Notes to Consolidated Financial Statements

Mitsubishi Gas Chemical Company, Inc. and Consolidated Subsidiaries
For the year ended March 31, 2018

1. Summary of Significant Accounting Policies

(a) Basis of Presenting Consolidated Financial Statements

Mitsubishi Gas Chemical Company, Inc. (the Company) and its domestic subsidiaries maintain their books of account and prepare their financial statements in conformity with financial accounting standards of Japan, and its foreign subsidiaries in conformity with those of the countries of their domicile.

"Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for Consolidated Financial Statements" (ASBJ Practical Issues Task Force (PITF) No. 18, May 17, 2006) and "Practical Solution on Unification of Accounting Policies Applied to Associates Accounted for by the Equity Method" (ASBJ Practical Issues Task Force (PITF) No. 24, March 10, 2008) require that for the preparation of consolidated financial statements, the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should be unified, in principle, and financial statements prepared by foreign subsidiaries in accordance with IFRSs or the generally accepted accounting principles in the United States (U.S. GAAP) tentatively may be used for the consolidation process, however, the items listed in the PITF should be adjusted in the consolidation process so that profit (loss) is accounted for in accordance with Japan GAAP unless they are not material. The Company made necessary modification to the consolidated financial statements according to the PITF.

The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations, and in conformity with accounting principles and practices generally accepted in Japan, which may differ in certain respects from accounting principles and practices generally accepted in countries and jurisdictions other than Japan.

In preparing the accompanying consolidated financial statements, certain reclassifications have been made in the financial statements issued domestically in Japan in order to present them in a form 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.

(b) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and 70 subsidiaries (71 in 2017). The Company and its consolidated subsidiaries are collectively referred to as "MGC."

All significant intercompany accounts and transactions have been eliminated in consolidation.

JAPAN PIONICS CO., LTD. was excluded from the scope of consolidation due to the sale of the entirety of shares during the year ended March 31, 2018.

Investments in an unconsolidated subsidiary and 15 affiliates (15 in 2017) are accounted for by the equity method.

The Accounting Standards for Consolidation require the control or influence concept for the consolidation scope of subsidiaries and affiliates. Under the control or influence concept, a company in which the parent company or its consolidated subsidiaries, directly or indirectly, are able to exercise control over operations is fully consolidated, and a company over which the parent company and/or its consolidated subsidiaries have the ability to exercise significant influence is accounted for by the equity method.

The difference between the cost and the underlying net assets at the date of investments in subsidiaries or affiliates is allocated to identifiable assets and liabilities based on fair market value at the date of investments.

The unallocated portion of the difference, which is recognized as goodwill, is being amortized using the straight-line method over an expected benefit period by each investment within 20 years.

The fiscal year-ends of 31 consolidated subsidiaries (31 in 2017) are December 31. For consolidation purposes, the Company uses their financial statements as of December 31 with necessary consolidation adjustments made to reflect any significant transactions which occurred between January 1 and March 31.

(c) Cash and Cash Equivalents

For the purpose of the statement of cash flows, MGC considers all highly liquid investments with insignificant risk of changes in value, which have maturities of generally three months or less when purchased, to be cash equivalents.

(d) Short-term Investments and Investments in Securities

Under the Accounting Standards for Financial Instruments, securities are classified into four categories – "trading securities," "held-to-maturity securities," "investments in affiliates" and "other securities." Securities classified as "trading securities" are stated at fair value and unrealized gains or losses are recorded in the consolidated statement of income. Securities classified as "held-to-maturity securities" are stated at amortized cost. Securities classified as "other securities" with fair value are stated at fair value and unrealized gains or losses, net of related taxes, are excluded from earnings and reported as accumulated other comprehensive income in the consolidated balance sheet. Debt classified as "other securities" for which fair value is not available are stated at the amortized cost. Equity securities classified as "other securities" for which fair value is not available are stated at the moving-average cost. Realized gains and losses on the other securities are computed using the moving-average cost. Securities held by the Company are classified as held-to-maturity securities, investments in affiliates and other securities.

(e) Inventories

Inventories held for sale in the ordinary course of business are measured at the lower of cost or net selling value, which is defined as the selling price less additional estimated manufacturing costs and estimated direct selling expenses, determined principally by the average method.

(f) Property, Plant and Equipment

Property, plant and equipment is carried substantially at cost. Depreciation of the property, plant and equipment is provided principally by the straight-line method based on the estimated useful lives.

The estimated useful lives are as follows:

Buildings and structures	7-50 years
Machinery, equipment and vehicles	8-15 years

(g) Intangible Assets

Intangible assets are carried at cost less accumulated amortization. The expenses for internal use computer software are deferred and amortized by the straight-line method over the estimated useful lives (5 years). Intangible assets other than software are deferred and amortized by the straight-line method at rates based on the estimated useful lives of the respective assets.

(h) Impairment of Long-lived Assets

The standard for the impairment of long-lived assets requires that fixed assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. An impairment loss would be recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group. The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset or the net selling price at disposition.

Recognized impairment losses, except for those to be deducted directly from acquisition costs of corresponding fixed assets, are included in accumulated depreciation on the consolidated balance sheet.

(i) Allowance for Doubtful Receivables

An allowance for doubtful receivables is provided at an amount of uncollectible receivables based on historical loss ratios and an amount that takes into consideration the possibility of specific liabilities.

(j) Retirement Benefits

In calculating retirement benefit obligation, the benefit formula basis is used for the method of attributing expected retirement benefits to the periods up to the end of the current fiscal year.

Past service costs are amortized by the straight-line method over a certain period within the average remaining years of service of the eligible employees (10 years) when such past service costs occur.

Actuarial gains and losses are amortized by the declining-balance method over a certain period within the average remaining years of service of the eligible employees (10 years) from the year following the year in which the gains or losses occur.

The Company and certain subsidiaries have unfunded defined benefit pension plans for directors, corporate auditors and executive officers. The provision for the plans has been made in the accompanying consolidated financial statements for the vested benefits to which directors, corporate auditors and executive officers are entitled if they were to retire or sever immediately at the balance sheet dates (See note 8).

(k) Leases

All finance lease transactions are capitalized. Leased assets related to finance lease transactions without title transfer are depreciated on a straight-line method, with the lease periods as their useful lives and no residual value.

(l) Foreign Currency Translation

Under the Accounting Standards for Foreign Currency Transactions, foreign currency transactions are translated into yen on the basis of the rates in effect at the transaction dates, receivables and payables denominated in foreign currencies are translated into yen at the rate of exchange as of the balance sheet dates, and gains or losses resulting from the translation of foreign currencies are credited or charged to income. Assets and liabilities of overseas subsidiaries are translated into yen at the rate of exchange as of the balance sheet date, and revenues and expenses of them are translated into yen using the average rate in the year, and a comprehensive adjustment resulting from translation is presented as “Foreign currency translation adjustments” and “Non-controlling interests” in a component of net assets.

(m) Income Taxes

Income taxes in Japan applicable to the Company and its domestic consolidated subsidiaries consist of corporate tax, inhabitant tax and business tax.

The Accounting Standards for Income Taxes require that deferred income taxes be accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled, and the effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

(n) Accrual for Environmental Measures

An accrual for environmental measures is provided at an estimated amount of disposal and transport costs of polychlorinated biphenyl waste based on the handling cost publicized by Japan Environmental Storage & Safety Corporation. The Act of Special Measures for Proper Handling of Polychlorinated Biphenyl Waste requires proper handling of polychlorinated biphenyl waste.

(o) Asset Retirement Obligations

The Company recognized an asset retirement obligation which is statutory or similar obligation with regard to the removal of assets as a liability. An asset retirement obligation is recognized as a liability at the time that the asset is incurred by its acquisition, construction, development or ordinary use. When an asset retirement obligation is recognized as a liability, the asset retirement cost corresponding to it is included in the cost of the relevant asset by the same amount.

(p) Accrued Business Structure Improvement Expenses

The Company provides a reasonably estimated amount of structural reform costs for unprofitable business.

(q) Provision for Loss on Liquidation of Subsidiaries and Affiliates

The Company provides a reasonably estimated amount for loss to be incurred in association with liquidation of subsidiaries and affiliates.

(r) Reclassifications

Certain reclassifications have been made to the prior years' consolidated financial statements to conform to the presentation used for the year ended March 31, 2018.

