Challenge for Growth and Evolution

Ishihara Sangyo Kaisha

Annual Report 2019

Year Ended March 31, 2019

ISK

Forward-Looking Statements

Forward-looking statements in this report relating to operational result forecasts are based on certain assumptions that the Company believes are reasonable and involve risks and uncertainties. Actual results may differ significantly from these forecasts, affected by various material factors.

Contents

Consolidated Financial Highlights

For the year ended March 31, 2019

	Millions of yen			Thousands of U.S. dollars (Note 1)
	2019	2018	2017	2019
For the years ended March 31,				
Net sales:				
Domestic	¥ 52,829	¥ 50,309	¥ 46,734	$ 475,937
Overseas	53,612	57,692	54,867	482,991
Total	106,441	108,001	101,601	958,928
Sales classified by business segment:				
Inorganic chemicals	54,883	54,441	47,504	494,442
Organic chemicals	47,672	50,461	51,064	429,477
Other businesses	3,886	3,099	3,033	35,009
Total	106,441	108,001	101,601	958,928
Operating income	11,372	10,022	8,416	102,450
Net income	8,683	3,442	3,804	78,225
Depreciation and amortization of property, plant and equipment	4,631	4,639	4,660	41,721
Research and development costs	8,071	8,707	8,173	72,712
As of March 31,				
Current assets	107,080	103,387	104,005	964,685
Total assets	168,690	159,767	156,871	1,519,730
Current liabilities	44,712	47,985	47,311	402,811
Net assets	75,335	67,137	62,981	678,694

	Yen			U.S. dollars (Note)
Per share data				
Net income	¥ 217.26	¥ 86.12	¥ 95.15	$ 1.95
Net assets	1,885.01	1,679.77	1,575.53	16.98
Number of employees (as of March 31)	1,642	1,578	1,581	–

Note 1: The U.S. dollar amounts in this report have been translated from the yen amounts, for convenience only, at ¥111.00 = U.S.$1.00, the rate of exchange prevailing on March 31, 2019.

To Our Shareholders and Friends

Kenichi Tanaka
President & CEO

Looking at global markets during the current fiscal year, the USA continued to record strong economic growth on firm personal consumption and capital investments. At the same time, the European economy showed signs of economic slowdown on lower exports and production. In Asia, Chinese economic slowdown was evident but the economy was strong on demand among emerging countries. The Japanese economy continued on a trend of mild growth underpinned by continued improvements in corporate earnings and the employment environment as well as steady personal consumption.

Looking at the market environment influencing the main operations of our Group, sales of titanium dioxide were firm on domestic and overseas demand. However, the lack of transparency regarding second half demand and economic conditions is increasing due to the influence of a Chinese flagging ecnomy. Agrochemicals showed signs of trending towards a recovery in global shipment volumes on improved conditions in the South America market, which had remained stagnant.

Under such conditions, our Group launched our 7th Medium-term Business Plan ahead of 2020, the year of our 100th anniversary. We worked to protect and strengthen existing businesses while also promoting aggressive initiatives toward a new growth.

As a result, the current fiscal year resulted in net sales of ¥106.4 billion [US$959 million] (down ¥1.5 billion YoY) and operating income increased to ¥11.3 billion [US$102 million] (up ¥1.3 billion YoY). Ordinary income was 11.1 billion yen [US$100 million] (up 2.7 billion yen YoY) thanks to recording non-operating income on gains this fiscal year on foreign currency exchange and on equity method after recording losses during the previous fiscal year. Profit attributable to owners of parent increased significantly to 8.6 billion yen [US$78 million] (up 5.2 billion yen YoY), mainly thanks to the elimination of provisions for environmental safety arrangements recorded as extraordinary losses during the previous fiscal year.

The 7th Medium-term Business Plan outlines solidifying our footholds in existing businesses while we aimed at “becoming a chemical company that is attractive to all stakeholders” by reinforcing aggressive initiatives for further growth. In FY2018, the first year of this plan, operating environment conditions from the second half onward worsened but we worked to enhance profitability for existing businesses to record a favorable start that resulted in earnings greatly outperforming our original plan. We also engaged in aggressive investments aimed at future growth, including capital investments to expand production capacity for functional material products with strong market demand and financing a local agrochemical manufacturing and sales company in Brazil, the world’s largest agrochemical market. During the next fiscal year, we will continue to enhance our current profit platform while proactively promoting aggressive initiatives towards future sales growth.

In the inorganic chemicals business, we will further accelerate initiatives to shift our focus from common products to the development and sales of highly functional, high value-added products. For titanium dioxide, we will further expand sales of steadily growing super weatheralility products and our product for use in ink. At the same time, from the next fiscal year we will focus on increasing sales of our finishes product for matte coating, which has gathered attention among consumers. For functional materials, advancing automotive electronics and IoT-compatible electronics, demand is increasing for high-purity titanium dioxide and barium titanate for electronic products, as well as for electro-conductive materials with antistatic functions. We will steadily continue establishing development, production, and sales structures that enable us to capture growing demand for these products.

For organic chemical products, we will work to improve the performance of main agrochemicals, for which revenues are declining, to quickly return to a growth trajectory. For sales, we will focus on strengthening sales and marketing for our own products. We will maximize sales volume by further enhancing collaboration with sales subsidiaries in major markets and new sites established to strengthen overseas sales. We also will carefully formulate sales strategies tailored to the needs of each region. For production, we will continue working to reduce production costs and improve quality internally and at contract manufacturers to secure a competitive cost advantage. We will maximize the value of our own products as we aim for increased profitability and sustainable growth.

For product segments other than agrochemicals, we will promote market penetration for the world's first anti-pancreatitis drug for dogs, which we launched in Japan in autumn last year. The biopharmaceutical HVJ-E we are developing in collaboration with the University of Osaka is steadily progressing with Phase II clinical trials. We will quickly undertake to establish partnerships with external companies to compensate for functions we aren't found in our Group.

The Group has formulated a "Basic Philosophy" and "Code of Conduct" to represent the fundamental and universal values shared by all its employees in the execution of their work activities.

Basic Philosophy
- Contribute to social development, protection of life and environmental preservation
- Respect shareholders, customers, suppliers, local communities and employees
- Abide by laws and regulations; maintain transparency in business activities

Code of Conduct
- We will strictly observe laws, regulations, social norms and Company rules, while steadfastly adhering to high ethical standards, so as to gain social trust in our business.
- In manufacturing activities, we will place the utmost priority on global environmental protection, and worker safety, and will work to prevent any workplace accident or injury.
- On the basis of respect for human rights, we will promote mutual understanding and cooperation among employees, in order to create an open and friendly workplace.
- To maintain transparency in our business activities, as a corporate citizen, we will promote communication with local communities and society, and will disclose corporate information in a timely and appropriate manner.

With all employees constantly mindful of and practicing the Basic Philosophy and Code of Conduct, the ISK Group will strive to foster progress of society through growth as a robust development-oriented corporation that adapts to the changing times and environment.

We look forward to your ongoing support and understanding.

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Kenichi Tanaka
President & CEO

Business Overview

Inorganic Chemicals Business

Net sales of titanium dioxide were 42.5 billion yen [US$383 million] (down 0.7 billion yen YoY). Although we maintained high production rates to meet supply needs driven by firm demand in Japan and overseas, we were unable to fully respond to demand from buyers.

Net sales of functional materials were ¥12.3 billion [US$111 million] (up ¥1.2 billion YoY) on increased sales due to continued strong demand for electronic components.

Looking at profits and losses, income growth factors included increased revenues from functional materials and continued efforts to improve export prices. However, these were offset by rising costs for titanium ore and other raw materials.

As a result, net sales for the inorganic chemicals business were ¥54.8 billion [US$494 million] (up ¥0.4 billion YoY) and operating income was ¥7.2 billion [US$65 million] (down ¥0.7 billion YoY).

Organic Chemicals Business

For agrochemicals, domestic sales were largely unchanged year on year but overseas sales decreased year on year. New products launched in the Americas as part of initiatives to increase sales recorded steady growth and favorable sales of fungicides and insecticides contributed to increased overseas sales but these were offset by decreased revenues in Europe on the influence of distribution inventory.

For product segments other than agrochemicals, in Japan we received approval to manufacture and sell the world's first anti-pancreatitis drug for dogs. We began sales of active ingredient to co-development company. Sales of contracted active pharmaceutical ingredients also outperformed the previous year.

Looking at profits and losses, although income decreased on lower revenues, income increased thanks to a year-on-year improvement in adjustments for unrealized gains on internal transaction with overseas subsidiaries.

As a result, net sales for the organic chemicals business were ¥47.6 billion [US$429 million] (down ¥2.7 billion YoY) and operating income increased to ¥5.9 billion [US$53 million] (up ¥2.3 billion YoY).

Other Businesses

Net sales of other businesses were ¥3.8 billion [US$35 million] (up ¥0.7 billion YoY) and operating income was ¥0.6 billion [US$6 million] (unchanged YoY).

Consolidated Balance Sheet

As of March 31, 2019

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Assets			
Current assets:			
Cash and deposits (Notes 4 and 18)	¥ 23,984	¥ 30,297	$ 216,072
Trade receivables (Notes 5 and 18):			
Notes	3,259	2,636	29,360
Accounts	30,639	27,245	276,027
	33,898	29,881	305,387
Less allowance for doubtful receivables	(469)	(414)	(4,225)
Trade receivables, net	33,429	29,467	301,162
Inventories (Note 7)	46,783	41,494	421,469
Other current assets	2,884	2,129	25,982
Total current assets	107,080	103,387	964,685
Property, plant and equipment:			
Land (Note 8)	5,399	5,709	48,640
Buildings and structures (Note 8)	39,583	36,810	356,604
Machinery and equipment (Note 8)	115,459	113,348	1,040,170
Leased assets (Note 21)	2,615	2,763	23,559
Construction in progress	3,683	3,972	33,180
	166,739	162,602	1,502,153
Less accumulated depreciation	(123,572)	(121,759)	(1,113,261)
Property, plant and equipment, net (Notes 9 and 25)	43,167	40,843	388,892
Investments and other assets:			
Investments in securities (Notes 6, 9 and 18):			
Unconsolidated subsidiaries and affiliates	2,248	2,137	20,252
Other	4,771	2,048	42,982
Total investments in securities	7,019	4,185	63,234
Deferred income taxes (Notes 3 and 13)	9,604	9,588	86,523
Asset for retirement benefits (Note 11)	12	15	108
Other	1,808	1,749	16,288
Total investments and other assets	18,443	15,537	166,153
Total assets (Note 25)	¥ 168,690	¥ 159,767	$ 1,519,730

