idemitsu

Consolidated Financial Statements

Year ended March 31, 2021
with Independent Auditor's Report

Idemitsu Kosan Co.,Ltd.

CONSOLIDATED BALANCE SHEET

Idemitsu Kosan Co.,Ltd. and Consolidated Subsidiaries
March 31, 2021

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	**2021**	**2021**
ASSETS			
Current assets:			
Cash and cash equivalents (Note 20)	¥129,335	**¥130,956**	**$1,182,875**
Notes and accounts receivable, trade (Note 20)	593,730	**602,661**	**5,443,603**
Inventories (Note 6)	622,895	**694,522**	**6,273,346**
Accounts receivable, other	149,661	**180,336**	**1,628,907**
Short-term loans	12,994	**12,106**	**109,356**
Other (Notes 20 and 21)	43,442	**46,455**	**419,611**
Less: Allowance for doubtful accounts	(1,770)	**(1,521)**	**(13,739)**
Total current assets	1,550,288	**1,665,516**	**15,043,961**
Property, plant and equipment, net (Notes 7, 9, and 19):			
Buildings and structures	255,774	**266,693**	**2,408,936**
Machinery and equipment	267,954	**309,885**	**2,799,071**
Land (Note 8)	811,627	**808,037**	**7,298,688**
Construction in progress	59,167	**58,815**	**531,254**
Other	83,598	**78,468**	**708,775**
Total property, plant and equipment, net	1,478,122	**1,521,899**	**13,746,725**
Intangible fixed assets:			
Goodwill	167,104	**159,006**	**1,436,243**
Other	165,003	**160,245**	**1,447,437**
Total intangible fixed assets	332,108	**319,252**	**2,883,681**
Investments and other assets:			
Investments in securities (Notes 4, 10, and 20)	28,084	**25,117**	**226,876**
Investments in nonconsolidated subsidiaries and affiliates (Notes 4 and 20)	239,343	**214,079**	**1,933,694**
Long-term loans (Note 20)	79,825	**37,720**	**340,711**
Guarantee deposits	22,154	**25,847**	**233,469**
Long-term prepaid expenses	13,301	**14,881**	**134,414**
Exploration and development expenditures	30,807	**10,871**	**98,193**
Deferred tax assets (Note 17)	38,287	**21,019**	**189,865**
Other	76,328	**100,398**	**906,859**
Less: Allowance for doubtful accounts	(1,715)	**(2,160)**	**(19,516)**
Total investments and other assets	526,418	**447,774**	**4,044,566**
Total assets	¥3,886,938	**¥3,954,443**	**$35,718,935**

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	**2021**	**2021**
LIABILITIES AND EQUITY			
Current liabilities:			
Notes and accounts payable, trade (Note 20)	¥475,664	**¥530,697**	**$4,793,579**
Short-term borrowings (Notes 10 and 20)	210,872	**277,686**	**2,508,232**
Commercial paper (Notes 10 and 20)	315,965	**188,005**	**1,698,182**
Current portion of long-term debt (Notes 10 and 20)	128,728	**76,622**	**692,105**
Accounts payable, other (Note 20)	343,611	**406,890**	**3,675,280**
Accrued expenses	31,408	**24,799**	**223,999**
Income taxes payable	11,564	**18,422**	**166,407**
Accrued bonuses to employees	9,912	**11,392**	**102,901**
Other (Notes 10, 20 and 21)	120,691	**86,769**	**783,757**
Total current liabilities	1,648,420	**1,621,286**	**14,644,446**
Long-term liabilities:			
Long-term debt (Notes 10 and 20)	648,133	**737,468**	**6,661,264**
Deferred tax liabilities (Note 17)	16,200	**9,643**	**87,107**
Deferred tax liability related to land revaluation (Notes 8 and 17)	85,410	**84,993**	**767,715**
Liability for employees' retirement benefits (Notes 2(T) and 11)	67,542	**49,232**	**444,694**
Reserve for repair work	64,138	**73,197**	**661,164**
Asset retirement obligations (Note 12)	62,130	**77,647**	**701,357**
Other (Notes 20 and 21)	94,397	**85,836**	**775,329**
Total long-term liabilities	1,037,953	**1,118,019**	**10,098,634**
Total liabilities	2,686,374	**2,739,306**	**24,743,080**
Contingent liabilities (Note 13)			
Equity (Note 14):			
Shareholders' equity:			
Common stock:	168,351	**168,351**	**1,520,653**
Authorized, 436,000,000 shares in 2020 and 2021			
Issued, 297,864,718 shares in 2020 and 2021			
Capital surplus	461,636	**461,635**	**4,169,774**
Retained earnings	408,064	**400,579**	**3,618,281**
Treasury stock-at cost, 603,227 shares in 2020 and 596,197 shares in 2021	(2,042)	**(2,008)**	**(18,138)**
Total shareholders' equity	1,036,010	**1,028,559**	**9,290,571**
Accumulated other comprehensive income (loss):			
Surplus from land revaluation (Note 8)	157,834	**159,585**	**1,441,471**
Deferred (losses) on hedging activities, net (Note 21)	(7,667)	**(1,209)**	**(10,926)**
Unrealized gains on available-for-sale securities	1,524	**5,792**	**52,322**
Foreign currency translation adjustments	(34,370)	**(47,207)**	**(426,405)**
Defined retirement benefit plans	(3,321)	**5,410**	**48,870**
Total accumulated other comprehensive income	113,999	**122,371**	**1,105,332**
Noncontrolling interests in consolidated subsidiaries	50,555	**64,206**	**579,950**
Total equity	1,200,564	**1,215,136**	**10,975,854**
Total liabilities and equity	¥3,886,938	**¥3,954,443**	**$35,718,935**