(s) Additional Information (Adoption of IFRS by Overseas Affiliates)

In applying the equity method to the financial statements of Japan Saudi Arabia Methanol Company, Inc. (JSA Methanol), an affiliate of the Company, the equity method was applied to the investments in SAUDI METHANOL COMPANY, an overseas affiliate of JSA Methanol, to recognize the affiliate's profit and loss, which were included in the financial statements of JSA Methanol. From the fiscal year ended March 31, 2018, JSA Methanol applies the equity method to the financial statements of SAUDI METHANOL COMPANY prepared in accordance with IFRS.

In addition, the Company applies the equity method to the financial statements of Tai Hong Circuit Industrial Co., Ltd., an overseas affiliate of the Company, prepared in accordance with IFRS from the fiscal year ended March 31, 2018.

These changes have been applied retrospectively and the prior year consolidated financial statements have been restated.

As a result, profit before income taxes for the year ended March 31, 2017 increased by ¥51 million ($480 thousand) compared to the amount previously determined before retrospective application. In addition, retained earnings as of April 1, 2016 decreased by ¥3,392 million ($31,928 thousand) reflecting the cumulative effects on the beginning balance of net assets in the prior year.

(t) Accounting Pronouncements Not Yet Adopted

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

The International Accounting Standards Board (IASB) and US Financial Accounting Standards Board (FASB) jointly developed comprehensive revenue recognition standards and issued "Revenue from Contracts with Customers" in May 2014 (IASB's IFRS 15 and FASB's Topic 606). Considering that IFRS 15 shall apply to fiscal years beginning on or after January 1, 2018, and Topic 606 shall apply to fiscal years beginning after December 15, 2017, the ASBJ developed a comprehensive accounting standard on revenue recognition and thus issued the accounting standard together with the implementation guidance.

The ASBJ established the accounting standard on revenue recognition by following the basic policies in developing it. The basic policies were: firstly, incorporating the core principle of IFRS 15 as the starting point from the perspective of facilitating comparability among financial statements, which is one of the benefits of ensuring consistency with IFRS 15; secondly, adding alternative treatments, but to the extent not impairing comparability, where consideration should be given to the practice having been used in Japan.

These ASBJ statement and implementation guidance will be applied from the fiscal year beginning on April 1, 2021.

The impact of the application of the Accounting Standard for Revenue Recognition on the consolidated financial statements is currently under evaluation.

2. Financial Statement Translation

The translations of the yen amounts into U.S. dollars are included solely for the convenience of the readers, using the prevailing exchange rate as of March 31, 2018, which was ¥106.24 to U.S. $1. This translation should not be construed as a representation that the amounts shown could be converted into U.S. dollars at such rate.

3. Cash and Cash Equivalents

(a) Reconciliation between "Cash" in the consolidated balance sheet and "Cash and cash equivalents" in the consolidated statement of cash flows as of March 31, 2018 and 2017 is as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Cash	**¥ 101,090**	¥ 75,017	**$ 951,525**
Time deposits with maturities of over three months	**(10,907)**	(7,979)	**(102,664)**
Short-term investments	**121**	139	**1,139**
Cash and cash equivalents	**¥ 90,304**	¥ 67,177	**$ 850,000**

(b) Details of the assets and liabilities of subsidiaries that have been excluded from the scope of consolidation due to sales of share

As of March 31, 2018
JAPAN PIONICS CO., LTD. has been excluded from the scope of consolidation due to the sale of the entirety of shares. The components of assets and liabilities at the time of the sale, the selling price and net proceeds from sales of shares of JAPAN PIONICS CO., LTD. are as follows:

	Millions of yen	Thousands of U.S. dollars
	2018	2018
Current assets	¥ 2,100	$ 19,767
Non-current assets	1,049	9,874
Current liabilities	(1,091)	(10,269)
Non-current liabilities	(3)	(28)
Loss on sales of shares	(1,245)	(11,719)
Selling price of shares	¥ 808	$ 7,605
Cash and cash equivalents	(4)	(38)
Payments for sales of shares of subsidiaries resulting in change in scope of consolidation	¥ 804	$ 7,568

As of March 31, 2017
KOKUKA SANGYO CO., LTD. and its five subsidiaries have been excluded from the scope of consolidation due to sales of a part of shares. The components of assets and liabilities at the time of sales, the selling price and net payments for sales of shares of KOKUKA SANGYO CO., LTD. and its five subsidiaries are as follows:

	Millions of yen
	2017
Current assets	¥ 2,007
Non-current assets	18,249
Current liabilities	(3,481)
Non-current liabilities	(15,418)
Net unrealized gain on other securities	(4)
Non-controlling interests	(339)
Investment account after sale of shares	(675)
Loss on sales of shares	(127)
Selling price of shares	¥ 210
Cash and cash equivalents	(523)
Payments for sales of shares of subsidiaries resulting in change in scope of consolidation	¥ (313)

4. Short-term Investments and Investments in Securities

Balance sheet amount, fair value and gross unrealized gain and loss of held-to-maturity securities with fair value as of March 31, 2018 and 2017 are summarized as follows:

	Millions of yen			
	Balance sheet amount	Gross unrealized gain	Gross unrealized loss	Fair value
March 31, 2018				
Government bond securities	¥ 0	¥ 0	¥ —	¥ 0
	¥ 0	¥ 0	¥ —	¥ 0
March 31, 2017				
Government bond securities	¥ 0	¥ 0	¥ —	¥ 0
	¥ 0	¥ 0	¥ —	¥ 0

	Thousands of U.S. dollars			
	Balance sheet amount	Gross unrealized gain	Gross unrealized loss	Fair value
March 31, 2018				
Government bond securities	$ 0	$ 0	$ —	$ 0
	$ 0	$ 0	$ —	$ 0

Balance sheet amount, acquisition cost, and gross unrealized gain and loss of other securities with fair value as of March 31, 2018 and 2017 are summarized as follows:

	Millions of yen			
	Balance sheet amount	Gross unrealized gain	Gross unrealized loss	Acquisition cost
March 31, 2018				
Equity securities	¥ 48,573	¥ 25,512	¥ (589)	¥ 23,650
Other securities	9	—	(0)	10
	¥ 48,584	¥ 25,512	¥ (589)	¥ 23,661
March 31, 2017				
Equity securities	¥ 52,454	¥ 26,365	¥ (530)	¥ 26,619
Other securities	9	—	(0)	10
	¥ 52,465	¥ 26,365	¥ (530)	¥ 26,629

	Thousands of U.S. dollars			
	Balance sheet amount	Gross unrealized gain	Gross unrealized loss	Acquisition cost
March 31, 2018				
Equity securities	$ 457,201	$ 240,136	$ (5,544)	$ 222,609
Other securities	85	—	(0)	94
	$ 457,304	$ 240,136	$ (5,544)	$ 222,713

Securities classified as other securities for which fair value is not available are unlisted equity securities amounting to ¥4,267 million ($40,164 thousand) and ¥11,405 million as of March 31, 2018 and 2017, respectively.

For the years ended March 31, 2018 and 2017, proceeds from the sale of other securities are ¥4,716 million ($44,390 thousand) and ¥1,960 million, respectively. Gross realized gains are ¥2,066 million ($19,447 thousand) and ¥860 million for the years ended March 31, 2018 and 2017, respectively. Gross realized losses are ¥1 million for the year ended March 31, 2017.

The Company recognized impairment losses on securities of ¥8,327 million ($78,379 thousand) and ¥240 million for the years ended March 31, 2018 and 2017, respectively.

The Company recognizes impairment losses on securities with market value when the market value declines by more than 50 percent. When the market value declines by more than 30 percent but less than 50 percent, the Company recognizes necessary impairment losses as a result of considering the possibility of recovery. The Company recognizes impairment losses on securities without market value when the value declines significantly due to an issuer's financial condition.

5. Investments in Affiliates

The aggregate carrying amounts of investments in affiliates as of March 31, 2018 and 2017 are ¥108,900 million ($1,025,038 thousand) and ¥111,969 million, respectively.

6. Short-term and Long-term Debt

Short-term debt is represented by bank loans which are due within one year. The weighted average interest rate of short-term debt is 0.7% and 0.5% as of March 31, 2018 and 2017, respectively.

Long-term debt as of March 31, 2018 and 2017 is summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Loans, principally from banks, maturing in installments through 2026 with weighted average interest of 1.37% as of March 31, 2018, partially secured by mortgage of property, plant and equipment and securities	**¥ 42,752**	¥ —	**$ 402,410**
Loans, principally from banks, maturing in installments through 2021 with weighted average interest of 1.28% as of March 31, 2017, partially secured by mortgage of property, plant and equipment and securities	**—**	47,095	**—**
Lease liabilities maturing in installments through 2025 as of March 31, 2018	**478**	—	**4,499**
Lease liabilities maturing in installments through 2023 as of March 31, 2017	**—**	547	**—**
Unsecured bonds, due 2021 with interest of 0.572%	**10,000**	10,000	**94,127**
	53,230	57,642	**501,035**
Less current installments:			
Loans	**17,423**	13,600	**163,997**
Lease liabilities	**100**	100	**941**
	¥ 35,707	¥ 43,942	**$ 336,098**

Note : The weighted average interest rates on lease liabilities as of March 31, 2017 and 2018 are omitted because lease liabilities were recorded in the consolidated balance sheet based on the total lease payment which includes assumed interests portion.