Consolidated Balance Sheet

As of March 31, 2019

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Liabilities and net assets			
Current liabilities:			
Short-term bank loans (Notes 9 and 18)	¥ 8,000	¥ 10,410	$ 72,072
Current portion of long-term bank loans (Notes 9 and 18)	10,102	13,538	91,009
Current portion of bonds (Notes 9 and 18)	390	390	3,514
Trade payables (Notes 5 and 18):			
Notes	3,537	2,979	31,865
Accounts	11,856	9,110	106,811
	15,393	12,089	138,676
Lease obligations (Notes 9, 18 and 21)	451	449	4,063
Accrued income taxes (Note 13)	471	1,291	4,243
Accrued expenses	4,547	4,337	40,964
Accrued bonuses for employees	734	768	6,613
Reserve for sales returns	35	36	315
Reserve for implementation of environmental and safety arrangements	84	133	757
Provision for maintenance	–	261	–
Other current liabilities	4,505	4,283	40,585
Total current liabilities	44,712	47,985	402,811
Long-term liabilities:			
Long-term bank loans (Notes 9 and 18)	25,698	20,575	231,514
Bonds (Notes 9 and 18)	1,620	2,010	14,595
Lease obligations (Notes 9, 18 and 21)	616	721	5,550
Liability for retirement benefits (Note 11)	12,882	12,778	116,054
Long-term deposits received	1,227	1,198	11,054
Reserve for implementation of environmental and safety arrangements (Note 16)	2,878	3,642	25,928
Asset retirement obligations (Note 10)	710	717	6,396
Provision for repairs	150	41	1,351
Liabilities from application of equity method	663	908	5,973
Other long-term liabilities (Note 3)	2,199	2,055	19,810
Total long-term liabilities	48,643	44,645	438,225
Contingent liabilities (Note 12)			
Net assets:			
Shareholders' equity (Note 14):			
Common stock:			
Authorized: 100,000 thousand shares in 2019 and 2018			
Issued: 40,384 thousand shares in 2019 and 2018	43,421	43,421	391,180
Capital surplus	10,627	10,627	95,739
Retained earnings	23,419	14,736	210,982
Less treasury stock, at cost:			
418 thousand shares in 2019 and 416 thousand shares in 2018	(723)	(720)	(6,513)
Total shareholders' equity	76,744	68,064	691,388
Accumulated other comprehensive income (loss):			
Net unrealized holding gain on securities	478	670	4,306
Translation adjustments	(1,444)	(1,072)	(13,009)
Retirement benefits liability adjustments	(443)	(525)	(3,991)
Total accumulated other comprehensive loss	(1,409)	(927)	(12,694)
Total net assets (Note 22)	75,335	67,137	678,694
Total liabilities and net assets	¥ 168,690	¥ 159,767	$ 1,519,730

Consolidated Statement of Income

For the year ended March 31, 2019

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Net sales (Note 25)	¥ 106,441	¥ 108,001	$ 958,928
Cost of sales (Notes 7 and 15)	70,668	74,071	636,649
Gross profit	35,773	33,930	322,279
Selling, general and administrative expenses (Note 15)	24,401	23,908	219,829
Operating income (Note 25)	11,372	10,022	102,450
Other income:			
Interest and dividend income	160	218	1,441
Equity in earnings of affiliates	393	–	3,541
Foreign exchange gain, net	141	–	1,270
Commission fee	121	150	1,090
Gain on sales of raw materials	75	100	676
Other	269	182	2,423
	1,159	650	10,441
Other expenses:			
Interest expense	718	919	6,468
Financial fee	388	250	3,495
Foreign exchange loss, net	–	709	–
Equity in losses of affiliates	–	52	–
Other	281	328	2,532
	1,387	2,258	12,495
Ordinary income	11,144	8,414	100,396
Extraordinary gains:			
Gain on sales of fixed assets	182	–	1,639
Gain on insurance claim	63	–	568
Subsidy income	–	7	–
	245	7	2,207
Extraordinary losses:			
Loss on disposal of fixed assets	729	613	6,567
Loss on disaster	311	45	2,802
Loss on impairment of fixed assets (Notes 8 and 25)	121	55	1,090
Reserve for implementation of environmental and safety arrangements (Note 16)	–	2,783	–
Other	–	8	–
	1,161	3,504	10,459
Income before income taxes	10,228	4,917	92,144
Income taxes (Note 13):			
Current	1,391	1,563	12,532
Deferred	154	(88)	1,387
	1,545	1,475	13,919
Net income (Note 22)	8,683	3,442	78,225
Net income attributable to:			
Owners of parent	¥ 8,683	¥ 3,442	$ 78,225

Consolidated Statement of Comprehensive Income

For the year ended March 31, 2019

	Millions of yen		Thousands of U.S. dollars (Note 1
	2019	2018	2019
Net income	¥ 8,683	¥ 3,442	$ 78,225
Other comprehensive income (loss) (Note 20):			
Net unrealized holding (loss) gain on securities	(191)	104	(1,721)
Unrealized deferred gain on hedges	–	0	–
Translation adjustments	(379)	719	(3,414)
Retirement benefits liability adjustments	82	21	739
Share of other comprehensive income (loss) of affiliates accounted for by the equity method attributable to the Company	6	(120)	54
Total other comprehensive (loss) income	(482)	724	(4,342)
Comprehensive income	¥ 8,201	¥ 4,166	$ 73,883
Total comprehensive income attributable to:			
Owners of parent	¥ 8,201	¥ 4,166	$ 73,883

Consolidated Statement of Changes in Net Assets

Year ended March 31, 2019

	Millions of yen									
		Shareholders' equity				Accumulated other comprehensive income (loss)				
	Number of shares of common stock in issue	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Net unrealized holding gain on securities	Unrealized deferred loss on hedges	Translation adjustments	Retirement benefits liability adjustments	Total net assets
Balance at April 1, 2017	40,383,943	¥ 43,421	¥ 10,627	¥ 11,294	¥ (710)	¥ 566	¥ (0)	¥ (1,671)	¥ (546)	¥ 62,981
Net income attributable to owners of parent for the period	–	–	–	3,442	–	–	–	–	–	3,442
Acquisition of treasury stock	–	–	–	–	(10)	–	–	–	–	(10)
Disposition of treasury stock	–	–	0	–	0	–	–	–	–	0
Other changes	–	–	–	–	–	104	0	599	21	724
Balance at April 1, 2018	40,383,943	¥ 43,421	¥ 10,627	¥ 14,736	¥ (720)	¥ 670	¥ –	¥ (1,072)	¥ (525)	¥ 67,137
Net income attributable to owners of parent for the period	–	–	–	8,683	–	–	–	–	–	8,683
Acquisition of treasury stock	–	–	–	–	(3)	–	–	–	–	(3)
Disposition of treasury stock	–	–	0	–	0	–	–	–	–	0
Other changes	–	–	–	–	–	(192)	–	(372)	82	(482)
Balance at March 31, 2019	40,383,943	¥ 43,421	¥ 10,627	¥ 23,419	¥ (723)	¥ 478	¥ –	¥ (1,444)	¥ (443)	¥ 75,335

	Thousands of U.S. dollars (Note 1)								
	Shareholders' equity				Accumulated other comprehensive income (loss)				
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Net unrealized holding gain on securities	Unrealized deferred loss on hedges	Translation adjustments	Retirement benefits liability adjustments	Total net assets
Balance at April 1, 2018	$ 391,180	$ 95,739	$ 132,757	$ (6,486)	$ 6,036	$ –	$ (9,658)	$ (4,730)	$ 604,838
Net income attributable to owners of parent for the period	–	–	78,225	–	–	–	–	–	78,225
Acquisition of treasury stock	–	–	–	(27)	–	–	–	–	(27)
Disposition of treasury stock	–	0	–	0	–	–	–	–	0
Other changes	–	–	–	–	(1,730)	–	(3,351)	739	(4,342)
Balance at March 31, 2019	$ 391,180	$ 95,739	$ 210,982	$ (6,513)	$ 4,306	$ –	$ (13,009)	$ (3,991)	$ 678,694

Consolidated Statement of Cash Flows

For the year ended March 31, 2019

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2019	2018	2019
Cash flows from operating activities			
Income before income taxes	¥ 10,228	¥ 4,917	$ 92,144
Adjustments for:			
Depreciation and amortization	4,631	4,639	41,721
Loss on disaster	311	45	2,802
Loss on impairment of fixed assets	121	55	1,090
Increase in liabilities for retirement benefits, net	234	199	2,108
Decrease in provision for loss on liquidation of a subsidiary	(1)	(5)	(9)
(Decrease) increase in reserve for implementation of environmental and safety arrangements	(813)	2,365	(7,324)
Interest and dividend income	(160)	(218)	(1,441)
Interest expense	718	919	6,468
Foreign exchange loss, net	142	212	1,279
Equity in (earnings) losses of affiliates, net	(352)	84	(3,171)
(Gain) loss on disposal or sales of fixed assets, net	(20)	219	(180)
Other	(270)	587	(2,431)
Changes in operating assets and liabilities:			
Trade receivables	(4,385)	(4,061)	(39,505)
Inventories	(5,763)	6,090	(51,919)
Other current assets	(732)	90	(6,595)
Trade payables	3,457	1,579	31,144
Accrued expenses and other current liabilities	369	195	3,324
Subtotal	7,715	17,911	69,505
Interest and dividends received	155	127	1,396
Interest paid	(739)	(874)	(6,658)
Insurance claim received	127	7	1,144
Disaster loss paid	(49)	–	(441)
Income taxes paid	(2,302)	(564)	(20,739)
Net cash provided by operating activities	¥ 4,907	¥ 16,607	$ 44,207
Cash flows from investing activities			
Increase in time deposits	¥ –	¥ (0)	$ –
Proceeds from withdrawal of time deposits	–	190	–
Purchase of investment securities	(2,899)	(74)	(26,117)
Purchases of property, plant and equipment	(6,473)	(5,851)	(58,314)
Proceeds from sales of property, plant and equipment	701	161	6,315
Increase in long-term loans receivable	(286)	(664)	(2,577)
Collection of long-term loans receivables	359	261	3,234
Other	7	(53)	63
Net cash used in investing activities	(8,591)	(6,030)	(77,396)
Cash flows from financing activities			
Proceeds from issuance of bonds	–	2,400	–
Redemption of bonds	(390)	(560)	(3,514)
Decrease in short-term bank loans, net	(410)	(3,240)	(3,694)
Proceeds from long-term bank loans	15,000	8,980	135,135
Repayment of long-term bank loans	(15,313)	(15,857)	(137,954)
Repayment of lease obligations	(497)	(512)	(4,477)
Repayment of installment payable	(211)	(134)	(1,901)
Proceeds from deposits received	1,002	2,744	9,027
Repayment of deposits received	(1,652)	(2,319)	(14,883)
Increase in treasury stock, net	(4)	(10)	(36)
Net cash used in financing activities	(2,475)	(8,508)	(22,297)
Effect of exchange rate changes on cash and cash equivalents	(154)	71	(1,388)
(Decrease) increase in cash and cash equivalents	(6,313)	2,140	(56,874)
Cash and cash equivalents at the beginning of the year	30,297	28,157	272,946
Cash and cash equivalents at the end of the year (Note 4)	¥ 23,984	¥ 30,297	$ 216,072

Notes to Consolidated Financial Statements

Year ended March 31, 2019

1. Basis of Preparation of Consolidated Financial Statements

The accompanying consolidated financial statements of Ishihara Sangyo Kaisha, Ltd. (the "Company") and its consolidated subsidiaries have been prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to the 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 Act of Japan.