See notes to consolidated financial statements.

CONSOLIDATED STATEMENT OF INCOME

Idemitsu Kosan Co.,Ltd. and Consolidated Subsidiaries
Year ended March 31, 2021

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	**2021**	**2021**
Net sales	¥6,045,850	**¥4,556,620**	**$41,158,162**
Cost of sales (Note 6)	5,632,657	**3,997,591**	**36,108,677**
Gross profit	413,193	**559,028**	**5,049,485**
Selling, general, and administrative expenses (Note 15)	417,053	**418,965**	**3,784,354**
Operating income (loss)	(3,860)	**140,062**	**1,265,130**
Non-operating income (expenses):			
Interest income	10,829	**9,935**	**89,740**
Dividend income	3,502	**4,237**	**38,271**
Gain (loss) on foreign exchange, net	2,613	**(81)**	**(734)**
Interest expense	(13,049)	**(11,982)**	**(108,235)**
Subsidy income	7,277	**4,655**	**42,048**
Gain on sales of fixed assets (Note 23)	2,214	**13,081**	**118,158**
Gain on sales of investments in securities	503	**59**	**533**
Gain on sales of shares of subsidiaries and affiliates	—	**362**	**3,277**
Gain from step acquisition (Note 23)	17,215	**—**	**—**
Gain on reversal of restoration cost	—	**889**	**8,029**
Equity in losses of nonconsolidated subsidiaries and affiliates, net	(22,358)	**(39,789)**	**(359,401)**
Impairment loss on fixed assets (Note 9)	(9,044)	**(20,164)**	**(182,142)**
Loss on sales of fixed assets (Note 23)	(428)	**(1,121)**	**(10,131)**
Loss on disposals of fixed assets	(7,870)	**(6,863)**	**(61,997)**
Loss on valuation of investments in nonconsolidated subsidiaries and associates	(1,960)	**(56)**	**(505)**
Loss on valuation of investments in securities	—	**(6,193)**	**(55,940)**
Loss from money transfer scam at foreign subsidiary	—	**(3,672)**	**(33,171)**
Loss on valuation of long-term loans	—	**(18,114)**	**(163,620)**
Other, net	(2,809)	**(659)**	**(5,959)**
Non-operating income(expenses), net	(13,366)	**(75,479)**	**(681,779)**
Income (loss) before income taxes	(17,226)	**64,582**	**583,351**
Income taxes - Current (Note 17)	29,696	**17,756**	**160,389**
- Deferred (Note 17)	(26,136)	**11,586**	**104,655**
Total income taxes	3,560	**29,343**	**265,045**
Net income (loss)	(20,786)	**35,239**	**318,306**
Net income attributable to noncontrolling interests	2,149	**319**	**2,882**
Net income (loss) attributable to owners of the parent	(¥22,935)	**¥34,920**	**$315,423**
Basic net income (loss) per share (in yen and dollars) (Notes 2(V) and 22)	(¥76.31)	**¥117.47**	**$1.06**