The aggregate annual maturities of loans after March 31, 2019, are as follows:

	Millions of yen	Thousands of U.S. dollars
Year ending March 31,		
2020	¥ 13,650	$ 128,483
2021	2,813	26,478
2022	5,794	54,537
2023	1,251	11,775

The aggregate annual maturities of bonds after March 31, 2019, are as follows:

	Millions of yen	Thousands of U.S. dollars
Year ending March 31,		
2020	¥ —	$ —
2021	10,000	94,127
2022	—	—
2023	—	—

Property, plant and equipment and securities with a book value as of March 31, 2018 of ¥17,626 million ($165,907 thousand) were mortgaged to secure certain debts.

As is customary in Japan, both short-term and long-term bank loans are under general agreements which provide that security and guarantees for present and future indebtedness will be given upon request of the bank, and that the bank shall have the right, as the obligations become due or in the event of default, to offset cash deposits against obligations due the banks.

7. Asset Retirement Obligations

(a) Asset retirement obligations recognized on the consolidated balance sheet

The Company is obliged to restore its natural gas mining facilities except for mentioned below (b) according to law and land lease contracts. The asset retirement obligations are based on estimated future cash flows for the restorations. The obligations are calculated by using the estimated mine lives of 12 to 76 years and discounted rate of 0.828% to 2.385%.

Asbestos are used in part of fixed assets held by the Company and certain consolidated subsidiaries. The Company is obliged to conduct a special treatment when asbestos are removed. The asset retirement obligations are based on estimated future cash flows for the treatment. The obligations are calculated by using the estimated useful lives of the fixed assets mainly of 8 years and discounted rate mainly of 1.035%.

The Company and certain consolidated subsidiaries are obliged to restore their head offices and plant premises according to leasehold contracts. The asset retirement obligations are based on estimated future cash flows for the restorations. The obligations are calculated by using the estimated lease terms of 31 to 50 years and discounted rate mainly of 2.295%.

The following table provides a total asset retirement obligation for the years ended March 31, 2018 and 2017:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Balance at beginning of year	¥ 3,930	¥ 3,912	$ 36,992
Liabilities incurred due to the acquisition	17	11	160
Accretion expenses	75	66	706
Liabilities settled	(80)	(65)	(753)
Other	—	5	—
Balance at end of year	¥ 3,943	¥ 3,930	$ 37,114

(b) Asset retirement obligations not recognized on the consolidated balance sheet

The Company is obliged to restore its natural gas mining facilities according to law and land lease contracts, and the Company plans to use part of the facilities as storage facilities after mining continuingly. The Company and certain consolidated subsidiaries are obliged to restore their piers and pipelines according to law and lease contracts, and the piers and pipelines can be used for a substantial long-term with appropriate repair. Asset retirement obligations relating to these assets are not recognized because it is extremely difficult to estimate the time of fulfilling the obligations reasonably.

8. Retirement Benefits

MGC has defined retirement benefit plans such as lump-sum retirement benefit plans and defined benefit corporate pension plans, besides defined contribution pension plans.

In addition, the Company has also set up retirement benefit trusts.

Certain consolidated subsidiaries apply the simplified method in computing net defined benefit liability and retirement benefit expenses for their defined benefit corporate pension plans and lump-sum retirement benefit plans.

Defined benefit plans

(a) Reconciliation between retirement benefit obligations at beginning of year and end of year (excluding plans applying the simplified method):

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Retirement benefit obligation at beginning of year	¥ 40,775	¥ 42,432	$ 383,801
Service costs	2,164	2,181	20,369
Interest costs	370	372	3,483
Actuarial gains and losses arising during year	(121)	21	(1,139)
Retirement benefits paid	(1,965)	(4,197)	(18,496)
Other	23	(34)	216
Retirement benefit obligation at end of year	¥ 41,246	¥ 40,775	$ 388,234

(b) Reconciliation between plan assets at beginning of year and end of year (excluding plans applying the simplified method):

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Plan assets at beginning of year	¥ 36,289	¥ 34,943	$ 341,576
Expected return on plan assets	407	460	3,831
Actuarial gains and losses arising during year	2,497	2,003	23,503
Contribution from employer	1,577	1,566	14,844
Retirement benefits paid	(1,366)	(2,665)	(12,858)
Other	33	(18)	311
Plan assets at end of year	¥ 39,438	¥ 36,289	$ 371,216

(c) Reconciliation between net defined benefit liabilities of plans applying the simplified method at beginning of year and end of year:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Net defined benefit liability at beginning of year	¥ 1,438	¥ 1,589	$ 13,535
Decrease due to change of scope of consolidation	—	(80)	—
Retirement benefit expenses	257	293	2,419
Retirement benefits paid	(73)	(291)	(687)
Contribution to plans	(81)	(76)	(762)
Other	22	3	207
Net defined benefit liability at end of year	¥ 1,563	¥ 1,438	$ 14,712

(d) Reconciliation between retirement benefit obligations and plan assets at end of year and net defined benefit asset and defined benefit liability on the consolidated balance sheet:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Funded retirement benefit obligation	¥ 41,230	¥ 40,428	$ 388,084
Plan assets	(41,015)	(37,750)	(386,060)
	¥ 215	¥ 2,678	$ 2,024
Unfunded retirement benefit obligation	3,155	3,246	29,697
Net balance of liability and asset recorded on the consolidated balance sheet	¥ 3,371	¥ 5,924	$ 31,730
Net defined benefit asset	¥ (1,221)	¥ (12)	$ (11,493)
Net defined benefit liability	4,592	5,936	43,223
Net balance of liability and asset recorded on the consolidated balance sheet	¥ 3,371	¥ 5,924	$ 31,730

(e) Retirement benefit expenses and components thereof:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Service costs	¥ 2,164	¥ 2,181	$ 20,369
Interest costs	370	372	3,483
Expected return on plan assets	(407)	(460)	(3,831)
Amortization of actuarial gains and losses	(99)	291	(932)
Amortization of past service costs	81	126	762
Retirement benefit expenses applying the simplified method	257	293	2,419
Other	(41)	—	(386)
Retirement benefit expenses under defined benefit plans	¥ 2,324	¥ 2,805	$ 21,875

(f) Components of items recorded in remeasurements of defined benefit plans in other comprehensive income, before tax, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Past service costs	¥ 81	¥ 126	$ 762
Actuarial gains and losses	2,367	2,171	22,280
Total	¥ 2,449	¥ 2,297	$ 23,052

(g) Components of items recorded in remeasurements of defined benefit plans in accumulated other comprehensive income, before tax, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Unrecognized past service costs	¥ (76)	¥ 4	$ (715)
Unrecognized actuarial gains and losses	(3,513)	(1,146)	(33,067)
Total	¥ (3,590)	¥ (1,141)	$ (33,791)

(h) Plan assets

(i) Components of plan assets

Percentages to total plan assets by major category are as follows:

	2018	2017
Debt securities	36%	31%
Equity securities	42	48
Cash	3	4
Other	19	17
Total	100%	100%

(ii) Determination of expected long-term rate of return on plan assets

The expected long-term rate of return on plan assets is determined considering current and expected allocation of plan assets and current and expected long-term rate of return derived from various components of plan assets.

(i) Actuarial assumptions

	2018	2017
Discount rate	Mainly 0.8%	Mainly 0.8%
Expected long-term rate of return on plan assets	Mainly 2.0%	Mainly 2.5%

Defined contribution plans

The required contribution of MGC to the defined contribution plans amounted to ¥493 million ($4,640 thousand) and ¥471 million as of March 31, 2018 and 2017, respectively.

Directors, corporate auditors and executive officers are not covered by the plans described above. For such persons, the Company and certain subsidiaries had unfunded defined benefit pension plans. Under the plans, directors, corporate auditors and executive officers are entitled to lump-sum payments based on the current rate of pay and length of service when they leave the companies. MGC provides for the amount of the vested benefits to which directors, corporate auditors and executive officers are entitled if they were to retire or sever immediately at the balance sheet dates. As of March 31, 2018 and 2017, the liabilities for retirement and severance benefits related to the plans were ¥339 million ($3,191 thousand) and ¥387 million, respectively.