In preparing the accompanying consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued in Japan in order to present them in a format which is more familiar to readers outside Japan. In addition, the notes to the consolidated financial statements include information which is not required under accounting principles generally accepted in Japan but is presented herein as additional information.

Certain amounts in the prior year's consolidated financial statements have been reclassified to conform to the current year's presentation. Such reclassifications had no effect on consolidated profit or net assets.

The translation of yen amounts into U.S. dollar amounts is included solely for convenience, as a matter of arithmetic computation only, at ¥111.00 = U.S.$1.00, the approximate rate of exchange in effect on March 31, 2019. This translation should not be construed as a representation that yen have been, could have been, or could in the future be, converted into U.S. dollars at the above or any other rate.

2. Summary of Significant Accounting Policies

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

The accompanying consolidated financial statements include the accounts of the Company and its 13 significant consolidated subsidiaries, consisting of ISK Bioscience K.K., ISK SINGAPORE PTE. LTD., the ISK AMERICAS INCORPORATED Group (5 subsidiaries), ISK BIOSCIENCES EUROPE N.V., ISK Taiwan Co., Ltd., Fuji Titanium Industry Co., Ltd., Ishihara Techno Corporation, ISK Engineering Partners Corporation and ISK ANIMAL HEALTH, LLC.

ISK ANIMAL HEALTH, LLC. has been included in the scope of consolidation since it was established as a subsidiary. Yokkaichi Energy Service Co., Ltd., which had been a consolidated subsidiary, was excluded from consolidation following an absorption-type merger into the Company.

The Company's remaining subsidiaries, including ISK BIOSCIENCES KOREA LTD., have not been consolidated because they are not significant in terms of total assets, retained earnings, net sales and net income.

Investments in significant affiliates are stated at their underlying net equity after the elimination of intercompany income.

Investments in unconsolidated subsidiaries and the remaining affiliate companies are stated at cost.

The overseas consolidated subsidiaries are consolidated on the basis of a fiscal period ending December 31, which differs from the balance sheet date of the Company. As a result, adjustments have been made for any significant intercompany transactions which took place during the period between the year end of these overseas consolidated subsidiaries and the year end of the Company.

(b) Foreign currency translation

Foreign currency transactions

All monetary assets and liabilities denominated in foreign currencies are translated into yen amounts at the rates of exchange in effect at the balance sheet date, except that receivables and payables hedged by qualified forward foreign exchange contracts are translated at their corresponding contracted rates.

Revenue and expense items arising from transactions denominated in foreign currencies are generally translated into yen at the exchange rates in effect at the respective transaction dates. Foreign exchange gain or loss is credited or charged to income in the year in which such gain or loss is recognized for financial reporting purposes.

Financial statements of overseas consolidated subsidiaries

The balance sheet accounts of the overseas consolidated subsidiaries are translated into yen at the rates of exchange in effect at the balance sheet date, except that the components of net assets are translated at their historical rates. Revenue and expense accounts are translated at the average rates of exchange in effect during the year. Differences resulting from translating financial statements denominated in foreign currencies have not been included in the determination of net income but are reported as translation adjustments which are components of accumulated other comprehensive loss.

(c) Cash and cash equivalents

For the purposes of the consolidated statement of cash flows, cash and cash equivalents consist of cash on hand, cash in banks which can be withdrawn at any time and short-term investments with a maturity of three months or less when purchased which can easily be converted to cash and are subject to little risk of change in value.

(d) Inventories

Inventories of the Company and its domestic consolidated subsidiaries are principally stated at lower of cost or net selling value, cost being determined by the gross average method.

(e) Securities

Securities are classified into two categories: held-to-maturity debt securities and other securities. Held-to-maturity debt securities are carried at amortized cost. Marketable securities classified as other securities are carried at fair value, with any changes in unrealized holding gain or loss, net of the applicable income taxes, reported as a separate component of accumulated other comprehensive income (loss). Non-marketable securities classified as other securities are carried at cost. Cost of securities sold is determined by the moving average method.

Investments in investment business limited liability partnerships and other similar partnerships, which are deemed to be securities under Article 2, Clause 2 of the Financial Instruments and Exchange Act of Japan, are valued at the amount of the underlying equity in their net assets based on the latest financial statements available as of the closing date stipulated in the partnership agreement.

(f) Derivatives and hedging activities

Derivative financial instruments are utilized by the Company and its domestic consolidated subsidiaries principally in order to manage risk arising from adverse fluctuation in foreign exchange rates and interest rates. The Company and its domestic consolidated subsidiaries have established a control environment which includes policies and procedures for risk assessment, including an assessment of the effectiveness of their hedging activities, and for the approval, reporting and monitoring of transactions involving derivatives.

Derivatives are carried at fair value with any changes in unrealized gain or loss credited or charged to income, except for those which meet the criteria for deferral hedge accounting under which unrealized gain or loss is deferred and reported as a component of accumulated other comprehensive income (loss). Receivables and payables hedged by forward foreign exchange contracts which meet certain conditions are translated at their contracted rates (the “allocation method”). Interest-rate swaps which meet certain conditions are accounted for as if the interest rates which apply to the swaps had originally applied to the underlying debt (the “special method”).

The effectiveness of hedges is assessed based on comparison of the cumulative changes in markets or cash flows of the hedged items and those of the hedging instruments. However, the assessment of interest rate swaps which the special method is applied is omitted.

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

Property, plant and equipment are stated at cost. Depreciation of property, plant and equipment is recognized primarily by the straight-line method over the estimated useful lives of the respective assets. The useful lives of property, plant and equipment are principally as follows:

Buildings and structures ....3 to 55 years
Machinery and equipment ....2 to 20 years

Costs for maintenance, repairs and minor renewals are charged to income as incurred. Major renewals and betterments are capitalized.

(h) Intangible assets (except for leased assets)

Intangible assets are amortized by the straight-line method over the useful lives of the respective assets. Expenditures relating to computer software developed for internal use are charged to income as incurred, except if these are deemed to contribute to the generation of future income or cost savings. Such expenditures are capitalized as assets and amortized by the straight-line method over their estimated useful lives of 5 years.

(i) Research and development costs

Research and development costs are charged to income as incurred.

(j) Leased assets

Leased assets under finance leases that transfer ownership of the assets are depreciated by using the economic useful lives of leased assets.

Leased assets under finance lease contracts that do not transfer ownership to the lessee are depreciated to a residual value of zero by the straight-line method using the term of the contract as the useful life.

(k) Allowance for doubtful receivables

The Company and its domestic consolidated subsidiaries have provided an allowance for doubtful receivables based on their historical experience of bad debts on ordinary receivables plus an additional estimate of probable specific doubtful accounts from customers experiencing financial difficulties.

The allowance for doubtful receivables of the overseas consolidated subsidiaries has been provided at the estimated aggregate amount of their probable bad debts.

(l) Accrued bonuses for employees

Accrued employees' bonuses are accounted for at an estimated amount of the bonuses to be paid as allocated to the current fiscal year.

(m) Reserve for sales returns

Reserve for sales returns is provided for estimated losses incurring due to the return of finished goods and merchandise sold during the fiscal year subsequent to the balance sheet date, using the historical rate of such returns in prior years.

(n) Reserve for implementation of environmental and safety arrangements

The Company has provided the reserve for estimated expenditures to promote environmental and safety arrangements.

In addition, the Company has also provided the reserve for the expenses related to the remediation of soil and groundwater contamination and measures for buried waste at Yokkaichi Plant.

(o) Provision for maintenance

Provision for maintenance is provided in an amount estimated to be necessary for the maintenance for certain machinery and equipment.

(p) Retirement benefits

Liability for retirement benefits is provided at an amount calculated based on the retirement benefit obligation and the fair value of the pension plan assets as of the balance sheet date.

The retirement benefit obligation for employees is attributed to each period by the straight-line method over the estimated years of service of the eligible employees.

Actuarial gain or loss is amortized in the following year in which such gain or loss is recognized, principally by the straight-line method, over the estimated average remaining years of service of the employees participating in the plans.

Prior service cost is amortized as incurred by the straight-line method over the estimated average remaining years of service of the employees participating in the plans.

(q) Income taxes

Income taxes are calculated based on taxable income and charged to income on an accrual basis. Certain temporary differences exist between taxable income and income reported for financial statement purposes which enter into the determination of taxable income in a different period. The Company and its consolidated subsidiaries recognize the tax effect of such temporary differences in their consolidated financial statements.

(r) Accounting standard issued but not effective

Accounting Standard and Implementation Guidance on Revenue Recognition

On March 30, 2018, the ASBJ issued "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29) and "Implementation Guidance on Accounting Standard for Revenue Recognition" (ASBJ Guidance No. 30).

(1) Overview

This is a comprehensive accounting standard for revenue recognition. Specifically, the accounting standard establishes the following five-step model that will apply to revenue from customers:

1. Identify the contract(s) with a customer
2. Identify the performance obligations in the contract
3. Determine the transaction price
4. Allocate the transaction price to the performance obligations in the contract
5. Recognize revenue when (or as) the entity satisfies a performance obligation

(2) Scheduled date of adoption

The Company expects to adopt the accounting standard and implementation guidance from the beginning of the fiscal year ending March 31, 2022.

(3) Impact of the adoption of accounting standard and implementation guidance

The Company is currently evaluating the effect of the adoption of this accounting standard and implementation guidance on its consolidated financial statements.