See notes to consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

Idemitsu Kosan Co.,Ltd. and Consolidated Subsidiaries
Year ended March 31, 2021

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	**2021**	**2021**
Net income (loss)	(¥20,786)	**¥35,239**	**$318,306**
Other comprehensive income (loss) (Note 18):			
Unrealized gains (losses) on available-for-sale securities	(4,308)	**4,033**	**36,432**
Deferred gains (losses) on hedging activities, net	173	**5,220**	**47,154**
Foreign currency translation adjustments	(14,221)	**(11,267)**	**(101,773)**
Defined retirement benefit plans	(3,215)	**8,917**	**80,551**
Surplus from land revaluation	2,913	**825**	**7,454**
Share of other comprehensive income (loss) in affiliates	(1,035)	**1,151**	**10,402**
Total other comprehensive income (loss)	(19,693)	**8,881**	**80,221**
Comprehensive income (loss) (Note 18)	(¥40,480)	**¥44,120**	**$398,527**
Total comprehensive income (loss) attributable to (Note 18):			
Owners of the parent	(¥40,466)	**¥42,367**	**$382,684**
Noncontrolling interests	(14)	**1,753**	**15,842**

See notes to consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Idemitsu Kosan Co.,Ltd. and Consolidated Subsidiaries
Year ended March 31, 2021

	Thousands	Millions of yen				
		Shareholders' equity				
	Number of shares of common stock outstanding	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at March 31, 2019	**197,342**	**¥168,351**	**¥130,876**	**¥466,750**	**(¥56,022)**	**¥709,955**
Prior period adjustments				**(664)**		**(664)**
Capital surplus (goodwill)			**(0)**			**(0)**
Cash dividends, ¥160.0 per share				**(34,028)**		**(34,028)**
Net income attributable to owners of the parent				**(22,935)**		**(22,935)**
Net adjustment to retained earnings due to change in scope of consolidation				**(17)**	**(40)**	**(57)**
Acquisitions of treasury stock	**(4,503)**				**(13,164)**	**(13,164)**
Disposals of treasury stock	**10**		**(2)**		**51**	**49**
Cancellation of treasury stocks	**—**		**(10,352)**	**(1,653)**	**12,006**	**—**
Change due to share exchange	**104,411**		**341,115**		**55,127**	**396,243**
Adjustment due to sales and revaluation of land (Note 8)				**614**		**614**
Items other than changes in shareholders' equity						
Balance at March 31, 2020	**297,261**	**¥168,351**	**¥461,636**	**¥408,064**	**(¥2,042)**	**¥1,036,010**
Capital surplus (goodwill)			**(0)**			**(0)**
Cash dividends, ¥120.0 per share				**(41,697)**		**(41,697)**
Net income attributable to owners of the parent				**34,920**		**34,920**
Net adjustment to retained earnings due to change in scope of consolidation				**218**		**218**
Acquisitions of treasury stock	**(10)**				**(25)**	**(25)**
Disposals of treasury stock	**17**			**(0)**	**59**	**59**
Adjustment due to sales and revaluation of land (Note 8)				**(925)**		**(925)**
Items other than changes in shareholders' equity						
Balance at March 31, 2021	**297,268**	**¥168,351**	**¥461,635**	**¥400,579**	**(¥2,008)**	**¥1,028,559**

	Thousands of U.S. dollars (Note 1)				
	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at March 31, 2020	**$1,520,653**	**$4,169,780**	**$3,685,888**	**($18,450)**	**$9,357,872**
Capital surplus (goodwill)		**(6)**			**(6)**
Cash dividends, $1.08 per share			**(376,641)**		**(376,641)**
Net income attributable to owners of the parent			**315,423**		**315,423**
Net adjustment to retained earnings due to change in scope of consolidation			**1,975**		**1,975**
Acquisitions of treasury stock				**(228)**	**(228)**
Disposals of treasury stock			**(4)**	**540**	**535**
Adjustment due to sales and revaluation of land (Note 8)			**(8,360)**		**(8,360)**
Items other than changes in shareholders' equity					
Balance at March 31, 2021	**$1,520,653**	**$4,169,774**	**$3,618,281**	**($18,138)**	**$9,290,571**

(Continued)

