yen	U.S. dollars
	2017	2018	2018
Deferred Tax Assets:			
Depreciation and amortization	¥11,996	¥11,628	\$109,703
Net defined benefit liability	11,152	10,248	96,683
Unrealized profit	6,441	7,039	66,411
Maintenance costs	5,006	5,734	54,096
Accrued bonuses	3,289	3,476	32,799
Unsettled accounts receivable and payable	3,989	3,386	31,946
Allowance for doubtful accounts	4,264	3,305	31,187
Accrued enterprise taxes	1,090	1,949	18,391
Tax loss carryforwards	664	561	5,301
Unrealized gains/losses on available-for-sale securities	151	181	1,709
Other	30,132	27,297	257,518
Valuation allowance	(5,237)	(5,178)	(48,852)
Total	¥72,943	¥69,631	\$656,896
Deferred Tax Liabilities:			
Depreciation and amortization	¥97,949	¥57,208	\$539,699
Unrealized gains/losses on available-for-sale securities	10,245	11,826	111,569
Reserve for special depreciation	70	63	595
Other	7,117	9,141	86,236
Total	¥115,384	¥78,238	\$738,101
Net deferred tax assets (liabilities)	¥(42,440)	¥(8,607)	\$(81,205)

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

			Thousands of	
	Million	Millions of yen		
	2017	2018	2018	
Current assets: Deferred taxes, current	¥35,937	¥36,475	\$344,108	
Fixed assets: Deferred taxes, non-current	22,562	21,584	203,624	
Current liabilities: Other	(2,711)	(4,331)	(40,865)	
Long-term liabilities: Deferred taxes, non-current	(98,228)	(62,335)	(588,072)	

A reconciliation of the difference between the statutory tax rate and effective rate on taxable income for the fiscal years ended March 31, 2017 and 2018 is as follows:

	2017	2018
Statutory tax rate	30.7 %	30.7 %
Rate difference from foreign subsidiaries	0.0	0.3
Equity in (earnings) losses of affiliates	(0.4)	(0.3)
Dividend and other non-taxable income	(1.9)	(1.2)
Elimination of intercompany dividend income	1.9	1.1
Tax deduction for research expenses and other	(1.3)	(1.5)
Entertainment and other non-deductible expenses	0.2	0.1
Adjustments to deferred tax liabilities due to change in income tax rate	_	(8.8)
Other, net	(2.9)	0.2
Effective tax rate	26.4	20.6

Tax reform legislation in the United States, which was passed on December 22, 2017, and effective from fiscal years starting on or after January 1, 2018, has lowered the federal corporate income tax rate. In accordance with this tax reform legislation, the tax rate applied to the Company's consolidated subsidiaries in the United States was lowered from 35% to 21%. This tax rate change resulted in a reduction of ¥ 29,891 million (\$281,998 thousand) in deferred tax liabilities (amount after deducting deferred tax assets), with income taxes—deferred decreasing by the same amount as of and for the fiscal year ended March 31, 2018.

#### 20. OTHER COMPREHENSIVE INCOME

Reclassification adjustments and tax effects of each component of other comprehensive income for the fiscal years ended March 31, 2017 and 2018 are as follows:

			Thousands of
	Millions	s of yen	U.S. dollars
	2017	2018	2018
Unrealized gains (losses) on available-for-sale securities			
Amount arising during the year	¥12,468	¥5,110	\$48,215
Reclassification adjustment for gains and losses included in profit or loss	27	(8)	(84)
Unrealized gains (losses) on available-for-sale securities before tax	12,496	5,101	48,131
Tax effect	(3,347)	(1,552)	(14,649)
Unrealized gains (losses) on available-for-sale securities	9,149	3,549	33,482
Deferred gains (losses) on hedges			
Amount arising during the year	1,431	1,485	14,014
Reclassification adjustment for gains and losses included in profit or loss	(2,463)	(457)	(4,319)
Deferred gains (losses) on hedges before tax	(1,031)	1,027	9,694
Tax effect	278	(220)	(2,083)
Deferred gains (losses) on hedges	(753)	806	7,610
Foreign currency translation adjustments			
Amount arising during the year	(34,265)	14	135
Remeasurements of defined benefit plans			
Amount arising during the year	(2,062)	(1,447)	(13,655)
Reclassification adjustment for gains and losses included in profit or loss	1,363	1,014	9,573
Remeasurements of defined benefit plans before tax	(698)	(432)	(4,082)
Tax effect	418	770	7,265
Remeasurements of defined benefit plans	(280)	337	3,183
Share of other comprehensive income (loss) of affiliates accounted for			
using the equity method			
Amount arising during the year	(205)	374	3,534
Reclassification adjustment for gains and losses included in profit or loss		(3)	(35)
Share of other comprehensive income (loss) of affiliates accounted for using the equity method	(205)	370	3,498
Total other comprehensive income (loss)	¥(26,356)	¥5,078	\$47,910