3. Change in Presentation

Applying the "Partial Amendments to Accounting Standard for Tax Effect Accounting"

The Company and its consolidated subsidiaries have adopted "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018) (hereinafter, the "Partial Amendments") from the beginning of the fiscal year ended March 31, 2019. As such, deferred income taxes are included within investments and other assets and long-term liabilities, and related income tax disclosures have been expanded.

As a result, ¥2,166 million of deferred income taxes in current assets and ¥6 million of deferred income taxes included in other current liabilities in current liabilities previously presented in consolidated balance sheet as of March 31, 2018 have been reclassified and included within ¥9,588 million of deferred tax assets in investments and other assets and ¥2,055 million of other long-term liabilities in long-term liabilities, respectively.

Also, "Note 13 Income Taxes" in the Notes to the consolidated financial statements has been expanded in accordance with Note 8 and Note 9 of Interpretive Notes to Accounting for Tax Effect Accounting. However, comparative information for the year ended March 31, 2018 has not been disclosed in Note 13 in accordance with the transitional provisions set forth in Article 7 of the Partial Amendments.

4. Cash and Deposits

The reconciliation between cash and cash equivalents in the accompanying consolidated statements of cash flows and cash and deposits in the accompanying consolidated balance sheets as of March 31, 2019 and 2018 is presented as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Cash and deposits	¥ 23,984	¥ 30,297	$ 216,072
Cash and cash equivalents	¥ 23,984	¥ 30,297	$ 216,072

5. Notes Receivable and Notes Payable

As the balance sheet date for the year ended March 31, 2019 fell on a bank holiday, notes receivable, trade of ¥348 million ($3,135 thousand) and notes payable, trade of ¥674 million ($6,072 thousand) with a due date of March 31, 2019 were included in the respective balances in the consolidated balance sheet at March 31, 2019 and were settled on the next business day.

6. Investments in Securities

Marketable securities classified as held-to-maturity debt securities and other securities at March 31, 2019 and 2018 were as follows:

(a) Held-to-maturity debt securities

	Millions of yen					
	2019			2018		
	Carrying value	Estimated fair value	Unrealized gain	Carrying value	Estimated fair value	Unrealized gain
Securities whose estimated fair value exceeds their carrying value	¥ 9	¥ 10	¥ 1	¥ 10	¥ 10	¥ 0
Total	¥ 9	¥ 10	¥ 1	¥ 10	¥ 10	¥ 0

	Thousands of U.S. dollars		
	2019		
	Carrying value	Estimated fair value	Unrealized gain
Securities whose estimated fair value exceeds their carrying value	$ 81	$ 90	$ 9
Total	$ 81	$ 90	$ 9

(b) Other securities

	Millions of yen					
	2019			2018		
	Carrying value	Acquisition cost	Unrealized gain (loss)	Carrying value	Acquisition cost	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost: Equity securities	¥ 1,326	¥ 651	¥ 675	¥ 1,591	¥ 692	¥ 899
Subtotal	1,326	651	675	1,591	692	899
Securities whose acquisition cost exceeds their carrying value: Equity securities	109	140	(31)	78	86	(8)
Subtotal	109	140	(31)	78	86	(8)
Total	¥ 1,435	¥ 791	¥ 644	¥ 1,669	¥ 778	¥ 891

	Thousands of U.S. dollars		
	2019		
	Carrying value	Acquisition cost	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost: Equity securities	$ 11,946	$ 5,865	$ 6,081
Subtotal	11,946	5,865	6,081
Securities whose acquisition cost exceeds their carrying value: Equity securities	982	1,261	(279)
Subtotal	982	1,261	(279)
Total	$ 12,928	$7,126	$ 5,802

The redemption schedule subsequent to March 31, 2019 for held-to-maturity debt securities classified as other securities is described in Note 18.

7. Inventories

Inventories at March 31, 2019 and 2018 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Finished goods and merchandise	¥ 25,217	¥ 22,908	$ 227,181
Work in process	5,976	4,526	53,838
Raw materials and supplies	15,590	14,060	140,450
Total	¥ 46,783	¥ 41,494	$ 421,469

Net gain on reversal of devaluation of inventories included in cost of sales for the years ended March 31, 2019 and 2018 amounted to ¥277 million ($2,495 thousand) and ¥637 million, respectively.

8. Loss on Impairment of Fixed Assets

For the year ended March 31, 2019, the Company recorded a loss on impairment of fixed assets. The main components of loss on impairment of fixed assets are as follows:

			Millions of yen	Thousands of U.S. dollars
Location	Major use	Classification	2019	2019
Sasagawa company house (Yokkaichi City, Mie Prefecture)	Company-owned housing	Land	¥ 64	$ 576
		Buildings and structures	57	514
		Other	0	0
		Total	¥ 121	$ 1,090

The Company and its consolidated subsidiaries group their assets based on the business segment and production process for assessment of loss on impairment. Idle assets which are not anticipated to be utilized in the future and leased real estate are classified as individual cash-generating units. Assets not definitely linked to a specific business, such as the head-office building, the facilities for research and development and the facilities for welfare, are classified as corporate assets.

The Company plans to sell land used for company-owned housing located at Sasagawa company house in the above table. The Company recognized the land as an asset held for sale and recorded a loss on impairment.

The recoverable amount of the land was measured at net selling value, which was reasonably estimated by considering the market value.

For the year ended March 31, 2018, the Company recorded a loss on impairment of fixed assets. The main components of loss on impairment of fixed assets are as follows:

			Millions of yen
Location	Major use	Classification	2018
Hiratsuka Plant (Hiratsuka City, Kanagawa Prefecture)	Company-owned housing	Land	¥ 55

Fuji Titanium Industry Co., Ltd., a consolidated subsidiary of the Company, plans to sell land used for company-owned housing located at the Hiratsuka Plant in the above table. The Company recognized the land as an asset held for sale and recorded a loss on impairment.

The recoverable amount of the land was measured at net selling value, which was reasonably estimated by considering the market value.

9. Short-Term Bank Loans, Long-Term Bank Loans, Lease Obligations and Bonds

The average annual interest rate on short-term bank loans at March 31, 2019 and 2018 were approximately 1.2% and 1.5%, respectively.

Long-term bank loans, including the current portion of long-term bank loans, at March 31, 2019 and 2018 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Secured bank loans	¥ 14,214	¥ 15,351	$ 128,054
Unsecured bank loans	21,586	18,762	194,469
Subtotal	35,800	34,113	322,523
Less amounts due within one year	(10,102)	(13,538)	(91,009)
Total	¥ 25,698	¥ 20,575	$ 231,514

The annual average interest rates applicable to long-term bank loans due within one year presented in the above table at March 31, 2019 and 2018 were 1.5% and 1.8%, respectively.

The annual average interest rates applicable to long-term bank loans due after more than one year presented in the above table at March 31, 2019 and 2018 were 1.2% and 1.4%, respectively.

These bank loans become due from April 2020 through to March 2027.

Bonds at March 31, 2019 and 2018 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Unsecured bonds, payable in yen at rate of 0.257%, due 2024	¥ 2,010	¥ 2,400	$ 18,109
Less amounts due within one year	(390)	(390)	(3,514)
Total	¥ 1,620	¥ 2,010	$ 14,595

Lease obligations at March 31, 2019 and 2018 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Finance lease obligations (ownership not transferred to the lessee)	¥ 1,067	¥ 1,170	$ 9,613
Less amounts due within one year	(451)	(449)	(4,063)
Total	¥ 616	¥ 721	$ 5,550

Information on the payment schedules of long-term bank loans, bonds, and lease obligations subsequent to March 31, 2019 is described in Notes 17 and 18.

At March 31, 2019 and 2018, the following assets were pledged as collateral for short-term bank loans, the current portion of long-term bank loans and long-term bank loans:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Property, plant and equipment, net of accumulated depreciation	¥ 23,408	¥ 21,255	$ 210,883
Investments in securities	27	95	243
Total	¥ 23,435	¥ 21,350	$ 211,126

Short-term bank loans, the current portion of long-term bank loans and long-term bank loans secured by such collateral at March 31, 2019 and 2018 were as follows:

	Millions of yen			Thousands of U.S. dollars	
	2019		2018	2019	
Short-term bank loans	¥	6,020	¥6,690	$	54,234
Current portion of long-term bank loans		5,799	8,443		52,243
Long-term bank loans		8,415	6,908		75,811
Total	¥	20,234	¥22,041	$	182,288

10. Asset Retirement Obligations

The asset retirement obligations include legal obligations for disposal of items including polychlorobiphenyl pursuant to the "Law Concerning Special Measures Against PCB Waste" and other legal obligations for the removal of leasehold improvements and restoration of premises around the Yokkaichi Plant to their original condition upon termination of lease contracts.

The asset retirement obligations are measured at present value calculated based on the discount rate applicable to government bonds and the estimated useful lives of the assets, which are estimated to be from 3 years to 8 years since their acquisitions.

The following is a summary of changes in the carrying amounts of the asset retirement obligations for the years ended March 31, 2019 and 2018.

	Millions of yen			Thousands of U.S. dollars	
	2019		2018	2019	
Asset retirement obligation balance at the beginning of the year	¥	717	¥781	$	6,459
Accretion expense		0	0		0
Liabilities settled		(7)	(64)		(63)
Asset retirement obligation balance at the end of the year	¥	710	¥717	$	6,396

11. Retirement Benefits

The Company and certain consolidated subsidiaries have a lump-sum payment plan as a retirement benefit plan for eligible employees upon retirement. Retirement payments are determined by reference to basic salary, years of service and certain other factors. In addition to this, the Company and certain domestic consolidated subsidiaries have defined contribution pension plans.

Certain consolidated subsidiaries have calculated their retirement benefit obligations and retirement benefit expenses based on the amount which would be payable at the year end if all eligible employees terminated their services voluntarily (the "Simplified Method").