	Millions of yen							
	Accumulated other comprehensive income							
	Surplus from land revaluation	Deferred gains (losses) on hedging activities, net	Unrealized gains (losses) on available-for-sale securities	Foreign currency translation adjustments	Defined retirement benefit plans	Total accumulated other comprehensive income	Noncontrolling interests in consolidated subsidiaries	Total equity
Balance at March 31, 2019	**¥155,535**	**(¥6,730)**	**¥5,734**	**(¥21,330)**	**(¥1,064)**	**¥132,144**	**¥36,831**	**¥878,931**
Prior period adjustments								**(664)**
Capital surplus (goodwill)								**(0)**
Cash dividends, ¥160.0 per share								**(34,028)**
Net income attributable to owners of the parent								**(22,935)**
Net adjustment to retained earnings due to change in scope of consolidation								**(57)**
Acquisitions of treasury stock								**(13,164)**
Disposals of treasury stock								**49**
Cancellation of treasury stocks								—
Change due to share exchange								**396,243**
Adjustment due to sales and revaluation of land (Note 8)	**(614)**					**(614)**		—
Items other than changes in shareholders' equity	**2,913**	**(937)**	**(4,210)**	**(13,040)**	**(2,256)**	**(17,530)**	**13,723**	**(3,806)**
Balance at March 31, 2020	**¥157,834**	**(¥7,667)**	**¥1,524**	**(¥34,370)**	**(¥3,321)**	**¥113,999**	**¥50,555**	**¥1,200,564**
Capital surplus (goodwill)								**(0)**
Cash dividends, ¥120.0 per share								**(41,697)**
Net income attributable to owners of the parent								**34,920**
Net adjustment to retained earnings due to change in scope of consolidation								**218**
Acquisitions of treasury stock								**(25)**
Disposals of treasury stock								**59**
Adjustment due to sales and revaluation of land (Note 8)	**925**					**925**		—
Items other than changes in shareholders' equity	**825**	**6,457**	**4,268**	**(12,836)**	**8,731**	**7,446**	**13,651**	**21,097**
Balance at March 31, 2021	**¥159,585**	**(¥1,209)**	**¥5,792**	**(¥47,207)**	**¥5,410**	**¥122,371**	**¥64,206**	**¥1,215,136**

	Thousands of U.S. dollars (Note 1)							
	Accumulated other comprehensive income							
	Surplus from land revaluation	Deferred gains (losses) on hedging activities, net	Unrealized gains (losses) on available-for-sale securities	Foreign currency translation adjustments	Defined retirement benefit plans	Total accumulated other comprehensive income	Noncontrolling interests in consolidated subsidiaries	Total equity
Balance at March 31, 2020	**$1,425,656**	**($69,258)**	**$13,769**	**($310,457)**	**($29,999)**	**$1,029,711**	**$456,645**	**$10,844,228**
Capital surplus (goodwill)								**(6)**
Cash dividends, $1.08 per share								**(376,641)**
Net income attributable to owners of the parent								**315,423**
Net adjustment to retained earnings due to change in scope of consolidation								**1,975**
Acquisitions of treasury stock								**(228)**
Disposals of treasury stock								**535**
Adjustment due to sales and revaluation of land (Note 8)	**8,360**					**8,360**		—
Items other than changes in shareholders' equity	**7,454**	**58,332**	**38,552**	**(115,947)**	**78,869**	**67,261**	**123,305**	**190,566**
Balance at March 31, 2021	**$1,441,471**	**($10,926)**	**$52,322**	**($426,405)**	**$48,870**	**$1,105,332**	**$579,950**	**$10,975,854**