#### 21. 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, 2017 and 2018 are presented below:

		<u> </u>	Thousand	ds of
	Millions	s of yen	U.S. dolla	lars
	2017	2018	2018	3
Cash and time deposits	¥752,675	¥854,506	\$8,061,	,381
Securities	186,591	197,339	1,861,	,693
Time deposits (maturities over three months)	(135,369)	(156,056)	(1,472,	,230)
Securities (maturities over three months)	(70,591)	(115,339)	(1,088,	,108)
Cash and cash equivalents	¥733,306	¥780,449	\$7,362,	,735

#### 22. 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", "Slicones Business", "Specialty Chemicals Business", "Semiconductor Silicon Business", "Electronics & Functional Materials Business" and "Processing, Trading & Specialized Services Business". Consequently, these six businesses are specified as reportable segments.

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

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

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

		Millions of yen										
		2018										
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Total	Adjustment <sup>(1)</sup>	Figures in consolidated financial statements			
Sales to outside customers	¥501,346	¥206,268	¥117,197	¥308,390	¥207,454	¥100,775	¥1,441,432	¥—	¥1,441,432			
Intersegment sales	3,413	6,036	17,025	2	6,889	92,183	125,550	(125,550)	_			
Total	¥504,759	¥212,305	¥134,222	¥308,393	¥214,344	¥192,958	¥1,566,983	¥(125,550)	¥1,441,432			
Segment income (Operating income)	¥93,236	¥51,954	¥25,729	¥92,963	¥61,631	¥11,482	¥336,998	¥(175)	¥336,822			
Depreciation and amortization	¥32,969	¥12,059	¥9,601	¥32,458	¥20,118	¥4,384	¥111,590	¥(300)	¥111,289			
Amortization of goodwill	¥—	¥165	¥561	¥—	¥—	¥—	¥727	¥—	¥727			
Increase in property, plant and equipment and intangible assets	¥63,610	¥29,167	¥7,052	¥51,584	¥20,246	¥5,004	¥176,664	¥(380)	¥176,283			

				Tho	usands of U.S.	dollars					
		2018									
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Total	Adjustment <sup>(1)</sup>	Figures in consolidated financial statements		
Sales to outside customers	\$4,729,687	\$1,945,930	\$1,105,632	\$2,909,344	\$1,957,121	\$950,708	\$13,598,423	\$—	\$13,598,423		
Intersegment sales	32,198	56,947	160,616	23	64,998	869,653	1,184,437	(1,184,437)	_		
Total	\$4,761,885	\$2,002,877	\$1,266,248	\$2,909,368	\$2,022,119	\$1,820,361	\$14,782,861	\$(1,184,437)	\$13,598,423		
Segment income (Operating income)	\$879,593	\$490,132	\$242,732	\$877,010	\$581,432	\$108,326	\$3,179,227	\$(1,655)	\$3,177,572		
Depreciation and amortization	\$311,029	\$113,766	\$90,579	\$306,207	\$189,794	\$41,358	\$1,052,737	\$(2,838)	\$1,049,898		
Amortization of goodwill	\$-	\$1,565	\$5,298	\$-	\$—	\$-	\$6,863	\$—	\$6,863		
Increase in property, plant and equipment and intangible assets	\$600,098	\$275,162	\$66,528	\$486,643	\$191,005	\$47,208	\$1,666,647	\$(3,590)	\$1,663,056		

Notes: [1] Elimination of intersegment transactions.