The changes in retirement benefit obligations during the years ended March 31, 2019 and 2018 are as follows:

	Millions of yen				Thousands of U.S. dollars	
	2019		2018		2019	
Retirement benefit obligations at the beginning of the year	¥	12,068	¥	11,856	$	108,721
Service cost		593		606		5,342
Interest cost		11		10		99
Actuarial (gain) loss		(22)		78		(198)
Retirement benefits paid		(474)		(499)		(4,270)
Other		(10)		17		(90)
Retirement benefit obligations at the end of the year	¥	12,166	¥	12,068	$	109,604

The changes in plan assets during the years ended March 31, 2019 and 2018 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Plan assets at the beginning of the year	¥ 178	¥ 153	$ 1,604
Expected return on plan assets	1	1	9
Actuarial (loss) gain	(6)	16	(54)
Contributions paid by the Company and subsidiaries	31	27	279
Retirement benefits paid	(9)	(19)	(81)
Other	(0)	0	(0)
Plan assets at the end of the year	¥ 195	¥ 178	$ 1,757

The changes in retirement benefit obligations calculated by the Simplified Method during the years ended March 31, 2019 and 2018 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Retirement benefit obligations at the beginning of the year	¥ 873	¥ 884	$ 7,865
Retirement benefit expenses	82	94	739
Retirement benefits paid	(56)	(105)	(505)
Retirement benefit obligations at the end of the year	¥ 899	¥ 873	$ 8,099

The following table sets forth the funded status of the plans and the amounts recognized in the consolidated balance sheet as of March 31, 2019 and 2018 for the Company's and the consolidated subsidiaries' defined benefit plans:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Funded retirement benefit obligation	¥335	¥313	$3,018
Plan assets at fair value	(195)	(178)	(1,757)
	140	135	1,261
Unfunded retirement benefit obligation	12,730	12,628	114,685
Net amount of asset and liability for retirement benefits in the consolidated balance sheet	12,870	12,763	115,946
Liability for retirement benefits	12,882	12,778	116,054
Asset for retirement benefits	(12)	(15)	(108)
Net amount of asset and liability for retirement benefits in the consolidated balance sheet	¥12,870	¥12,763	$115,946

The components of retirement benefit expenses for the years ended March 31, 2019 and 2018 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Service cost	¥ 593	¥ 606	$ 5,342
Interest cost	11	10	99
Expected return on plan assets	(1)	(1)	(9)
Amortization:			
Actuarial loss	83	79	748
Prior service cost	20	19	180
Retirement benefit expenses calculated by the Simplified Method	82	94	739
Retirement benefit expenses	¥ 788	¥ 807	$ 7,099

The components of retirement benefits liability adjustments included in other comprehensive income (before tax effect) for the years ended March 31, 2019 and 2018 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Actuarial gain and loss	¥ 100	¥17	$ 901
Prior service cost	20	19	180
Others	(2)	(3)	(18)
Total	¥ 118	¥33	$ 1,063

The components of retirement benefits liability adjustments included in accumulated other comprehensive income (before tax effect) as of March 31, 2019 and 2018 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Unrecognized actuarial gain and loss	¥ 494	¥593	$ 4,451
Unrecognized prior service cost	133	152	1,198
Total	¥ 627	¥745	$ 5,649

The fair value of plan assets, by major category, as a percentage of total plan assets as of March 31, 2019 and 2018 are as follows:

	2019	2018
Debt securities	84%	85%
Equity securities	10	10
Cash and deposits	6	5
Total	100%	100%

The expected return on plan assets has been estimated based on the anticipated allocation to each asset class at present and in the future and the expected long-term returns on assets held in each category at present and in the future.

The assumptions used in accounting for the defined benefit plans for the years ended March 31, 2019 and 2018 are as follows:

	2019	2018
Discount rate	Principally 0.1%	Principally 0.1%
Expected long-term rate of return on plan assets	Principally 1.7%	Principally 1.5%
Expected rates of salary increase	Principally 6.3%	Principally 6.3%

Total contributions paid by the Company and certain consolidated subsidiaries to the defined contribution pension plans for the years ended March 31, 2019 and 2018 amounted to ¥89 million ($802 thousand) and ¥89 million, respectively.

12. Contingent Liabilities

Guarantees

At March 31, 2019, the Company was contingently liable for the following:

	Millions of yen	Thousands of U.S. dollars
	2019	2019
Trade notes receivable discounted with banks	¥ 69	$ 622

13. Income Taxes

Income taxes applicable to the Company and its domestic consolidated subsidiaries consist of corporation, inhabitants' and enterprise taxes. The applicable statutory tax rate in Japan for the years ended March 31, 2019 and 2018 was, in the aggregate, approximately 30.2% and 30.4%, respectively. Overseas subsidiaries are subject to the income taxes of the respective countries in which they operate.

The effective tax rates reflected in the accompanying consolidated statement of income for the years ended March 31, 2019 and 2018 differs from the above statutory tax rate for the following reasons:

	2019	2018
Statutory tax rate	30.2%	–%
Permanently non-deductible expenses	0.3	–
Permanently non-taxable income	(0.1)	–
Per capita portion of inhabitants' taxes	0.3	–
Tax deduction for experiment and research expenses	(3.5)	–
Share of profit of equity method affiliates	(1.1)	–
Unrealized gain on intercompany transactions	(0.6)	–
Changes in valuation allowance	(13.5)	–
Difference tax rates applied to subsidiaries	(0.3)	–
Other	3.4	–
Effective tax rate	15.1%	–%

Since the difference between the normal effective statutory tax rate and the actual effective tax rate was not significant, the reconciliation for the year ended March 31, 2018 was omitted.

Deferred income taxes reflect the net tax effect of the temporary differences between the carrying amounts of the assets and liabilities for financial reporting purposes and the corresponding amounts for income tax purposes. The significant components of the Company's and consolidated subsidiaries' deferred tax assets and liabilities at March 31, 2019 and 2018 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Deferred tax assets:			
Tax loss carryforwards	¥ 10,475	¥ 11,543	$ 94,369
Liability for retirement benefits	3,913	3,878	35,252
Loss on devaluation of inventories	293	218	2,640
Unrealized gain on intercompany transactions	1,657	1,832	14,928
Accrued expenses	518	514	4,667
Accrued bonuses for employees	224	234	2,018
Reserve for implementation of environmental and safety arrangements	895	1,171	8,063
Asset retirement obligations	214	216	1,928
Loss on liquidation of a subsidiary	16	16	144
Other	2,007	2,150	18,081
Gross deferred tax assets	20,212	21,772	182,090
Valuation allowance for tax loss carryforwards (Note 2)	(8,562)	–	(77,135)
Valuation allowance for total future deductible temporary differences etc.	(1,504)	–	(13,550)
Less: total valuation allowance (Note 1)	(10,066)	(11,575)	(90,685)
Total deferred tax assets	10,146	10,197	91,405
Deferred tax liabilities:			
Property, plant and equipment	(21)	(21)	(189)
Unrealized holding gain on securities	(126)	(200)	(1,135)
Other	(409)	(436)	(3,685)
Total deferred tax liabilities	(556)	(657)	(5,009)
Net deferred tax assets	¥ 9,590	¥ 9,540	$ 86,396

Note 1: Valuation allowance decreased by ¥1,509 million ($13,595 thousand) in the year ended March 31, 2019. This decrease is mainly due to decrease of the valuation allowance for tax loss carryforwards by ¥366 million ($3,297 thousand), decrease of the valuation allowance for reserve for implementation of environmental and safety arrangements by ¥173 million ($1,559 thousand) and decrease of the valuation allowance for other future deductible temporary differences by ¥531 million ($4,784 thousand).

Note 2: A breakdown of tax loss carryforwards and valuation allowance by expiry date as of March 31, 2019 will expire as follows:

	Millions of yen						
	2019						
	Due in 1 year or less	Due after 1 year through 2 years	Due after 2 years through 3 years	Due after 3 years through 4 years	Due after 4 years through 5 years	Due after 5 years	Total
Net operating loss carryforwards (*).....	¥ –	¥ –	¥ –	¥ –	¥ –	¥ 10,475	¥ 10,475
Valuation allowance..............................	–	–	–	–	–	(8,562)	(8,562)
Deferred tax assets..............................	¥ –	¥ –	¥ –	¥ –	¥ –	¥ 1,913	¥ 1,913 (**)

	Thousands of U.S. dollars						
	2019						
	Due in 1 year or less	Due after 1 year through 2 years	Due after 2 years through 3 years	Due after 3 years through 4 years	Due after 4 years through 5 years	Due after 5 years	Total
Net operating loss carryforwards (*).....	$ –	$ –	$ –	$ –	$ –	$ 94,369	$ 94,369
Valuation allowance..............................	–	–	–	–	–	(77,135)	(77,135)
Deferred tax assets..............................	$ –	$ –	$ –	$ –	$ –	$ 17,234	$ 17,234 (**)

(*) The amount is determined by multiplying the corresponding net operating loss carryforwards by the effective statutory tax rate.

(**) The Company and consolidated subsidiaries have recorded tax loss carryforwards in the amount of ¥10,475 million ($94,369 thousand) after multiplying statutory tax rates, and recognize deferred tax assets in the amount of ¥1,913 million ($17,234 thousand) for the tax loss carryforwards. These deferred tax assets are all recognized for part of the Company's tax loss carryforwards in the amount of ¥5,221 million ($47,036 thousand). These tax loss carryforwards, for which the deferred tax assets are recognized, arose mainly due to the taxable loss related to closing of ISK SINGAPORE PTE. LTD., a consolidated subsidiary of the Company, recorded during the year ended March 31, 2016, and were assessed to be recoverable based on the estimated taxable income in the future period.

14. Shareholders' Equity

The Company Act of Japan (the "Act") provides that an amount equal to 10% of the amount to be disbursed as distributions of capital surplus (other than the capital reserve) and retained earnings (other than the legal reserve) be transferred to the capital reserve and the legal reserve, respectively, until the sum of the capital reserve and the legal reserve equals 25% of the capital stock account. Such distributions can be made at any time by resolution of the shareholders or by the Board of Directors if certain conditions are met.

Under the Act, upon the issuance and sale of new shares of common stock, the entire amount of the proceeds is required to be accounted for as common stock, although a company may, by resolution of the Board of Directors, account for an amount not exceeding one-half of the proceeds of the sale of new shares as additional paid-in capital.

Common stock and treasury stock

Movements in common stock and treasury stock during the years ended March 31, 2019 and 2018 are summarized as follows:

	Thousands of shares			
	2019			
	April 1, 2018	Increase	Decrease	March 31, 2019
Common stock	40,384	–	–	40,384
Treasury stock..	416	2	0	418

	Thousands of shares			
	2018			
	April 1, 2017	Increase	Decrease	March 31, 2018
Common stock	40,384	–	–	40,384
Treasury stock..	409	7	0	416

The increases in treasury stock were due to purchases of shares of less than one voting unit for the years ended March 31, 2019 and 2018. The decrease in treasury stock for the year ended March 31, 2019 and 2018 was mainly due to sales of shares at requests of shareholders who own less than one voting unit.