See notes to consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

Idemitsu Kosan Co.,Ltd. and Consolidated Subsidiaries
Year ended March 31, 2021

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	**2021**	**2021**
Operating activities:			
Income (loss) before income taxes	(¥17,226)	**¥64,582**	**$583,351**
Adjustments for:			
Depreciation and amortization	94,937	**98,158**	**886,629**
Impairment loss on fixed assets (Note 9)	9,044	**20,164**	**182,142**
Amortization of goodwill	9,675	**9,629**	**86,975**
Gain from step acquisition	(17,215)	**—**	**—**
Decrease in liability for employees' retirement benefits	(21,172)	**(20,021)**	**(180,844)**
Increase in reserve for repair work	6,140	**9,058**	**81,823**
Equity in losses of nonconsolidated subsidiaries and affiliates, net	22,358	**39,789**	**359,401**
Gain on sales of fixed assets, net	(1,785)	**(11,959)**	**(108,027)**
Loss on valuation of investment securities, net	—	**6,193**	**55,940**
Loss on valuation of long-term loans	—	**18,114**	**163,620**
(Increase) decrease in notes and accounts receivable, trade	111,785	**(19,805)**	**(178,893)**
(Increase) decrease in inventories	212,591	**(82,777)**	**(747,698)**
Increase in accounts receivable, other	(50,768)	**(40,455)**	**(365,421)**
Increase (decrease) in notes and accounts payable, trade	(210,465)	**63,901**	**577,194**
Increase (decrease) in accounts payable, other	(95,429)	**59,129**	**534,095**
Payment of income taxes	(56,835)	**(7,620)**	**(68,836)**
Other, net	(28,348)	**(35,614)**	**(321,694)**
Net cash provided by (used in) operating activities	(32,712)	**170,466**	**1,539,759**
Investing activities:			
Purchases of tangible fixed assets	(118,644)	**(121,064)**	**(1,093,526)**
Proceeds from sales of tangible fixed assets	3,416	**27,669**	**249,926**
Purchases of intangible fixed assets	(11,548)	**(11,763)**	**(106,254)**
Purchases of investment securities	(2,122)	**(1,837)**	**(16,594)**
Proceeds from sales of investment securities	5,802	**2,538**	**22,926**
Proceeds for sales of shares of subsidiaries resulting in change in scope of consolidation	—	**1,061**	**9,586**
Disbursements for long-term loans	(1,939)	**(370)**	**(3,347)**
Proceeds from collection of long-term loans receivable	2,506	**2,025**	**18,293**
(Increase) decrease in short-term loans receivable, net	(805)	**1,419**	**12,824**
Payments for investments in capital of subsidiaries and associates	(2,839)	**(5,089)**	**(45,970)**
Other, net	(8,288)	**(4,440)**	**(40,106)**
Net cash used in investing activities	(134,463)	**(109,851)**	**(992,244)**
Financing activities:			
Increase in short-term borrowings, net	74,918	**76,110**	**687,474**
Increase (decrease) in commercial paper, net	111,965	**(127,960)**	**(1,155,812)**
Proceeds from long-term debt	120,999	**121,034**	**1,093,254**
Repayments of long-term debt	(85,202)	**(124,444)**	**(1,124,059)**
Proceeds from issuance of bonds	30,000	**40,000**	**361,304**
Redemption of bonds	(20,000)	**—**	**—**
Purchases of treasury stock	(13,164)	**(25)**	**(228)**
Disposal of treasury stock	4	**59**	**535**
Cash dividends paid	(34,028)	**(41,697)**	**(376,641)**
Proceeds from share issuance to non-controlling shareholders	—	**14,039**	**126,813**
Cash dividends paid to noncontrolling interests	(2,544)	**(2,141)**	**(19,344)**
Cash dividends paid to previous shareholders of newly consolidated subsidiaries	(21,646)	**—**	**—**
Other, net	(3,394)	**(11,200)**	**(101,173)**
Net cash (used in) provided by financing activities	157,907	**(56,227)**	**(507,878)**
Effect of exchange rate changes on cash and cash equivalents	(879)	**(3,230)**	**(29,180)**
Net increase (decrease) in cash and cash equivalents	(10,149)	**1,157**	**10,455**
Cash and cash equivalents at beginning of year	90,690	**129,335**	**1,168,234**
Increase in cash and cash equivalents resulting from new consolidated subsidiaries	48,793	**463**	**4,186**
Cash and cash equivalents at end of year	¥129,335	**¥130,956**	**$1,182,875**

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Idemitsu Kosan Co.,Ltd. and Consolidated Subsidiaries

1. Basis of Presentation of Consolidated Financial Statements

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 accordance with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards.

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In addition, certain reclassifications have been made in the 2020 consolidated financial statements to conform to the classifications used in 2021.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which Idemitsu Kosan Co.,Ltd. (the "Company") is incorporated and operates. Japanese yen figures less than a million yen are rounded down to the nearest million yen, except for per share data. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥110.71 to $1, the approximate rate of exchange at March 31, 2021. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

2. Summary of Significant Accounting Policies

(A) Principles of Consolidation

The consolidated financial statements as of and for the year ended March 31, 2021, include the accounts of the Company and its significant subsidiaries (together, the "Group"). Under the control and influence concepts, those companies for which the Company, directly or indirectly, is able to exercise control over operations are fully consolidated, and those companies over which the Group has the ability to exercise significant influence are accounted for by the equity method (see (C) below).

All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealized profit included in assets resulting from transactions within the Group is also eliminated. The excess of the cost of acquisition over the fair value of the net assets of an acquired subsidiary at the date of acquisition is amortized over periods ranging from 5 years to 20 years. The account balance of investment costs over the net equity of subsidiaries acquired is included in goodwill in the accompanying consolidated balance sheet.

The number of consolidated subsidiaries as of March 31, 2020 and 2021 is as follows:

Consolidated subsidiaries	2020	**2021**
Domestic	31	**28**
Overseas	72	**72**
Total	103	**100**

Consolidation of the remaining subsidiaries would not have a material impact on the accompanying consolidated financial statements.

Certain subsidiaries, such as IDEMITSU APOLLO CORPORATION and 70 overseas subsidiaries and certain affiliates, employ December 31 as their balance sheet date. For consolidating the accounts of these subsidiaries and applying the equity method to investments in these affiliates, the Company uses their financial statements as of their respective financial year-end, and necessary adjustments have been made where significant intercompany transactions took place between such different year-end dates.