## 2. Related information Geographic information

#### (1) Net sales

			Thousands of
	Million	s of yen	U.S. dollars
	2017	2018	2018
Net sales			
Japan	¥342,002	¥373,832	\$3,526,720
U.S.	275,033	335,706	3,167,040
China	123,683	138,333	1,305,031
Asia / Oceania (excluding China)	268,747	319,795	3,016,943
Europe	135,802	162,164	1,529,857
Other	92,136	111,600	1,052,831
Total	¥1,237,405	¥1,441,432	\$13,598,423

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

			Thousands of
	Million	s of yen	U.S. dollars
	2017	2018	2018
Property, plant and equipment			
Japan	¥253,904	¥270,927	\$2,555,922
U.S.	456,093	471,482	4,447,951
Other	136,572	157,318	1,484,132
Total	¥846,570	¥899,728	\$8,488,005

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

		Millions of yen							
				201	17				
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Total	
Loss on impairment of fixed assets	¥—	¥—	¥1,489	¥—	¥—	¥539	¥—	¥2,028	

		Millions of yen							
				201	l8				
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Total	
Loss on impairment of fixed assets	¥—	¥—	¥428	¥649	¥—	¥382	¥—	¥1,460	

		Thousands of U.S. dollars  2018							
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Total	
Loss on impairment of fixed assets	\$—	\$-	\$4,045	\$6,130	\$-	\$3,607	\$—	\$13,782	

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

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

	Millions of yen 2018								
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Figures in consolidated financial statements	
Amortization of goodwill	¥—	¥165	¥561	¥—	¥—	¥—	¥—	¥727	
Unamortized balance	¥—	¥1,427	¥2,501	¥—	¥—	¥—	¥—	¥3,928	

	Thousands of U.S. dollars 2018								
	PVC/Chlor- Alkali	Silicones	Specialty Chemicals	Semiconductor Silicon	Electronics & Functional Materials	Processing, Trading & Specialized Services	Elimination or common asset	Figures in consolidated financial statements	
Amortization of goodwill	\$-	\$1,565	\$5,298	\$-	\$-	\$-	\$-	\$6,863	
Unamortized balance	\$-	\$13,462	\$23,601	\$—	\$—	\$-	\$-	\$37,064	

#### 23. RELATED PARTY TRANSACTIONS

Transactions between the Company and related parties during the fiscal year ended March 31, 2018 are as follows:

						Millions of yen		
Туре	Name	Percentage of voting rights	Relationship	Transactions	Transaction amount (Thousands of shares)	Account	Balance at the fiscal year end	Transaction amount (Thousands of shares)
Director	Chihiro Kanagawa	Direct Ownership 0.05%	Representative Director- Chairman	Exercise of stock options (Note)	¥366 (50)	_	1	\$3,461 (50)
Director	Yasuhiko Saitoh	Direct Ownership 0.01%	Representative Director- President	Exercise of stock options (Note)	¥212 (29)	-	1	\$2,007 (29)
Director	Masahiko Todoroki	Direct Ownership 0.00%	Senior Managing Director	Exercise of stock options (Note)	¥44 (6)	-	1	\$415 (6)
Director	Toshiya Akimoto	Direct Ownership 0.00%	Managing Director	Exercise of stock options (Note)	¥80 (11)	_	1	\$761 (11)
Director	Yukihiro Matsui	Direct Ownership 0.00%	Managing Director	Exercise of stock options (Note)	¥22 (3)	-	1	\$207 (3)
Director	Masaki Miyajima	Direct Ownership 0.01%	Managing Director	Exercise of stock options (Note)	¥29 (4)	_	-	\$276 (4)
Director	Shunzo Mori	Direct Ownership 0.00%	Director- Adviser	Exercise of stock options (Note)	¥36 (5)	-	1	\$346 (5)
Director	Toshiyuki Kasahara	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥14 (2)	-	1	\$138 (2)
Director	Hidenori Onezawa	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥22 (3)	_	-	\$207 (3)
Director	Kazumasa Maruyama	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥29 (4)	_	_	\$276 (4)
Director	Kenji Ikegami	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥14 (2)	_	_	\$138 (2)
Director	Toshio Shiobara	Direct Ownership 0.00%	Director	Exercise of stock options (Note)	¥44 (6)	_	-	\$415 (6)