15. Research and Development Costs

Research and development costs included in manufacturing costs and selling, general and administrative expenses for the years ended March 31, 2019 and 2018 totaled ¥8,071 million ($72,712 thousand) and ¥8,707 million, respectively.

16. Reserve for Implementation of Environmental and Safely Arrangements

In terms of the remediation measures on the contaminated soil, underground water and buried waste at Yokkaichi Plant of the Company, which was announced after a comprehensive compliance test in 2008, the Company had recorded costs for the remediation including the investigation as extraordinary losses to the extent that they were paid or reasonably estimated to be incurred. On the other hand, the Company had disclosed costs that could not be reasonably estimated as contingent liabilities.

During the year ended March 31, 2018, since the Company completed the discussions with the responsible governmental agency and finalized the plan for the removal of contaminated soil, underground water and buried waste, the corresponding costs can be reasonably estimated. As result, the Company additionally recorded reserve for implementation of environmental and safety arrangements in the amount of ¥2,580 million for the year ended March 31, 2018.

17. Leases

Operating lease transactions

Future minimum lease payments subsequent to March 31, 2019 under non-cancelable operating leases are summarized as follows:

Year ending March 31,	Millions of yen	Thousands of U.S. dollars
2020	¥ 308	$ 2,775
2021 and thereafter	403	3,630
Total	¥ 711	$ 6,405

18. Financial Instruments

Overview

(1) Policy for financial instruments

In consideration of plans for capital expenditures or cash management, the Company and its consolidated subsidiaries (collectively, the “Group”) raise funds through bank loans or issuing bonds for its domestic and overseas business. The Group manages temporary cash surpluses through low-risk financial assets. The Group uses derivatives for the purpose of reducing fluctuation risk of foreign exchange and interest rates. However, the use of derivatives is limited within the extent of risk at the basis of the actual demand and the Group does not enter into derivatives for speculative or trading purposes.

(2) Types of financial instruments and related risk

Trade receivables – trade notes and accounts receivable – are exposed to credit risk in relation to customers. In addition, the Group has global operations and the percentage of sales transactions denominated in foreign currencies is high. As a result, the Group is exposed to foreign currency exchange risk arising from receivables denominated in foreign currencies.

Marketable securities and investments in securities are exposed to market risk. Those securities are composed of mainly held-to-maturity debt securities and the shares of common stock of other companies with which the Group has business relationships, or affiliated companies. The Group has also loans receivable from other companies with which it has business relationships. These loans receivable are exposed to credit risk.

Regarding trade payables – trade notes and accounts payable – the Group is exposed to the risk of failure of settlement of these payables at the due date because of working capital issue, which may result in loss of credit. The Group is also exposed to foreign currency exchange risk arising from those payables denominated in foreign currencies due to the import of raw materials and other supplies.

A portion of bank loans and bonds has some financial covenants, which may result in the risk of early repayment depending on the fluctuation of the financial position of the Group. Short-term and long-term bank loans with variable interest rates are exposed to interest rate fluctuation risk. The repayment dates of the debt extend up to 8 years from the balance sheet date.

Regarding derivatives, the Group enters into forward foreign exchange contracts to reduce the foreign currency exchange risk arising from the receivables and payables denominated in foreign currencies. The Group also enters into interest rate swap transactions to reduce fluctuation risk deriving from interest payable for long-term bank loans bearing interest at variable rates. Information regarding the method of hedge accounting is described in Note 2 (f).

(3) Risk management for financial instruments

(a) Monitoring of credit risk (the risk that customers or counterparties may default)

In accordance with the internal policies for credit limit management, the Group reduces certain risks arising from credit transactions with customers by setting credit limits for individual customers, managing maturity dates and outstanding amounts, recognizing the existing risks and controlling all receivables appropriately. The Group monitors the financial situation of its main customers periodically and compares outstanding receivables balances with the amounts of credit limit by each customer periodically and confirms that the internal policies are appropriately applied.

In accordance with the internal policies for asset management, the Group invests in held-to-maturity debt securities with high credit ratings. Accordingly, the Group believes that the credit risk deriving from such debt securities is insignificant.

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

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

For trade receivables and payables denominated in foreign currencies, the Group identifies the foreign currency exchange risk for each currency on a monthly basis and enters into forward foreign exchange contracts to hedge such risk. In order to mitigate the unfavorable impact caused by foreign currency exchange fluctuations on accounts receivable deriving from forecasted export sales transactions, the Group may enter into forward foreign exchange contracts to the extent it is probable that those forecasted export sales take place. In order to mitigate the interest rate risk for loans payable and bonds bearing interest at variable rates, the Group may also enter into interest rate swap transactions.

For marketable securities and investments in securities, the Group periodically reviews the fair values of such financial instruments and the financial position of the issuers. In addition, the Group continuously evaluates whether securities other than those classified as held-to-maturity debt securities should be maintained taking into account their fair values and the relationships with the issuers.

In conducting derivative transactions, the division in charge of derivative transactions follows the internal policies, and requests divisions that perform such derivative transactions to report these transactions, and reconciles this information with transaction details obtained from financial institutions. The division prepares monthly reports which include actual transaction data, the contracted amounts, principals, fair value of these derivatives and valuation gains or losses. These reports are then submitted to the Board of Directors for their review.

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

Based on the reports from each cash management division, the Group prepares and updates its cash flow plans on a monthly basis to manage liquidity risk. The Group also reports these plans to the Board of Directors and takes actions if necessary to maintain a specified level of cash position.

(4) Supplementary explanation of the estimated fair value of financial instruments

The fair value of financial instruments is based on their quoted market price, if available. When there is no quoted market price available, fair value is reasonably estimated. Since various assumptions and factors are reflected in estimating the fair value, different assumptions and factors could result in different fair value. In addition, the notional amounts of derivatives in Note 19 are not necessarily indicative of the actual market risk involved in the derivative transactions.

Estimated Fair Value of Financial Instruments

The carrying value of financial instruments on the consolidated balance sheets, estimated fair value and the differences as of March 31, 2019 and 2018 are shown in the following table. The following table does not include financial instruments for which it is extremely difficult to determine the fair value. (Please refer to Note 18(b) below) *(a) Estimated fair value of financial instruments*

	Millions of yen					
	2019			2018		
	Carrying value	Estimated fair value	Difference	Carrying value	Estimated fair value	Difference
Assets:						
(1) Cash and deposits	¥ 23,984	¥ 23,984	¥ –	¥ 30,297	¥ 30,297	¥ –
(2) Trade receivables	33,898	33,898	–	29,881	29,881	–
(3) Securities and investments in securities:						
Held-to-maturity debt securities	9	10	1	10	10	0
Other securities	1,435	1,435	–	1,669	1,669	–
Total assets	¥ 59,326	¥ 59,327	¥ 1	¥ 61,857	¥ 61,857	¥ 0
Liabilities:						
(1) Trade payables	15,393	15,393	–	12,089	12,089	–
(2) Short-term bank loans	8,000	8,000	–	10,410	10,410	–
(3) Long-term bank loans, including current portion	35,800	36,211	411	34,113	34,248	135
Total liabilities	¥ 59,193	¥ 59,604	¥ 411	¥ 56,612	¥ 56,747	¥ 135
Derivatives (*)	¥ 5	¥ 5	¥ –	¥ 70	¥ 70	¥ –

	Thousands of U.S. dollars		
	2019		
	Carrying value	Estimated fair value	Difference
Assets:			
(1) Cash and deposits	$216,072	$216,072	$ –
(2) Trade receivables	305,387	305,387	–
(3) Securities and investments in securities:			
Held-to-maturity debt securities	81	90	9
Other securities	12,928	12,928	–
Total assets	$534,468	$534,477	$ 9
Liabilities:			
(1) Trade payables	138,676	138,676	–
(2) Short-term bank loans	72,072	72,072	–
(3) Long-term bank loans, including current portion	322,522	326,225	3,703
Total liabilities	$533,270	$536,973	$ 3,703
Derivatives (*)	$ 45	$ 45	$ –

(*) Assets and liabilities arising from derivatives are shown at net value with the amount in parentheses representing net liability position.

Methods to determine the estimated fair value of financial instruments and other matters related to securities and derivative transactions are as follows:

Assets:

(1) Cash and deposits and (2) Trade receivables

Since these items are settled in a short time period, their carrying value approximates estimated fair value.

(3) Securities and investments in securities

The fair value of equity and debt securities is based on quoted market prices. Regarding the information on securities and investments in securities corresponding to holding purposes, please refer to Note 6.

Liabilities:

(1) Trade payables and (2) Short-term bank loans

Since these items are settled in a short time period, their carrying value approximates estimated fair value.

(3) Long-term bank loans, including current portion

For long-term bank loans with floating interest rates, their carrying value approximates estimated fair value because their interest rate reflects the market interest rate.

The estimated fair value of long-term bank loans with fixed interest rates is based on the present value of the total of principal and interest discounted by the interest rate to be applied assuming new loans under the similar conditions to existing loans are made.

Derivatives:

Please refer to Note 19 "Derivatives."

(b) Financial instruments whose fair values were extremely difficult to determine

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Unlisted equity securities	¥ 5,572	¥ 2,485	$ 50,198
Investments in limited partnerships	2	21	18

Because no quoted market price is available and it is extremely difficult to determine the fair value, the above financial instruments are not included in the preceding table.