(B) Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements

Under Accounting Standards Board of Japan ("ASBJ") Practical Issues Task Force ("PITF") No. 18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the 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 in principle be unified for the preparation of the consolidated financial statements. However, financial statements prepared by foreign subsidiaries in accordance with either International Financial Reporting Standards or generally accepted accounting principles in the United States of America (Financial Accounting Standards Board Accounting Standards Codification) tentatively may be used for the consolidation process, except for the following items that should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been directly recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; (d) cancellation of the fair value model of accounting for property, plant, and equipment and investment properties and incorporation of the cost model of accounting; and (e) recording a gain or loss through profit or loss on the sale of an investment in an equity instrument for the difference between the acquisition cost and the selling price, and recording impairment loss through profit or loss for other-than-temporary declines in the fair value of an investment in an equity instrument, where a foreign subsidiary elects to present in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument.

(C) Investments in Nonconsolidated Subsidiaries and Affiliates

Investments in nonconsolidated subsidiaries and affiliates are, in principle, accounted for by the equity method. The number of nonconsolidated subsidiaries and affiliates to which the equity method is applied as of March 31, 2020 and 2021, is as follows:

Equity method entities	2020	**2021**
Nonconsolidated subsidiaries	4	**4**
Affiliates	30	**21**
Total	34	**25**

Investments in the remaining unconsolidated subsidiaries and affiliates are stated at cost. If the equity method of accounting had been applied to the investments in these companies, the impact on the accompanying consolidated financial statements would not be material.

(D) Unification of Accounting Policies Applied to Foreign Associated Companies for the Equity Method

ASBJ Statement No. 16, "Accounting Standard for Equity Method of Accounting for Investments," requires adjustments to be made to conform the associate's accounting policies for similar transactions and events under similar circumstances to those of the parent company when the associate's financial statements are used in applying the equity method, unless it is impracticable to determine such adjustments. In addition, financial statements prepared by foreign associated companies in accordance with either International Financial Reporting Standards or generally accepted accounting principles in the United States of America tentatively may be used in applying the equity method if the following items are adjusted so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss on pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting; and (e) recording a gain or loss through profit or loss on the sale of an investment in an equity instrument for the difference between the acquisition cost and selling price, and recording impairment loss through profit or loss for other-than-temporary declines in the fair value of an investment in an equity instrument, where a foreign associate elects to present in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument.

(E) Foreign Currency Translation

All monetary assets and liabilities in foreign currencies are translated into yen at the exchange rates prevailing at the respective balance sheet dates. With respect to translation of the foreign currency-denominated financial statements of overseas consolidated subsidiaries, all profits and losses of foreign subsidiaries are translated into yen using the average rate for the period. Also, all balance sheet items, except for equity, are translated at the current rates of foreign exchange prevailing at the balance sheet date, whereas equity items are translated at the historical rates. Differences arising from translation of foreign currency financial statements are recorded as foreign currency translation adjustments in the equity section of the consolidated balance sheet.

(F) Cash Equivalents

Cash equivalents are short-term investments that are readily convertible into cash and exposed to insignificant risk of changes in value. Cash equivalents include time deposits, certificates of deposit, and commercial paper, all of which mature or become due within three months of the date of acquisition.

(G) Allowance for Doubtful Accounts

The Group provides an allowance for doubtful accounts based on the percentage of bad debt losses written off against the balance of total receivables in addition to the amount deemed necessary to cover estimated future losses by reviewing individual accounts.

(H) Inventories

Inventories are principally stated at the lower of cost, determined by the average cost method, or net selling value. Losses resulting from application of the lower of cost or net selling value method are included in cost of sales in the accompanying consolidated statement of income.

(I) Securities

Securities are classified into three categories: "Held-to-maturity securities," "Equity securities issued by nonconsolidated subsidiaries and affiliates," and "Available-for-sale securities."

Held-to-maturity securities:

Shown as current assets if the maturity period is within one year, or as investments in securities if the maturity period is over one year and stated at amortized cost, which is determined using the straight-line method.

Equity securities issued by nonconsolidated subsidiaries and affiliates:

Carried at cost determined by the moving-average method, unless they are deemed impaired in value, but accounted for by the equity method for consolidation purposes.