9. Income Taxes

The Company and its domestic subsidiaries are subject to Japanese corporate, inhabitant and business taxes based on income which, in the aggregate, result in a statutory tax rate of approximately 30.9% in 2018 and 2017.

A reconciliation of the statutory tax rate and the effective tax rate as a percentage of profit before income taxes for the years ended March 31, 2018 and 2017 is as follows:

	2018	2017
Statutory tax rate	30.9%	30.9%
Equity in earnings of affiliates	(7.7)	(10.7)
Dividend income eliminated in consolidation	10.4	8.0
Valuation allowance	(4.7)	(5.7)
Income not credited for tax purposes	(10.6)	(8.1)
Succession of operating loss carryforward associated with liquidation of subsidiaries	(0.0)	(0.2)
Foreign taxes	0.6	1.9
Adjustments of loss on valuation of shares of subsidiaries and associates	(3.9)	(0.3)
Other	(4.9)	(3.2)
Effective tax rate	10.2%	12.6%

Significant components of deferred tax assets and liabilities as of March 31, 2018 and 2017 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Deferred tax assets:			
Tax loss carryforward	**¥ 8,749**	¥ 15,947	**$ 82,351**
Net defined benefit liability	**6,291**	6,216	**59,215**
Devaluation loss on investments in securities	**3,273**	1,262	**30,808**
Accrued bonuses	**1,559**	1,569	**14,674**
Intercompany profits	**1,520**	1,720	**14,307**
Depreciation	**605**	695	**5,695**
Impairment loss	**3,165**	3,254	**29,791**
Asset retirement obligations	**1,247**	1,241	**11,738**
Other	**4,001**	4,420	**37,660**
	30,413	36,329	**286,267**
Valuation allowance	**(20,401)**	(27,085)	**(192,027)**
	10,011	9,244	**94,230**
Deferred tax liabilities:			
Net unrealized gain on other securities	**(7,444)**	(7,513)	**(70,068)**
Gain by contributing the assets to the trust	**(1,356)**	(1,402)	**(12,764)**
Tax purpose reserves etc. regulated by Japanese tax law	**(1,982)**	(2,118)	**(18,656)**
Asset retirement cost	**(330)**	(357)	**(3,106)**
Retained earnings of overseas consolidated subsidiaries and others	**(4,898)**	(5,459)	**(46,103)**
Other	**(1,984)**	(1,980)	**(18,675)**
	(17,997)	(18,832)	**(169,399)**
Net deferred tax liabilities	**¥ (7,985)**	¥ (9,587)	**$ (75,160)**

Net deferred tax assets and liabilities as of March 31, 2018 and 2017 are reflected in the accompanying consolidated balance sheet under the following captions:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Current assets - Deferred income taxes	**¥ 6,759**	¥ 5,818	**$ 63,620**
Investments and other assets - Deferred income taxes	**2,137**	2,161	**20,115**
Current liabilities - Other current liabilities	**(242)**	(256)	**(2,278)**
Non-current liabilities - Deferred income taxes	**(16,640)**	(17,309)	**(156,627)**

10. Common Stock

Under the Companies Act, the entire amount of the issue price of shares is required to be designated as stated common stock account although a company in Japan may, by resolution of its Board of Directors, account for an amount not exceeding 50% of the issue price of new shares as additional paid-in capital.

11. Retained Earnings and Dividends

The Companies Act provides that an amount equal to 10% of distributions from retained earnings paid by the Company and its Japanese subsidiaries be appropriated as a legal reserve. No further appropriations are required when the total amount of the additional paid-in capital and the legal reserve equals 25% of their respective stated capital. The Companies Act also provides that additional paid-in capital and legal reserve are available for appropriations by the resolution of the stockholders. Balances of the legal reserve are included in retained earnings in the accompanying consolidated balance sheet.

Cash dividends charged to retained earnings for the years ended March 31, 2018 and 2017 represent dividends paid out during those years. The amount available for dividends is based on the amount recorded in the Company's non-consolidated books of account in accordance with the Companies Act.

(a) Dividends paid during the year ended March 31, 2017

The following was approved by the Board of Directors held on May 26, 2016.

(i) Total dividends	¥3,533 million
(ii) Cash dividends per common share	¥8
(iii) Record date	March 31, 2016
(iv) Effective date	June 9, 2016

The following was approved by the Board of Directors held on November 2, 2016.

(i) Total dividends	¥3,453 million
(ii) Cash dividends per common share	¥8
(iii) Record date	September 30, 2016
(iv) Effective date	December 6, 2016

(b) Dividends paid during the year ended March 31, 2018

The following was approved by the Board of Directors held on May 26, 2017.

(i) Total dividends	¥4,747 million ($44,682 thousand)
(ii) Cash dividends per common share	¥22 ($0.21)
(iii) Record date	March 31, 2017
(iv) Effective date	June 8, 2017

The following was approved by the Board of Directors held on November 1, 2017.

(i) Total dividends	¥5,179 million ($48,748 thousand)
(ii) Cash dividends per common share	¥24 ($0.23)
(iii) Record date	September 30, 2017
(iv) Effective date	December 6, 2017

(c) Dividends to be paid after the balance sheet date but the record date for the payment belongs to the year ended March 31, 2018

The following was approved by the Board of Directors held on May 25, 2018.

(i) Total dividends	¥7,476 million ($70,369 thousand)
(ii) Dividend source	Retained earnings
(iii) Cash dividends per common share	¥35 ($0.33)
(iv) Record date	March 31, 2018
(v) Effective date	June 7, 2018

12. Selling, General and Administrative Expenses

Significant components of selling, general and administrative expenses are as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Freight	**¥ 21,047**	¥ 19,353	**$ 198,108**
Stevedoring and warehouse fee	**4,076**	4,182	**38,366**
Salaries	**17,574**	16,908	**165,418**
Employees' bonuses	**5,599**	5,458	**52,701**
Pension cost	**1,168**	1,312	**10,994**
Welfare	**3,532**	3,400	**33,245**
Transportation	**2,828**	2,683	**26,619**
Depreciation	**5,084**	4,741	**47,854**

13. Research and Development Costs

Research and development costs charged to income for the years ended March 31, 2018 and 2017 are ¥18,987 million ($178,718 thousand) and ¥19,267 million, respectively.

14. Long-lived Assets

Year ended March 31, 2018

Impairment loss on long-lived assets was immaterial for the year ended March 31, 2018. The relevant disclosure is, therefore, omitted.

Year ended March 31, 2017

MGC reviewed its long-lived assets for impairment and, as a result, recognized an impairment loss in the amount of ¥1,124 million for the significant asset groups which are as follows:

Location	Usage	Classification	Millions of yen
Niigata City, Niigata prefecture	Natural gas chemicals manufacturing facilities	Buildings, Machinery and equipment, etc.	¥ 1,029

The long-lived assets that are used for business are grouped according to the classification which is used for monitoring the profit and loss continuously under the management accounting system, and the idle assets are grouped individually by each item.

A part of natural gas chemicals manufacturing facilities owned by the Company was written down to a recoverable amount by considering the circumstances of the operation.

The recoverable amount was measured using the value in use and evaluated at the memo value because future cash flows were negative.

Impairment loss on the asset groups consisted of the following:

	Millions of yen
	2017
Buildings and structures	¥ 183
Machinery and equipment	766
Other	79
Total	¥ 1,029

Impairment loss on long-lived assets other than the above facilities was immaterial for the year ended March 31, 2017. The relevant disclosure is, therefore, omitted.

15. Loss on Liquidation of Subsidiaries and Affiliates

MGC recorded a loss on liquidation of subsidiaries and affiliates in the amount of ¥162 million ($1,525 thousand) and ¥667 million associated with the liquidation of a consolidated subsidiary for the years ended March 31, 2018 and 2017, respectively.