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

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

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

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

#### **24. SUPPLEMENTARY INFORMATION**

(Unapplied Accounting Standards)

- Accounting Standard for Revenue Recognition (ASBJ Statement No. 29, issued by the Accounting Standards Board of Japan on March 30, 2018)
- Implementation Guidance on Accounting Standard for Revenue Recognition (ASBJ Guidance No. 30, issued by the Accounting Standards Board of Japan on March 30, 2018)

#### (1) Summary

The International Accounting Standards Board (IASB) and the U.S. Financial Accounting Standards Board (FASB), which jointly develop comprehensive accounting standards for revenue recognition, announced Revenue from Contracts with Customers (IASB: IFRS 15; FASB: Topic 606) in May 2014. IFRS 15 is effective from annual reporting periods beginning on or after January 1, 2018; FASB Topic 606 is effective from annual reporting periods beginning after December 15, 2017. In light of this development, the Accounting Standards Board of Japan (ASBJ) developed and issued a comprehensive accounting standard for revenue recognition and implementation guidance.

As a basic policy for developing ASBJ accounting standards for revenue recognition, from the perspective of comparability between financial statements, which is one benefit of conformity with IFRS 15, starting with incorporating the basic principles of IFRS 15, in the event accounting standards have been established, or if there are items to be considered for practical purposes that are pertinent in Japan, additional alternative accounting treatments will be provided to the extent that comparability is not impaired.

#### (2) Planned Application

To be applied from the beginning of the fiscal year ending March 31, 2022

#### (3) Effect of Accounting Standard Application

The Company is currently assessing the effects on the consolidated financial statements resulting from the application of this accounting standard for revenue.