(c) Redemption schedule of deposits, monetary receivables and securities with maturities

	Millions of yen				Millions of yen			
	2019				2018			
	Due in 1 year or less	Due after 1 year through 5 years	Due after 5 years through 10 years	Due after 10 years	Due in 1 year or less	Due after 1 year through 5 years	Due after 5 years through 10 years	Due after 10 years
Deposits	¥ 23,975	¥ –	¥ –	¥ –	¥ 30,288	¥ –	¥ –	¥ –
Trade receivables	33,898	–	–	–	29,881	–	–	–
Investments in securities:								
Held-to-maturity debt securities	–	9	–	–	–	10	–	–
Total	¥ 57,873	¥ 9	¥ –	¥ –	¥ 60,169	¥ 10	¥ –	¥ –

	Thousands of U.S. dollars			
	2019			
	Due in 1 year or less	Due after 1 year through 5 years	Due after 5 years through 10 years	Due after 10 years
Deposits	$215,991	$ –	$ –	$ –
Trade receivables	305,387	–	–	–
Investments in securities:				
Held-to-maturity debt securities	–	81	–	–
Total	$521,378	$ 81	$ –	$ –

(d) Redemption schedule of long-term debt

	Millions of yen					
	2019					
	Due in 1 year or less	Due after 1 year through 2 years	Due after 2 years through 3 years	Due after 3 years through 4 years	Due after 4 years through 5 years	Due after 5 years
Long-term bank loans	¥ 10,102	¥ 7,780	¥ 6,513	¥ 5,387	¥ 3,973	¥ 2,045
Bonds	390	390	390	390	210	240
Lease obligations	451	333	203	73	6	1
Total	¥ 10,943	¥ 8,503	¥ 7,106	¥ 5,850	¥ 4,189	¥ 2,286

	Thousands of U.S. dollars					
	2019					
	Due in 1 year or less	Due after 1 year through 2 years	Due after 2 years through 3 years	Due after 3 years through 4 years	Due after 4 years through 5 years	Due after 5 years
Long-term bank loans	$ 91,009	$ 70,090	$ 58,676	$ 48,531	$ 35,793	$ 18,424
Bonds	3,514	3,514	3,514	3,514	1,891	2,162
Lease obligations	4,063	3,000	1,829	658	54	9
Total	$ 98,586	$ 76,604	$ 64,019	$ 52,703	$ 37,738	$ 20,595

19. Derivatives

The notional amounts and the estimated fair value of the derivative instruments outstanding which did not qualify for deferral hedge accounting at March 31, 2019 and 2018 were as follows:

(a) Currency-related transactions

Forward foreign exchange contracts:

	Millions of yen							
	2019				2018			
	Notional amount	Notional amount (over 1 year)	Estimated fair value (*)	Unrealized gain (loss)	Notional amount	Notional amount (over 1 year)	Estimated fair value (*)	Unrealized gain (loss)
Sell:								
Euro	¥ –	¥ –	¥ –	¥ –	¥ 1,349	¥ –	¥ 56	¥ 56
Buy:								
Japanese yen	369	–	5	5	580	–	(10)	(10)
U.S. dollars	39	–	(0)	(0)	90	–	(1)	(1)
Total	¥ 408	¥ –	¥ 5	¥ 5	¥ 2,019	¥ –	¥ 45	¥ 45

	Thousands of U.S. dollars			
	2019			
	Notional amount	Notional amount (over 1 year)	Estimated fair value (*)	Unrealized gain
Sell:				
Euro	$ –	$ –	$ –	$ –
Buy:				
Japanese yen	3,325	–	45	45
U.S. dollars	351	–	(0)	(0)
Total	$ 3,676	$ –	$ 45	$ 45

(*) The estimated fair value of forward foreign currency exchange contracts is computed using prices provided by counterparty financial institutions.

(b) Currency-related transactions (hedge accounting is applied)

Forward foreign exchange contracts:

			Millions of yen					
			2019			2018		
Method of accounting	Classification	Hedged item	Notional amount	Notional amount (over 1 year)	Estimated fair value (*)	Notional amount	Notional amount (over 1 year)	Estimated fair value (*)
Deferred hedge method	Sell: Euro	Accounts receivable	¥ –	¥ –	¥ –	¥ 645	¥ –	¥ 24
The allocation method	Sell: Euro	Accounts receivable	–	–	–	50	–	(**)
	Buy: U.S. dollars	Accounts payable	–	–	–	5	–	(**)
Total			¥ –	¥ –	¥ –	¥ 700	¥ –	¥ 24

			Thousands of U.S. dollars		
			2019		
Method of accounting	Classification	Hedged item	Notional amount	Notional amount (over 1 year)	Estimated fair value (*)
Deferred hedge method	Sell: Euro	Accounts receivable	$ –	$ –	$ –
The allocation method	Sell: Euro	Accounts receivable	–	–	–
	Buy: U.S. dollars	Accounts payable	–	–	–
Total			$ –	$ –	$ –

(*) The estimated fair value of forward foreign currency exchange contracts is computed using prices provided by counterparty financial institutions.
(**) Because forward foreign exchange contracts are accounted for as if the exchange rates applied to the forward foreign exchange contracts had originally applied to the accounts receivable or payable, their fair values were included in accounts receivable or payable.

(c) Interest-related transactions (hedge accounting is applied)

			Millions of yen					
			2019			2018		
Method of accounting	Classification	Hedged item	Notional amount	Notional amount (over 1 year)	Estimated fair value (*)	Notional amount	Notional amount (over 1 year)	Estimated fair value (*)
The special method	Receive/floating and pay/fixed	Long-term bank loans	¥ 7,188	¥ 4,280	¥ (**)	¥ 7,261	¥ 3,588	¥ (**)

			Thousands of U.S. dollars		
			2019		
Method of accounting	Classification	Hedged item	Notional amount	Notional amount (over 1 year)	Estimated fair value (*)
The special method	Receive/floating and pay/fixed	Long-term bank loans	$ 64,757	$ 38,559	$ (**)

(*) The estimated fair value of forward foreign currency exchange contracts is computed using prices provided by counterparty financial institutions.
(**) Because interest rate swap agreements are accounted for as if the interest rates applied to the swaps had originally applied to the long-term bank loans, their estimated fair values were included in estimated fair value of long-term bank loans.

20. Other Comprehensive Income

The following table presents reclassification adjustments and tax effects for components of other comprehensive income (loss) for the years ended March 31, 2019 and 2018:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Net unrealized holding (loss) gain on securities:			
Amount arising during the year	¥ (266)	¥ 152	$ (2,396)
Before tax effect	(266)	152	(2,396)
Tax effect	75	(48)	675
Total	(191)	104	(1,721)
Unrealized deferred gain on hedges:			
Amounts arising during the year	–	0	–
Reclassification adjustments for gains and losses included in net income	–	0	–
Before tax effect	–	0	–
Tax effect	–	(0)	–
Total	–	0	–
Translation adjustments:			
Amount arising during the year	(379)	719	(3,414)
Before tax effect	(379)	719	(3,414)
Tax effect	–	–	–
Total	(379)	719	(3,414)
Retirement benefits liability adjustments:			
Amount arising during the year	13	(65)	117
Reclassification adjustments for gains and losses included in net income	105	98	946
Before tax effect	118	33	1,063
Tax effect	(36)	(12)	(324)
Total	82	21	739
Other comprehensive income (loss) of affiliates accounted for by the equity method attributable to the Company	6	(120)	54
Total other comprehensive (loss) income	¥ (482)	¥ 724	$ (4,342)

21. Supplemental Information to Consolidated Statements of Cash Flows

Information on significant non-cash transactions

The Company and its consolidated subsidiaries recorded new leased assets of ¥366 million ($3,297 thousand) and ¥302 million and lease obligations of ¥395 million ($3,559 thousand) and ¥325 million under finance leases for the years ended March 31, 2019 and 2018, respectively.

22. Amounts per Share

	Yen		U.S. dollars
	2019	2018	2019
Net assets per share	¥ 1,885.01	¥ 1,679.77	$ 16.98
Net income attributable to owners of parent per share	217.26	86.12	1.95

Net income attributable to owners of parent per share is based on the net income attributable to shareholders of common stock and the weighted-average number of shares of common stock outstanding during each year. Net assets per share are based on the number of shares of common stock outstanding at the year end.

Diluted net income attributable to owners of parent per share for the years ended March 31, 2019 and 2018 is not presented since no potentially dilutive securities have been issued.

The financial data for the computation of basic net income attributable to owners of parent per share for the years ended March 31, 2019 and 2018 in the table above is summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Information on basic net income attributable to owners of parent per share:			
Net income attributable to owners of parent	¥ 8,683	¥3,442	$ 78,225
Net income not attributable to common shareholders	–	–	–
Adjusted net income attributable to common shareholders	¥ 8,683	¥3,442	$ 78,225

	Thousands of shares	
	2019	2018
Weighted-average number of shares of common stock outstanding during the year	39,967	39,971

The financial data for the computation of net assets per share at March 31, 2019 and 2018 in the above table is summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Total net assets	¥ 75,335	¥ 67,138	$ 678,697
Deductions from total net assets:			
Non-controlling interests	–	–	–
Total net assets used in the calculation of net assets per share	¥ 75,335	¥ 67,138	$ 678,697

	Thousands of shares	
	2019	2018
Number of shares used in the calculation of net assets per share	39,965	39,968

23. Related Party Transactions

Major transactions and balances between the Company and an affiliated company for the years ended and as of March 31, 2019 and 2018 were as follows:

	Transactions				Balances			
		Millions of yen		Thousands of U.S. dollars		Millions of yen		Thousands of U.S. dollars
Name of affiliated company	Type of transaction	2019	2018	2019	Account	2019	2018	2019
BELCHIM CROP PROTECTION N.V.	Sales of products	¥ –	¥ 399	$ –	Trade receivables	¥ –	¥ –	$ –

Major transactions and balances between a consolidated subsidiary and an affiliated company for the years ended and as of March 31, 2019 and 2018 were as follows:

	Transactions				Balances			
		Millions of yen		Thousands of U.S. dollars		Millions of yen		Thousands of U.S. dollars
Name of affiliated company	Type of transaction	2019	2018	2019	Account	2019	2018	2019
BELCHIM CROP PROTECTION N.V.	Sales of products	¥ 11,267	¥ 17,038	$101,505	Trade receivables	¥ 2,755	¥ 4,118	$ 24,820

The condensed financial statements of BELCHIM CROP PROTECTION N.V. as the significant related party as of and for the years ended March 31, 2019 and 2018 are as follows:

	Millions of yen		Thousands of U.S. dollars
	March 31		March 31
	2019	2018	2019
Current assets	¥ 55,839	¥ 52,689	$ 503,654
Fixed assets	7,154	7,843	64,451
Total assets	¥ 62,993	¥ 60,532	$ 567,505
Current liabilities	¥ 57,065	¥ 52,313	$ 514,099
Long-term liabilities	11,268	8,855	101,514
Total liabilities	68,333	61,168	615,613
Total net assets	(5,340)	(636)	(48,108)
Total liabilities and net assets	¥ 62,993	¥ 60,532	$ 567,505

	Millions of yen		Thousands of U.S. dollars
	For the years ended March 31		For the year ended March 31
	2019	2018	2019
Net sales	¥ 54,626	¥ 59,280	$ 492,126
Income before income taxes	(2,648)	560	23,856
Net (loss) income	¥ (3,504)	(478)	(31,568)

24. Business Combination

Transactions under common control

At the meeting of the Board of Directors held on August 10, 2018, the Company resolved to implement an absorption-type merger with its consolidated subsidiary, Yokkaichi Energy Service Co., Ltd. Based on this resolution, the Company, as the surviving company, merged with Yokkaichi Energy Service Co., Ltd., effective October 1, 2018.