Components of loss on liquidation of subsidiaries and affiliates for the years ended March 31, 2018 and 2017 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Provision for loss on liquidation of subsidiaries and affiliates	**¥ 162**	¥ 513	**$ 1,525**

16. Other Comprehensive Income

The reclassification adjustment and the related income tax effects allocated to each component of other comprehensive income for the years ended March 31, 2018 and 2017 are as

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Net unrealized (loss) gain on other securities:			
Arising during the year	**¥ 782**	¥ 12,320	**$ 7,361**
Reclassification adjustment	**(1,714)**	(783)	**(16,133)**
Before tax amount	**(932)**	11,537	**(8,773)**
Tax benefit (expense)	**104**	(3,273)	**979**
Net-of-tax amount	**(827)**	8,264	**(7,784)**
Deferred (losses) gains on hedges:			
Arising during the year	**(0)**	(0)	**(0)**
Reclassification adjustment	**0**	5	**0**
Before tax amount	**(0)**	4	**(0)**
Tax benefit (expense)	**0**	(1)	**0**
Net-of-tax amount	**(0)**	3	**(0)**
Foreign currency translation adjustments:			
Arising during the year	**2,081**	(2,192)	**19,588**
Reclassification adjustment	**20**	—	**188**
Net-of-tax amount	**2,102**	(2,192)	**19,785**
Remeasurements of defined benefit plans:			
Arising during the year	**2,615**	1,997	**24,614**
Reclassification adjustment	**(166)**	299	**(1,563)**
Before tax amount	**2,449**	2,297	**23,052**
Tax expense	**(244)**	(184)	**(2,297)**
Net-of-tax amount	**2,204**	2,113	**20,745**
Share of other comprehensive income of affiliates accounted for by equity method:			
Arising during the year	**(1,775)**	(253)	**(16,707)**
Reclassification adjustment	**—**	(44)	**—**
Net-of-tax amount	**(1,775)**	(297)	**(16,707)**
Total other comprehensive income	**¥ 1,702**	¥ 7,891	**$ 16,020**

17. Per Share Information

(a) Earnings per share

Earnings per share, and reconciliation of the numbers and the amounts used in the earnings per share computations for the years ended March 31, 2018 and 2017 are as follows:

	Yen		U.S. dollars
	2018	2017	**2018**
Earnings per share	**¥ 281.39**	¥ 221.83	**$ 2.65**

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Profit attributable to owners of parent	**¥ 60,531**	¥ 48,013	**$569,757**
Profit not applicable to common stockholders	**—**	—	**—**
Profit attributable to common stockholders of parent	**¥ 60,531**	¥ 48,013	**$569,757**

	Number of shares	
	2018	2017
Weighted average number of shares outstanding on which earnings per share is calculated	**215,117,047**	216,444,168

The diluted earnings per share for the years ended March 31, 2018 and 2017 are not presented because there are no dilutive potential shares as of March 31, 2018 and 2017.

(b) Net assets per share

Net assets per share as of March 31, 2018 and 2017 are as follows:

	Yen		U.S. dollars
	2018	2017	**2017**
Net assets per share	**¥2,187.99**	¥1,967.94	**$ 20.59**

18. Leases

Operating lease

Future minimum lease payments required under non-cancellable operating leases as of March 31, 2018 and 2017 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Within one year	**¥ 1,238**	¥ 1,368	**$11,653**
Over one year	**2,846**	2,485	**26,788**
	¥ 4,084	¥ 3,854	**$38,441**

19. Balances and Transactions with Related Party

The Company has a 50% equity ownership in Mitsubishi Engineering-Plastics Corporation as of March 31, 2018 and 2017.

Balances with the company as of March 31, 2018 and 2017 and related transactions for the years then ended are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Balances:			
Trade accounts receivable	**¥ 13,089**	¥ 8,102	**$ 123,202**
Transactions:			
Sales	**37,670**	31,977	**354,575**

The Company has a 50% equity ownership in BRUNEI METHANOL COMPANY SDN. BHD. as of March 31, 2018 and 2017.

As of March 31, 2018 and 2017, the Company has guaranteed ¥7,001 million ($65,898 thousand) and ¥9,373 million of the company's loans to financial institutions, respectively.

The affiliated company of the Company has a 35% equity ownership in CARIBBEAN GAS CHEMICAL LTD. as of March 31, 2018 and 2017.

As of March 31, 2018 and 2017, the Company has guaranteed ¥17,682 million ($166,434 thousand) and ¥6,719 million of the company's loans to financial institutions.

The condensed financial information of all of 16 affiliates (17 in 2017) accounted for by equity method, including the significant affiliate, Japan Saudi Arabia Methanol Company, Ltd., are as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Total current assets	**¥ 205,101**	¥ 170,149	**$1,930,544**
Total non-current assets	**216,184**	237,979	**2,034,864**
Total current liabilities	**125,081**	100,451	**1,177,344**
Total non-current liabilities	**68,886**	65,900	**648,400**
Total net assets	**227,318**	241,776	**2,139,665**
Sales	**361,599**	314,774	**3,403,605**
Profit before income taxes	**73,569**	63,337	**692,479**
Profit	**43,652**	58,190	**410,881**

20. Commitments and Contingencies

As of March 31, 2017, MGC was contingently liable with respect to recourse obligations related to trade notes receivable transferred in the amount of ¥9 million.

The Company guarantees certain obligations of its associated companies and employees, etc. As of March 31, 2018 and 2017, guarantees for affiliates and employees, etc. loans amounted to ¥25,160 million ($236,822 thousand) and ¥15,223 million, respectively.

21. Financial Instruments

Conditions of financial instruments

(a) Management policy

MGC raises necessary funds through bank borrowings and issue of bonds in accordance with a funds management plan. Surplus funds are invested in highly safe financial instruments. MGC raises funds through bank borrowings for short-term operating fund. MGC uses derivatives to avoid risks mentioned below and does not enter into derivatives for speculative purposes.

(b) Financial instruments and risks

Trade notes and accounts receivable are exposed to customer's credit risk. Maturities of trade notes and accounts payable are mostly within one year. Part of trade receivables and payables is denominated in foreign currency and is exposed to fluctuation risk of foreign exchange rates. MGC uses foreign exchange contracts to hedge the net position.

Short-term investments and investments in securities are mainly held-to-maturity bonds and equity securities held for business relations and are exposed to market fluctuation risk.

Borrowings, bonds and lease obligations for finance leases are mainly for financing of funds for capital expenditure and operating. Part of the liabilities is with variable interest rate and thus is exposed to interest rate fluctuation risk. MGC uses interest rate swaps to hedge the risk.

MGC uses foreign exchange contracts to hedge future fluctuation of foreign exchange rates of operating receivables and payables and forecasted transactions denominated in foreign currencies, interest rate swaps and currency swaps to hedge future fluctuation of interest rates and foreign exchange rates of borrowings.

Hedge accounting is applied for certain derivative transactions. MGC applies the deferral hedge accounting method for hedge accounting. MGC has entered into forward exchange contracts for receivables and payables and forecasted transactions denominated in foreign currencies, and interest rate swap agreements to manage interest rate exposures on certain borrowings. Hedges for fluctuation risk of foreign exchange rates that meet certain criteria are accounted for using the allocation method. If interest rate swap agreements are used as hedges and meet certain hedging criteria, the difference in amounts to be paid or received on the interest rate swap agreements is recognized over the life of the agreements as an adjustment to interest expense. MGC employs derivative transactions within actual demand and does not hold or issue derivative financial instruments for speculative purposes. The hedge effectiveness is assessed based on the fluctuation ratio of hedged items and hedging instruments by comparing the cumulative market fluctuations or cash flow fluctuations of hedged items and those of related hedging instruments. The Company omits to assess hedge effectiveness of interest rate swaps which qualify for hedge accounting and meet certain criteria.

(c) Financial instruments risk management

(i) Credit risk

To mitigate and quickly capture the collectability issues, sales administration divisions regularly monitor major customers' credit status, and perform due date controls and balance controls for each customer in accordance with trade receivables and credit control rules. Held-to-maturity securities are debt securities readily convertible into cash which are invested in accordance with investment of surplus funds rules.

Maximum risk as of March 31, 2018 and 2017 is represented by the carrying amount of financial assets exposed to credit risk.

(ii) Market risk

The finance departments have executed the transactions with market risk with the director's approval in accordance with the finance rules and the derivatives control rules.

To mitigate the foreign currency fluctuation risk recognized by currency and month, MGC enters into a forward exchange contract for hedging the cash flow fluctuation risk associated with operating receivables and payables and forecasted transactions denominated in foreign currencies and surplus funds. To mitigate the foreign currency and interest rate fluctuation risk, MGC enters into an interest rate swap and a currency swap for hedging the cash flow fluctuation risk associated with borrowings.

MGC regularly monitors a price and an issuer's financial condition, and continuously considers whether MGC holds the short-term investments or the investments in securities except for held-to-maturity bond.

(iii) Liquidity risk

To mitigate the liquidity risk, a finance department prepares and updates a funds management plan as necessary, and maintains an appropriate level of liquidity.

(d) Supplemental explanation regarding fair value of financial instruments

Fair value of financial instruments is measured based on the quoted market price, if available, or reasonably assessed value if a quoted market price is not available. Fair value of financial instruments for which a quoted market price is not available is calculated based on certain assumptions, and the fair value might differ if different assumptions are used. In addition, the contract amount of the derivative transactions described below in **Fair value of financial instruments** does not represent the market risk of the derivative transactions.