Available-for-sale securities:

Shown as current assets if the maturity period is within one year or as investments in securities if the maturity period is over one year or undefined. Those with readily determinable market values are stated at fair market value and those without readily determinable market values are carried at cost determined by the moving-average method. The resulting unrealized gains/losses are recorded as "Unrealized gains (losses) on available-for-sale securities" in a separate component of equity, net of tax effects thereon. Where the values are considered impaired, such impairments are charged to income.

(J) Derivatives and Hedging Activities

Derivatives

The Group utilizes forward currency exchange contracts, foreign currency options, interest rate swaps and options, interest rate currency swaps, and crude oil and petroleum product swaps and forward contracts to hedge the risks of exchange rate fluctuations, interest rate fluctuations, and price fluctuations of crude oil and petroleum products, respectively. The Company borrows foreign currency-denominated loans to hedge the risks of exchange rate fluctuations of overseas investments in securities and foreign subsidiaries' equity. Purchases of derivative financial instruments are limited to the amounts of the hedged items and are not used for speculation or dealing purposes. Internal rules have been established with respect to the purposes, policies, procedures, approvals, and reporting for derivatives. Hedge effectiveness with respect to the hedged items is constantly monitored.

Hedge Accounting

Where the transactions do not satisfy the conditions for hedge accounting stipulated in the accounting standard for financial instruments, such derivative arrangements and financial instruments are valued at fair value and the resulting gains or losses are included in the consolidated statement of income for the current year, whereas the deferral method of accounting is applied to transactions which qualify for hedge accounting. Under hedge accounting, unrealized gains or losses on the hedge instruments are carried as a component of equity in the consolidated balance sheet, until the profits or losses on the corresponding hedged items are realized.

(K) Property, Plant, and Equipment

Property, plant, and equipment are stated at cost, less accumulated depreciation. Depreciation of property, plant, and equipment of the Company and its subsidiaries is mainly computed by the straight-line method.

(L) Intangible Fixed Assets

Software for internal use is amortized using the straight-line method over the estimated useful life of the software, generally five years. Customer-related assets are amortized using the straight-line method over the estimated useful life of 20 years. Other intangible fixed assets are amortized using the straight-line method over their respective estimated useful lives.

(M) Bond and Stock Issue Costs

Bond and stock issue costs are charged to income as incurred.

(N) Asset Retirement Obligations

An asset retirement obligation is recorded for a legal obligation imposed either by law or contract that results from the acquisition, construction, development, and normal operation of a tangible fixed asset and is associated with the retirement of such tangible fixed asset. The asset retirement obligation is recognized as the sum of the discounted cash flows required for the future asset retirement and is recorded in the period in which the obligation is incurred if a reasonable estimate can be made. If a reasonable estimate of the asset retirement obligation cannot be made in the period the asset retirement obligation is incurred, the liability should be recognized when a reasonable estimate of the asset retirement obligation can be made. Upon initial recognition of a liability for an asset retirement obligation, an asset retirement cost is capitalized by increasing the carrying amount of the related fixed asset by the amount of the liability. The asset retirement cost is subsequently allocated to expense through depreciation over the remaining useful life of the asset. Over time, the liability is accreted to its present value each period. Any subsequent revisions to the timing or the amount of the original estimate of undiscounted cash flows are reflected as an adjustment to the carrying amount of the liability and the capitalized amount of the related asset retirement cost.

(O) Research and Development Costs

Research and development costs are charged to income as incurred.

(P) Leases

Finance lease transactions are capitalized to recognize lease assets and lease obligations in the balance sheet. All other leases are accounted for as operating leases.

(Q) Income Taxes

The provision for income taxes is computed based on the pretax income included in the consolidated statement of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are measured by applying currently enacted income tax rates to the temporary differences.

(R) Reserve for Repair Work

The Company and its consolidated subsidiaries are required periodically to repair oil tanks, machinery and equipment, and vessels. A reserve for the repair work on oil tanks, machinery and equipment, and vessels is provided for the current portion of the estimated total cost of such work.

(S) Accrued Bonuses to Employees

Accrued bonuses to employees are provided based on the estimated amount to be paid to employees after the consolidated balance sheet date for their services rendered during the current period.

(T) Liability for Employees' Retirement Benefits

The employees of the Company and its subsidiaries are generally covered by point-based retirement benefit plans under which the retiring employees are entitled to lump-sum payments and/or pension payments. Also, certain subsidiaries have defined contribution plans.

The Company accounts for liabilities for retirement benefits based on projected benefit obligations and plan assets at the balance sheet date. The projected benefit obligations are attributed to periods on a benefit formula basis. Actuarial gains and losses that are yet to be recognized in profit or loss are recognized within equity (accumulated other comprehensive income), after adjusting for tax effects, and are recognized in profit or loss over the period between 10 and 14 years, no longer than the expected average remaining service period of the employees. Past service costs are recognized in profit or loss in the period in which they are incurred.