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

### **Consolidated Subsidiaries**

SHIN-ETSU CHEMICAL CO., LTD. AND SUBSIDIARIES

Principal Consolidated Subsidiaries	Percentage of Voting Rights	Fiscal Year-End	Principal Consolidated Subsidiaries	Percentage of Voting Rights	Fiscal Year-End
Shintech Inc.*	100.0	December 31	Skyward Information System Co., Ltd.	100.0	March 31
Shin-Etsu Handotai Co., Ltd.	100.0	March 31	Shinano Electric Refining Co., Ltd.	100.0	March 31
Shin-Etsu Handotai America, Inc.*	100.0	December 31	Fukui Environmental Analysis Center Co., Ltd.	100.0	February 28
Shin-Etsu PVC B.V.*	100.0	December 31	Shin-Etsu Film Co., Ltd.	100.0	March 31
S.E.H. Malaysia Sdn. Bhd.*	100.0	December 31	Shin-Etsu Technology Service Co., Ltd.	76.9	February 28
Shin-Etsu Polymer Co., Ltd.	52.8	March 31	Shin-Etsu Polymer America, Inc.*	100.0	December 31
SE Tylose GmbH & Co. KG*	100.0	December 31	Naoetsu Sangyo Limited	100.0	March 31
Shin-Etsu Engineering Co., Ltd.	100.0	March 31	Shinken Total Plant Co., Ltd.	100.0	February 28
Shin-Etsu Astech Co., Ltd.	99.6	March 31	Saitama Shinkoh Mold Co., Ltd.	100.0	March 31
Shin-Etsu Handotai Taiwan Co., Ltd.*	70.0	December 31	Shinkoh Mold Co., Ltd.	100.0	March 31
Shin-Etsu Silicones (Thailand) Ltd.*	100.0	December 31	Shin-Etsu Magnet Co., Ltd.	100.0	March 31
Simcoa Operations Pty. Ltd.*	100.0	December 31	Shin-Etsu Polymer India Pvt. Ltd.*	100.0	December 31
JAPAN VAM & POVAL Co., Ltd.	100.0	March 31	PT. Shin-Etsu Polymer Indonesia*	100.0	December 31
Asia Silicones Monomer Limited*	100.0	December 31	Shin-Etsu Polymer Singapore Pte. Ltd.*	100.0	December 31
Nagano Electronics Industrial Co., Ltd.	90.0	February 28	Shin-Etsu Polymer Shanghai Co., Ltd.*	100.0	December 31
Naoetsu Electronics Co., Ltd.	100.0	February 28	Shin-Etsu Polymer Hong Kong Co., Ltd.*	100.0	December 31
Shin-Etsu Handotai Europe, Ltd.*	100.0	December 31	Shin-Etsu Polymer Hungary Kft.*	100.0	December 31
S-E, Inc.*	100.0	December 31	Shin-Etsu Polymer (Thailand) Ltd.*	100.0	December 31
Shin-Etsu Electronics Materials Singapore Pte. Ltd.*	100.0	December 31	Dongguan Shin-Etsu Polymer Co., Ltd.*	100.0	December 31
Shin-Etsu Silicone International Trading (Shanghai) Co., Ltd.*	100.0	December 31	Human Create Co., Ltd.	100.0	March 31
Shin-Etsu Finetech Co., Ltd.	100.0	March 31	Suzhou Shin-Etsu Polymer Co., Ltd.*	100.0	December 31
Shin-Etsu Magnetics Philippines., Inc.*	100.0	December 31	S.E.H. (Shah Alam) Sdn. Bhd.*	100.0	December 31
CIRES, Lda.*	100.0	December 31	SHIN-ETSU HANDOTAI SINGAPORE PTE. LTD.*	100.0	December 31
Shin-Etsu Singapore Pte. Ltd.*	100.0	December 31	SE Tylose USA, Inc.*	100.0	December 31
Shin-Etsu Silicone Korea Co., Ltd.*	100.0	December 31	K-Bin, Inc.*	100.0	December 31
Shin-Etsu (Malaysia) Sdn. Bhd.*	100.0	December 31	Shin-Etsu Silicone (Nantong) Co., Ltd.*	100.0	December 31
Nissin Chemical Industry Co., Ltd.	100.0	February 28	Shin-Etsu (Jiangsu) Optical Preform Co., Ltd.*	75.0	December 31
Shin-Etsu MicroSi, Inc.*	100.0	December 31	Kashima Chlorine & Alkali Co., Ltd.	79.0	March 31
Shin-Etsu Silicone Taiwan Co., Ltd.*	93.3	December 31	Kashima Vinyl Chloride Monomer Co., Ltd.	70.6	March 31
Shin-Etsu Silicones of America, Inc.*	100.0	December 31	Shin-Etsu Magnetic Materials Vietnam Co., Ltd.*	100.0	December 31
Shin-Etsu Silicones Europe B.V.*	100.0	December 31	Shin-Etsu Electronics Materials Taiwan Co., Ltd.*	100.0	December 31
Shin-Etsu Opto Electronic Co., Ltd.*	80.0	December 31	Shin-Etsu YOFC (Hubei) Optical Preform Co., Ltd.*	51.0	December 31
Shin-Etsu Polymer (Malaysia) Sdn. Bhd.*	100.0	December 31	Shin-Etsu Polymer Vietnam Co., Ltd.*	100.0	December 31
Shin-Etsu Polymer Europe B.V.*	100.0	December 31			
Shin-Etsu International Europe B.V.*	100.0	December 31	21 other consolidated subsidiaries		
Nihon Resin Co., Ltd.	100.0	December 31			
Naoetsu Precision Co., Ltd. *Overseas subsidiary	100.0	February 28			



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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, 2018, and the consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

Management's Responsibility for the Consolidated Financial Statements

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

#### Auditor's Responsibility

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

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

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

#### Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Shin-Etsu Chemical Co., Ltd. and its consolidated subsidiaries as at March 31, 2018, 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 28, 2018 Tokyo, Japan