Fair value of financial instruments

Balance sheet amount, fair value, and differences as of March 31, 2018 and 2017 are as follows.

Financial instruments, of which it is extremely difficult to measure the fair value, are not included in the table below. (Please see "<2> Financial instruments of which the fair value is extremely difficult to measure.")

	Millions of yen			Thousands of U.S. dollars		
March 31, 2018	Balance sheet amount	Fair value	Differences	Balance sheet amount	Fair value	Differences
Assets:						
(1) Cash	¥ 101,090	¥ 101,090	¥ —	$ 951,525	$ 951,525	$ —
(2) Trade notes and accounts receivable	165,606	165,606	—	1,558,791	1,558,791	—
(3) Short-term investments and investments in securities	51,968	53,638	1,670	489,157	504,876	15,719
Total assets	¥ 318,665	¥ 320,335	¥ 1,670	$2,999,482	$3,015,201	$ 15,719
Liabilities:						
(1) Trade notes and accounts payable	¥ 88,720	¥ 88,720	¥ —	$ 835,090	$ 835,090	$ —
(2) Short-term borrowings	71,155	71,155	—	669,757	669,757	—
(3) Accrued expenses	16,591	16,591	—	156,165	156,165	—
(4) Bonds	10,000	10,074	74	94,127	94,823	697
(5) Long-term borrowings	25,328	25,965	636	238,404	244,399	5,986
Total liabilities	¥ 211,795	¥ 212,507	¥ 711	$1,993,552	$2,000,254	$ 6,692
Derivative transactions (*):						
Hedge accounting not applied	¥ (124)	¥ (124)	¥ —	$ (1,167)	$ (1,167)	$ —
Hedge accounting applied	—	(9)	(9)	—	(85)	(85)
Total derivative transactions	¥ (124)	¥ (134)	¥ (9)	$ (1,167)	$ (1,261)	$ (85)

	Millions of yen		
March 31, 2017	Balance sheet amount	Fair value	Differences
Assets:			
(1) Cash	¥ 75,017	¥ 75,017	¥ —
(2) Trade notes and accounts receivable	138,410	138,410	—
(3) Short-term investments and investments in securities	55,633	53,884	(1,749)
Total assets	¥ 269,061	¥ 267,312	¥ (1,749)
Liabilities:			
(1) Trade notes and accounts payable	¥ 68,506	¥ 68,506	¥ —
(2) Short-term borrowings	74,669	74,669	—
(3) Accrued expenses	15,171	15,171	—
(4) Bonds	10,000	10,107	107
(5) Long-term borrowings	33,495	34,011	515
Total liabilities	¥ 201,842	¥ 202,465	¥ 622
Derivative transactions (*):			
Hedge accounting not applied	¥ (60)	¥ (60)	¥ —
Hedge accounting applied	—	(23)	(23)
Total derivative transactions	¥ (60)	¥ (84)	¥ (23)

*Derivative receivables and payables are on net basis. Items that are net payables are shown in parenthesis.

<1> Fair value measurement of financial instruments

Assets:

- Cash and Trade notes and accounts receivable
  The carrying amount approximates fair value because of the short maturity of these instruments.
- Short-term investments and Investments in securities
  The fair value of equity securities is calculated by quoted market price and the fair value of bond securities is estimated based on quotes from counterparties. Please see note 4 Short-term Investments and Investments in Securities for information by category.

Liabilities:

- Trade notes and accounts payable, Short-term borrowings, and Accrued expenses
  The carrying amount approximates fair value because of the short maturity of these instruments.
- Bonds
  The fair value of bonds issued by the Company is calculated by market price.
- Long-term borrowings
  Fair value of long-term borrowings is based on the present value of future cash flows discounted using the current borrowing rate for similar debt of a comparable maturity.

Derivative Transactions:
Please see note 22 Derivative Financial Instruments.

<2> Financial instruments of which the fair value is extremely difficult to measure

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Unlisted equity securities	**¥ 109,545**	¥ 119,968	**$1,031,109**

*It is extremely difficult to measure the fair value, and thus above are not included in "Assets (3) Short-term investments and investments in securities."

<3> Projected future redemption of monetary claim and securities with maturities as of March 31, 2018

	Millions of yen			
	Due within one year	Due after one year through five years	Due after five years through ten years	Due after ten years
(1) Cash	¥ 101,090	¥ —	¥ —	¥ —
(2) Trade notes and accounts receivable	165,606	—	—	—
(3) Short-term investments and investments in securities:				
Held-to-maturity securities:				
Government bonds	0	0	—	—
Total	¥ 266,697	¥ 0	¥ —	¥ —

	Thousands of U.S. dollars			
	Due within one year	Due after one year through five years	Due after five years through ten years	Due after ten years
(1) Cash	$ 951,525	$ —	$ —	$ —
(2) Trade notes and accounts receivable	1,558,791	—	—	—
(3) Short-term investments and investments in securities:				
Held-to-maturity securities:				
Government bonds	0	0	—	—
Total	$ 2,510,326	$ 0	$ —	$ —

<4> The annual maturities of the bonds and long-term borrowings as of March 31, 2018

	Millions of yen					
	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Bonds	¥ —	¥ —	¥ 10,000	¥ —	¥ —	¥ —
Long-term borrowings	17,423	13,650	2,813	5,794	1,251	1,818

	Thousands of U.S. dollars					
	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Bonds	$ —	$ —	$ 94,127	$ —	$ —	$ —
Long-term borrowings	163,997	128,483	26,478	54,537	11,775	17,112

22. Derivative Financial Instruments

The contract or notional amounts and fair value of derivative financial instruments held as of March 31, 2018 and 2017 are summarized as follows:

Derivative financial instruments to which hedge accounting is not applied are summarized as follows:

(a) Forward exchange contracts and currency swap agreements

	Millions of yen		
	Contract or notional amounts	Fair value	Valuation gain (loss)
March 31, 2018			
Forward exchange contracts:			
To sell foreign currency:			
U.S. dollar	**¥ 17,305**	**¥ (0)**	**¥ (0)**
Euro	**2,289**	**17**	**17**
New Taiwan dollar	**554**	**(7)**	**(7)**
To buy foreign currency:			
U.S. dollar	**654**	**3**	**3**
Canadian dollar	**1,008**	**(40)**	**(40)**
New Taiwan dollar	**5**	**(0)**	**(0)**
Currency swap agreements:			
Receive/U.S. dollar, Pay/Japanese Yen	**547**	**(18)**	**(18)**
Receive/U.S. dollar, Pay/Thai Baht	**582**	**(20)**	**(20)**
	¥ 22,946	**¥ (67)**	**¥ (67)**
March 31, 2017			
Forward exchange contracts:			
To sell foreign currency:			
U.S. dollar	¥ 18,447	¥ 5	¥ 5
Euro	1,410	7	7
New Taiwan dollar	446	(35)	(35)
To buy foreign currency:			
U.S. dollar	1,520	(30)	(30)
New Taiwan dollar	0	(0)	(0)
Currency swap agreements:			
Receive/U.S. dollar, Pay/Japanese Yen	340	(4)	(4)
Receive/U.S. dollar, Pay/Thai Baht	582	3	3
	¥ 22,747	¥ (53)	¥ (53)

	Thousands of U.S. dollars		
	Contract or notional amounts	Fair value	Valuation gain (loss)
March 31, 2018			
Forward exchange contracts:			
To sell foreign currency:			
U.S. dollar	**$ 162,886**	**$ (0)**	**$ (0)**
Euro	**21,546**	**160**	**160**
New Taiwan dollar	**5,215**	**(66)**	**(66)**
To buy foreign currency:			
U.S. dollar	**6,156**	**28**	**28**
Canadian dollar	**9,488**	**(377)**	**(377)**
New Taiwan dollar	**47**	**(0)**	**(0)**
Currency swap agreements:			
Receive/U.S. dollar, Pay/Japanese Yen	**5,149**	**(169)**	**(169)**
Receive/U.S. dollar, Pay/Thai Baht	**5,478**	**(188)**	**(188)**
	$ 215,983	**$ (631)**	**$ (631)**

* The fair value of forward exchange contracts and currency swap agreements is estimated based on quotes from counterparties.