(1) Outline of the merger

1. Name and business description of the company involved in the merger
   Name of the company involved in the merger: Yokkaichi Energy Service Co., Ltd.
   Business description: Production, supply and sale of electric power and steam for industrial use
2. Date of the business combination
   October 1, 2018
3. Legal form of the business combination
   The Company, as the surviving company, has absorbed Yokkaichi Energy Service Co., Ltd. which has been dissolved upon the merger.
4. Name of the company after the business combination
   Ishihara Sangyo Kaisha, Ltd.
5. Other items related to the outline of the transaction
   The Company decided to implement an absorption-type merger with Yokkaichi Energy Service Co., Ltd., with the aim of consolidating the all management resources related to Yokkaichi Plant and improving the efficiency of its operations.

(2) The Accounting methods applied

In accordance with the "Accounting Standard for Business Combinations" (ASBJ Statement No. 21, September 13, 2013) and the "Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures" (ASBJ Guidance No. 10, September 13, 2013), the merger has been accounted for as a transaction under common control.

25. Segment Information

(a) Overview of the reportable segments

The Company's reportable segments are determined on the basis that such segments provide the Board of Directors with specific information to determine the business activity policy and allocation of management resources and to evaluate their business performance. Consequently, the Company has classified its business into three reportable segments of "Inorganic chemicals," "Organic chemicals," and "Other businesses" based on the properties of products and services sold, manufacturing methods and processes.

Inorganic chemicals

This reportable segment includes the business of manufacturing and sales of titanium dioxide, functional materials, which are value-added products designed to take advantage of the characteristics of titanium dioxide and other inorganic chemicals.

Organic chemicals

This reportable segment includes the business of manufacturing and sales of organic intermediates such as agrochemicals and active pharmaceutical ingredients.

Other businesses

This reportable segment principally includes the trading business and the construction business.

(b) Valuation method for reportable segment sales, income and assets

The accounting policies for the reportable business segments are the same as those described in Note 2. Intersegment sales are recorded at the same prices used in transactions with third parties.

(c) Reportable segment information

	Millions of yen					
	2019					
	Reportable segments					
	Inorganic chemicals	Organic chemicals	Other businesses	Subtotal	Elimination and corporate (*1)	Consolidated (*2)
Net sales and operating income:						
Net sales:						
External customers	¥ 54,883	¥ 47,672	¥ 3,886	¥ 106,441	¥ –	¥ 106,441
Intersegment	–	–	5,538	5,538	(5,538)	–
Net sales	54,883	47,672	9,424	111,979	(5,538)	106,441
Segment income	¥ 7,268	¥ 5,903	¥ 664	¥ 13,835	¥ (2,463)	¥ 11,372
Segment assets	¥ 78,592	¥ 57,746	¥ 3,697	¥ 140,035	¥ 28,655	¥ 168,690
Other items:						
Depreciation and amortization of intangible assets	3,229	851	49	4,129	137	4,266
Loss on impairment of fixed assets	–	–	–	–	121	121
Increase in fixed tangible and intangible assets	6,165	915	96	7,176	63	7,239

	Millions of yen					
	2018					
	Reportable segments					
	Inorganic chemicals	Organic chemicals	Other businesses	Subtotal	Elimination and corporate (*1)	Consolidated (*2)
Net sales and operating income:						
Net sales:						
External customers	¥ 54,441	¥ 50,461	¥ 3,099	¥ 108,001	¥ –	¥108,001
Intersegment	–	–	4,937	4,937	(4,937)	–
Net sales	54,441	50,461	8,036	112,938	(4,937)	108,001
Segment income	¥ 7,984	¥ 3,576	¥ 618	¥ 12,178	¥ (2,156)	¥ 10,022
Segment assets	¥ 69,542	¥ 51,706	¥ 2,798	¥ 124,046	¥ 35,721	¥159,767
Other items:						
Depreciation and amortization of intangible assets	3,178	873	49	4,100	114	4,214
Loss on impairment of fixed assets	55	–	–	55	–	55
Increase in fixed tangible and intangible assets	5,335	788	24	6,147	293	6,440

	Thousands of U.S. dollars					
	2019					
	Reportable segments					
	Inorganic chemicals	Organic chemicals	Other businesses	Subtotal	Elimination and corporate (*1)	Consolidated (*2)
Net sales and operating income:						
Net sales:						
External customers	$ 494,442	$ 429,477	$ 35,009	$ 958,928	$ –	$ 958,928
Intersegment	–	–	49,892	49,892	(49,892)	–
Net sales	494,442	429,477	84,901	1,008,820	(49,892)	958,928
Segment income	$ 65,477	$ 53,180	$ 5,982	$ 124,639	$ (22,189)	$ 102,450
Segment assets	$ 708,037	$ 520,234	$ 33,306	$1,261,577	$ 258,153	$1,519,730
Other items:						
Depreciation and amortization of intangible assets	29,090	7,667	441	37,198	1,234	38,432
Loss on impairment of fixed assets	–	–	–	–	1,090	1,090
Increase in fixed tangible and intangible assets	55,540	8,243	865	64,648	568	65,216

(*1) The elimination and corporate applicable to segment income amounted to ¥2,463 million ($22,189 thousand) and ¥2,156 million in the above tables and includes ¥120 million ($1,081 thousand) and ¥79 million of eliminations of intersegment transactions and ¥2,343 million ($21,108 thousand) and ¥2,077 million of corporate expenses, which are not allocable to the reportable segments for the years ended March 31, 2019 and 2018, respectively. Corporate expenses mainly comprise expenses incurred by the administration department of the Company, which are not allocable to any reportable segment.
The elimination and corporate applicable to segment assets amounted to ¥28,655 million ($258,153 thousand) and ¥35,721 million includes ¥1,142 million ($10,288 thousand) and ¥959 million of offset of inter-segment receivables and payables, and ¥29,797 million ($268,441 thousand) and ¥36,680 million of corporate assets, which are not allocable to a reportable segment as of March 31, 2019 and 2018, respectively. Corporate assets consist of investments of surplus funds (cash and securities), long-term investments (investments in securities), assets of the administration department and so forth.

(*2) Segment income corresponds to operating income in the consolidated statements of income.

Related information

Products and services information

The information on each product and service is omitted because it is the same as that of reportable segment information for the years ended March 31, 2019 and 2018.

Geographical information

Net sales by geographical segment for the years ended March 31, 2019 and 2018 are summarized as follows:

	Millions of yen					
	Year ended March 31, 2019					
	Japan	Asia	America	Europe	Other	Total
Net sales	¥ 52,829	¥ 22,930	¥ 14,955	¥ 15,466	¥ 261	¥ 106,441

	Millions of yen					
	Year ended March 31, 2018					
	Japan	Asia	America	Europe	Other	Total
Net sales	¥ 50,309	¥ 22,928	¥ 12,384	¥ 22,097	¥ 283	¥ 108,001

	Thousands of U.S. dollars					
	Year ended March 31, 2019					
	Japan	Asia	America	Europe	Other	Total
Net sales	$ 475,937	$ 206,577	$ 134,730	$ 139,333	$ 2,351	$ 958,928

The regions are determined on the basis of geographic proximity and the Company's business activities as follows:

Asia: China, Taiwan, South Korea, Thailand, Indonesia, Singapore and India
America: The United States, Canada, Brazil, Argentina and Mexico
Europe: Germany, the Netherlands, France, the United Kingdom, Belgium, Italy, Eastern Europe and the Middle East
Other: Australia, New Zealand and Africa

Property, plant and equipment by geographical segment as of March 31, 2019 and 2018 are summarized as follows:

	Millions of yen				
	At March 31, 2019				
	Japan	Asia	America	Europe	Total
Property, plant and equipment	¥ 42,180	¥ 133	¥ 827	¥ 27	¥ 43,167

	Millions of yen				
	At March 31, 2018				
	Japan	Asia	America	Europe	Total
Property, plant and equipment	¥ 39,810	¥ 141	¥ 849	¥ 43	¥ 40,843

	Thousands of U.S. dollars				
	At March 31, 2019				
	Japan	Asia	America	Europe	Total
Property, plant and equipment	$ 380,000	$ 1,198	$ 7,450	$ 244	$ 388,892

Geographical segments are determined on the basis of geographic proximity and the Company's business activity as follows:

Asia: Taiwan
America: The United States
Europe: Belgium

Information on sales transactions with major customers

Sales transactions with a major customer for the year ended March 31, 2019 and 2018 are as follows:

		Millions of yen		Thousands of U.S. dollars
Customer name	Relevant reportable segments	2019	2018	2019
MITSUI & CO., LTD.	Inorganic chemicals and Organic chemicals	¥ 11,920	¥ 11,717	$ 107,387

26. Subsequent Events

Cash dividends

The following distribution of retained earnings of the Company, which has not been reflected in the accompanying consolidated financial statements for the year ended March 31, 2019 was approved at a meeting on the shareholders of the Company held on June 27, 2019:

	Millions of yen	Thousands of U.S. dollars
Cash dividends (¥12.00 = US $0.11 per share)	¥ 480	$ 4,324

Report of Independent Public Accountants

EY
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Independent Auditor's Report

The Board of Directors
Ishihara Sangyo Kaisha, Ltd.

We have audited the accompanying consolidated financial statements of Ishihara Sangyo Kaisha, Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2019, 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 Ishihara Sangyo Kaisha, Ltd. and its consolidated subsidiaries as at March 31, 2019, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

Convenience Translation

We have reviewed the translation of these consolidated financial statements into U.S. dollars, presented for the convenience of readers, and, in our opinion, the accompanying consolidated financial statements have been properly translated on the basis described in Note 1.

Ernst & Young Shin Nihon LLC

June 27, 2019
Osaka, Japan

Corporate Data

(As of June 28, 2019)

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Yasunobu Kawazoe
Hideo Takahashi

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Hiroshi Katsumata
Tatsuo Hanazawa

Board of Corporate Auditors

(Standing) Corporate Auditor
Taizo Kato
Michiyoshi Arata

Outside Corporate Auditors
Yoshitaka Akikuni
Masaaki Harima

Executive Officers

President & Chief Executive Officer
Kenichi Tanaka

Managing Executive Officers
Teruaki Matsue
Kiyomitsu Yoshida
Yasunobu Kawazoe
Hideo Takahashi
Masanari Kato
Masaki Shimojo

Executive Officers
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Kiyoshi Masuda
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