(b) Interest rate swap agreements

	Millions of yen		
	Contract or notional amounts	Fair value	Valuation gain (loss)
March 31, 2018			
Interest rate swap agreements:			
Receive/floating and pay/fixed	**¥ 5,979**	**¥ (57)**	**¥ (57)**
March 31, 2017			
Interest rate swap agreements:			
Receive/floating and pay/fixed	¥ 5,620	¥ (7)	¥ (7)

	Thousands of U.S. dollars		
	Contract or notional amounts	Fair value	Valuation gain (loss)
March 31, 2018			
Interest rate swap agreements:			
Receive/floating and pay/fixed	**$ 56,278**	**$ 41,331**	**$ (537)**

*The fair value of interest rate swap agreements is estimated based on quotes from counterparties.

Derivative financial instruments to which hedge accounting is applied are summarized as follows:

(a) Forward exchange contracts

	Hedged items	Millions of yen Contract or notional amounts	Fair value
March 31, 2018			
Forward exchange contracts:			
To sell foreign currency:	**Accounts receivable**		
U.S. dollar		**¥ 1,495**	**¥ 45**
To sell foreign currency:	**Forecasted transactions**		
U.S. dollar		**7**	**(0)**
To buy foreign currency:	**Forecasted transactions**		
U.S. dollar		**23**	**(0)**
		¥ 1,526	**¥ 44**
March 31, 2017			
Forward exchange contracts:			
To sell foreign currency:	Accounts receivable		
U.S. dollar		¥ 3,051	¥ (0)
Euro		85	0
Chinese Yuen		42	0
To buy foreign currency:	Accounts payable		
U.S. dollar		2,094	(16)
Euro		84	(1)
To sell foreign currency:	Forecasted transactions		
U.S. dollar		4	(0)
To buy foreign currency:	Forecasted transactions		
U.S. dollar		—	—
		¥ 5,362	¥ (18)

	Hedged items	Thousands of U.S. dollars Contract or notional amounts	Fair value
March 31, 2018			
Forward exchange contracts:			
To sell foreign currency:	**Accounts receivable**		
U.S. dollar		**$ 14,072**	**$ 424**
To sell foreign currency:	**Forecasted transactions**		
U.S. dollar		**66**	**(0)**
To buy foreign currency:	**Forecasted transactions**		
U.S. dollar		**216**	**(0)**
		$ 14,364	**$ 414**

*The fair value of forward exchange contracts is estimated based on quotes from counterparties.

(b) Interest rate swap agreements

	Hedged items	Millions of yen Contract or notional amounts	Fair value
March 31, 2018			
Interest rate swap agreements:			
Receive/floating and pay/fixed	**Long-term borrowings**	**¥ 2,535**	**¥ (9)**
March 31, 2017			
Interest rate swap agreements:			
Receive/floating and pay/fixed	Long-term borrowings	¥ 4,805	¥ (20)

	Hedged items	Thousands of U.S. dollars Contract or notional amounts	Fair value
March 31, 2018			
Interest rate swap agreements:			
Receive/floating and pay/fixed	**Long-term borrowings**	**$ 23,861**	**$ (85)**

* The fair value of interest rate swap agreements is estimated based on quotes from counterparties.

23. Investment and Rental Property

The Company and certain consolidated subsidiaries own land and buildings for rent in Tokyo and other areas (hereafter “rental property”).

The amounts recognized in the consolidated balance sheet and fair values related to the rental property for the years ended March 31, 2018 and 2017 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Consolidated balance sheet amount:			
Balance at beginning of the year	**¥ 10,828**	¥ 5,955	**$ 101,920**
Increase/(decrease)	**814**	4,873	**7,662**
Balance at end of the year	**¥ 11,642**	¥ 10,828	**$ 109,582**
Fair value	**¥ 14,410**	¥ 13,805	**$ 135,636**

Notes:
1. Consolidated balance sheet amount is its cost minus accumulated depreciation and accumulated impairment loss.
2. Increase for the year ended March 31, 2018 and 2017 were mainly due to new rents executed by the Company of ¥1,093 million ($10,288 thousand) and ¥4,938 million, respectively.
3. Fair value is based on roadside value, etc.

Rent income from the rental property is ¥334 million ($3,144 thousand) and ¥313 million for the years ended March 31, 2018 and 2017, respectively.

Gain on sales from the rental property is ¥144 million ($1,355 thousand) and ¥15 million for the years ended March 31, 2018 and 2017, respectively.

24. Segment Information

The Company introduced company-based organization for clarifying management's responsibility in operation and for managing efficiently. Each company develops a business strategy for their products and services and conducts business.

The reported segments of the Company are the business units for which the Company is able to obtain respective financial information separately in order for the Board of Directors to conduct periodic investigation to determine distribution of management resources and evaluate their business results. "Natural gas chemicals business," "Aromatic chemicals business," "Specialty chemicals business" and "Information and advanced materials business" are the Company's reported segments.

Natural gas chemicals business mainly produces and sells methanol, ammonia, amines, methacrylates, polyols, functional food materials and crude oil.

Aromatic chemicals business mainly produces and sells meta-xylenediamine, MX-Nylon, meta-xylene, purified isophthalic acid and foaming plastics.

Specialty chemicals business mainly produces and sells inorganic chemicals and engineering plastics.

Information and advanced materials business mainly produces and sells printed circuit board materials and oxygen absorber (AGELESS).

Segment sales, profit, assets, liabilities and others are calculated by accounting methods similar to those employed to prepare the accompanying consolidated financial statements. Segment profit are calculated based on "Keijo-soneki" disclosed in the consolidated statement of income under accounting principles generally accepted in Japan (See note 25). Intersegment revenue and transfer are based on arm's-length transactions.

(Adoption of IFRS by overseas affiliates)

As described in Note 1 (s), effective from the year ended March 31, 2018, the Company's overseas affiliate and an overseas affiliate of the Company's affiliate have adopted IFRS. Those changes have been applied retrospectively and the prior year segment information has been restated. As a result, for the year ended March 31, 2017, segment profit of Natural gas chemicals business increased by ¥72 million ($678 thousand) and Specialty chemicals business decreased by ¥21 million ($198 thousand) compared to the respective amount before retrospective application of IFRS.

The reported segment information for the Company and its consolidated subsidiaries for the years ended March 31, 2018 and 2017 is summarized as follows:

	Millions of yen						
	2018						
	Natural gas chemicals	Aromatic chemicals	Specialty chemicals	Information and advanced materials	Other	Adjustments	Consolidated
Sales:							
Sales to third parties	**¥ 167,035**	**¥ 212,050**	**¥ 203,561**	**¥ 52,735**	**¥ 526**	**¥ —**	**¥ 635,909**
Inter-segment sales	**12,444**	**3,429**	**1,553**	**39**	**79**	**(17,546)**	**—**
	¥ 179,480	**¥ 215,479**	**¥ 205,115**	**¥ 52,774**	**¥ 606**	**¥ (17,546)**	**¥ 635,909**
Segment profit	**¥ 14,928**	**¥ 25,106**	**¥ 38,633**	**¥ 6,349**	**¥ 261**	**¥ (4,567)**	**¥ 80,711**
Segment assets	**¥ 184,299**	**¥ 215,481**	**¥ 233,080**	**¥ 77,071**	**¥ 31,181**	**¥ 51,374**	**¥ 792,489**
Others:							
Depreciation and amortization	**¥ 5,145**	**¥ 8,527**	**¥ 9,170**	**¥ 3,595**	**¥ 19**	**¥ 568**	**¥ 27,027**
Amortization of goodwill	**—**	**241**	**0**	**—**	**129**	**—**	**370**
Interest income	**70**	**190**	**212**	**27**	**0**	**(17)**	**485**
Interest expenses	**89**	**644**	**650**	**107**	**7**	**(429)**	**1,069**
Equity in earnings (losses) of affiliates	**9,391**	**(121)**	**7,930**	**899**	**177**	**—**	**18,277**
Investments in affiliates accounted for by the equity method	**56,916**	**457**	**22,344**	**10,318**	**3,548**	**(88)**	**93,496**
Capital expenditures	**6,076**	**11,301**	**11,004**	**1,937**	**0**	**640**	**30,959**

	Millions of yen						
	2017						
	Natural gas chemicals	Aromatic chemicals	Specialty chemicals	Information and advanced materials	Other	Adjustments	Consolidated
Sales:							
Sales to third parties	¥ 142,901	¥ 191,933	¥ 170,894	¥ 50,197	¥ 553	¥ —	¥ 556,480
Inter-segment sales	10,656	2,546	1,326	2	68	(14,600)	—
	¥ 153,557	¥ 194,480	¥ 172,220	¥ 50,200	¥ 622	¥ (14,600)	¥ 556,480
Segment profit	¥ 14,359	¥ 17,533	¥ 26,809	¥ 6,129	¥ 328	¥ (2,730)	¥ 62,430
Segment assets	¥ 178,974	¥ 192,047	¥ 209,897	¥ 73,067	¥ 38,783	¥ 45,417	¥ 738,188
Others:							
Depreciation and amortization	¥ 5,069	¥ 8,506	¥ 8,671	¥ 3,027	¥ 20	¥ 335	¥ 25,631
Amortization of goodwill	—	241	0	—	33	—	275
Interest income	101	187	118	23	1	(8)	423
Interest expenses	152	799	777	138	13	(535)	1,346
Equity in earnings (losses) of affiliates	12,848	7	6,835	1,208	225	—	21,125
Investments in affiliates accounted for by the equity method	61,384	567	21,029	9,798	3,341	877	96,998
Capital expenditures	9,009	10,556	8,172	6,674	7	589	35,010

	Thousands of U.S. dollars						
	2018						
	Natural gas chemicals	Aromatic chemicals	Specialty chemicals	Information and advanced materials	Other	Adjustments	Consolidated
Sales:							
Sales to third parties	**$ 1,572,242**	**$ 1,995,953**	**$ 1,916,049**	**$ 496,376**	**$ 4,951**	**$ —**	**$ 5,985,589**
Inter-segment sales	**117,131**	**32,276**	**14,618**	**367**	**744**	**(165,154)**	**—**
	$ 1,689,383	**$ 2,028,229**	**$ 1,930,676**	**$ 496,743**	**$ 5,704**	**$ (165,154)**	**$ 5,985,589**
Segment profit	**$ 140,512**	**$ 236,314**	**$ 363,639**	**$ 59,761**	**$ 2,457**	**$ (42,988)**	**$ 759,704**
Segment assets	**$ 1,734,742**	**$ 2,028,247**	**$ 2,193,901**	**$ 725,442**	**$ 293,496**	**$ 483,566**	**$ 7,459,422**
Others:							
Depreciation and amortization	**$ 48,428**	**$ 80,262**	**$ 86,314**	**$ 33,838**	**$ 179**	**$ 5,346**	**$ 254,396**
Amortization of goodwill	**—**	**2,268**	**0**	**—**	**1,214**	**—**	**3,483**
Interest income	**659**	**1,788**	**1,995**	**254**	**0**	**(160)**	**4,565**
Interest expenses	**838**	**6,062**	**6,118**	**1,007**	**66**	**(4,038)**	**10,062**
Equity in earnings (losses) of affiliates	**88,394**	**(1,139)**	**74,642**	**8,462**	**1,666**	**—**	**172,035**
Investments in affiliates accounted for by the equity method	**535,730**	**4,302**	**210,316**	**97,120**	**33,396**	**(828)**	**880,045**
Capital expenditures	**57,191**	**106,372**	**103,577**	**18,232**	**0**	**6,024**	**291,406**

Notes:

1. Other includes listed affiliates and real estate business which are not included in reported segments.
2. Adjustments in the above tables are made for the followings:

(1) Adjustments in segment profit

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Elimination of intersegment transactions	¥ **99**	¥ 49	$ **932**
Unallocated company-wide expenses	**(4,666)**	(2,780)	**(43,919)**
	¥ **(4,567)**	¥ (2,730)	$ **(42,988)**

* Company-wide expenses are administrative expenses, financial income and expenses and other income and expenses which are not allocated to reported segments.

(2) Adjustments in segment assets

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Elimination of intersegment balances	¥ **(43,009)**	¥ (30,331)	$ **(404,829)**
Unallocated company-wide assets	**94,384**	75,748	**888,404**
	¥ **51,374**	¥ 45,417	$ **483,566**

*Company-wide assets are cash, investments in securities, and deferred taxes assets which are not allocated to reported segments.

(3) "Adjustments in depreciation and amortization" of ¥568 million ($5,346 thousand) and ¥335 million are depreciation and amortization of company-wide assets which are not allocated to reported segments for the years ended March 31, 2018 and 2017, respectively.

(4) "Adjustments in interest income" of ¥(17) million ($(160) thousand) and ¥(8) million are mainly elimination of intersegment transactions for the years ended March 31, 2018 and 2017, respectively.

(5) "Adjustments in interest expenses" of ¥(429) million ($ (4,038) thousand) and ¥(535) million are mainly elimination of intersegment transactions for the years ended March 31, 2018 and 2017, respectively.

(6) "Adjustments in investments in affiliates accounted for by the equity method" of ¥(88) million ($(828) thousand) and ¥877 million are mainly investments which are not allocated to reported segments for the years ended March 31, 2018 and 2017, respectively.

(7) "Adjustments in capital expenditures" of ¥640 million ($6,024 thousand) and ¥589 million are related to company-wide assets which are not allocated to reported segments for the years ended March 31, 2018 and 2017, respectively.

3. Segment profit is adjusted with "Keijo-soneki" disclosed in the consolidated statement of income under accounting principles generally accepted in Japan (See note 25).

Related information

1. Information by products and services
   Disclosures are omitted because the classification of products and services are same as the classification of the reported segments.

2. Geographical information
   (1) Sales

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Japan	¥ **282,671**	¥ 262,772	$ **2,660,683**
Asia:			
China	**95,707**	78,060	**900,857**
Other	**149,533**	125,893	**1,407,502**
U.S.A.	**51,367**	50,279	**483,500**
Other	**56,630**	39,474	**533,038**
Total	¥ **635,909**	¥ 556,480	$ **5,985,589**

Note: Geographical sales are classified by customer's location.

(2) Property, plant and equipment

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Japan	¥ **162,150**	¥ 164,134	$ **1,526,261**
Asia	**36,732**	36,223	**345,745**
Other	**21,834**	17,699	**205,516**
Total	¥ **220,717**	¥ 218,057	$ **2,077,532**

3. Information by major customers
   Disclosures are omitted because no particular customer whose sales are over 10% of sales in the consolidated statement of income exists.

Information of impairment loss on fixed assets by reported segments

	Millions of yen						
	2018						
	Natural gas chemicals	Aromatic chemicals	Specialty chemicals	Information and advanced materials	Other	Adjustments	Consolidated
Impairment loss	**¥ —**	**¥ —**	**¥ 11**	**¥ —**	**¥ —**	**¥ —**	**¥ 11**

	Millions of yen						
	2017						
	Natural gas chemicals	Aromatic chemicals	Specialty chemicals	Information and advanced materials	Other	Adjustments	Consolidated
Impairment loss	¥ 1,124	¥ —	¥ —	¥ —	¥ —	¥ —	¥ 1,124

	Thousands of U.S. dollars						
	2018						
	Natural gas chemicals	Aromatic chemicals	Specialty chemicals	Information and advanced materials	Other	Adjustments	Consolidated
Impairment loss	**$ —**	**$ —**	**$ 104**	**$ —**	**$ —**	**$ —**	**$ 104**

Information of balance of goodwill by reported segments

	Millions of yen						
	2018						
	Natural gas chemicals	Aromatic chemicals	Specialty chemicals	Information and advanced materials	Other	Adjustments	Consolidated
Goodwill	**¥ —**	**¥ 3,911**	**¥ —**	**¥ —**	**¥ —**	**¥ —**	**¥ 3,911**

	Millions of yen						
	2017						
	Natural gas chemicals	Aromatic chemicals	Specialty chemicals	Information and advanced materials	Other	Adjustments	Consolidated
Goodwill	¥ —	¥ 4,155	¥ 0	¥ —	¥ 102	¥ —	¥ 4,258

	Thousands of U.S. dollars						
	2018						
	Natural gas chemicals	Aromatic chemicals	Specialty chemicals	Information and advanced materials	Other	Adjustments	Consolidated
Goodwill	**$ —**	**$ 36,813**	**$ —**	**$ —**	**$ —**	**$ —**	**$ 36,813**

Information of negative goodwill incurred by reported segments

No negative goodwill was incurred for the years ended March 31, 2018 and 2017.

25. The Statement of Income Disclosure under Accounting Principles Generally Accepted in Japan

Under accounting principles generally accepted in Japan, an ordinary income, "Keijo-soneki" should be disclosed in the statement of income. The ordinary income is an income figure with certain adjustments made to profit before income taxes.

Followings are the summary information of the statement of income under accounting principles generally accepted in Japan.

	Millions of yen		Thousands of U.S. dollars
	2018	2017	**2018**
Sales	**¥ 635,909**	¥ 556,480	**$ 5,985,589**
Gross profit	**154,583**	131,249	**1,455,036**
Operating income	**62,741**	43,762	**590,559**
Ordinary income	**80,711**	62,430	**759,704**
Profit before income taxes	**73,421**	61,099	**691,086**
Profit	**65,933**	53,427	**620,604**