(U) Appropriation of Retained Earnings

The Company may make dividend payments as an appropriation of retained earnings by resolution of the Board of Directors pursuant to the provisions of Article 459, Paragraph 1 of the Companies Act of Japan (the "Companies Act").

(V) Net Income per Share

Basic net income per share is computed by dividing net income attributable to common shareholders by the weighted-average number of common shares outstanding for the period, retroactively adjusted for stock splits.

Diluted net income per share reflects the potential dilution that could occur if securities were exercised or converted into common stock. Diluted net income per share of common stock assumes full conversion of the outstanding convertible notes and bonds at the beginning of the year (or at the time of issuance) with an applicable adjustment for related interest expense, net of tax, and full exercise of outstanding warrants.

(W) Consumption Tax

Consumption tax is generally imposed at a flat rate of 10% in Japan on all domestic consumption of goods and services, with certain exceptions. Items in the consolidated statement of income are presented on a net basis of consumption tax. Net amounts of consumption tax to be recouped or paid are recorded as "Other" in current assets or current liabilities, as the case may be, in the consolidated balance sheet.

(X) Impairment of Fixed Assets

Fixed assets are required to be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss shall be recognized in the consolidated statement of income by reducing the carrying amount of impaired assets or a group of assets to the recoverable amount to be measured as the higher of net selling price or value in use.

(Y) New Accounting Pronouncements

(a) The Company and consolidated subsidiaries

・Accounting Standard for Revenue Recognition (ASBJ Statement No. 29, March 31, 2020)
・Implementation Guidance on Accounting Standard for Revenue Recognition (ASBJ Guidance No. 30, March 26, 2021)
・Implementation Guidance on Disclosures about Fair Value of Financial Instruments (ASBJ Guidance No. 19, March 31, 2020)

(1) Summary

On March 30, 2018, the ASBJ issued ASBJ Statement No. 29, "Accounting Standard for Revenue Recognition," and ASBJ Guidance No. 30, "Implementation Guidance on Accounting Standard for Revenue Recognition. "The core principle of the standard and guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity should recognize revenue in accordance with that core principle by applying the following steps:

Step 1: Identify the contract(s) with a customer
Step 2: Identify the performance obligations in the contract

Step 3: Determine the transaction price
Step 4: Allocate the transaction price to the performance obligations in the contract
Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

(2) Date of adoption

The Company and consolidated subsidiaries expect to apply the accounting standard and guidance for annual periods beginning on or after April 1, 2021.

(3) Effect from the application of this accounting standard

The application of this accounting standard does not have a material impact on the financial statements.

・Accounting Standard for Current price calculation (ASBJ Statement No. 30, July 4, 2019)
・Accounting Standard for Measurement of Inventories (ASBJ Statement No. 9, July 4, 2019)
・Implementation Guidance on Accounting Standard for Calculate current price (ASBJ Guidance No. 31, July 4, 2019)
・Accounting Standard for Financial Instruments (ASBJ Statement No. 10, July 4, 2019)
・Implementation Guidance on Disclosures about Fair Value of Financial Instruments (ASBJ Guidance No. 19, March 31, 2020)

(1) Summary

As the "IASB and FASB" have formulated similar detailed guidances on fair value measurement (IFRS 13, Fair Value Measurement under International Financial Reporting Standards (IFRS), and Accounting Standards Codification Topic 820, Fair Value Measurement under US GAAP), the ASBJ announced "Accounting Standard for Fair Value Measurement" and other standards to seek compatibility between Japanese GAAP and international accounting standards mainly relating to guidances and disclosure about fair value of financial instruments.

The ASBJ's basic policy for developing the Accounting Standard for Fair Value Measurement was to incorporate basically all the provisions of IFRS 13 to improve the comparability between financial statements of corporations both inside and outside Japan by adopting a unified calculation method, as well as to establish other treatments for individual items in consideration of business practices customary in Japan to the extent it does not greatly impair comparability between different financial statements.

(2) Date of adoption

The Company expects to apply the accounting standard and guidance for annual periods beginning on or after April 1, 2021.

(3) Effect from the application of this accounting standard

The Company is in the process of measuring the effects of applying the accounting standard in future applicable periods.

(b) Overseas consolidated subsidiaries

・Accounting Standards Update No. 2016-02 "Leases"

(1) Summary

This standard requires lessees under lease agreements to recognize the assets and liabilities arising from all leases on the balance sheet in principle.

(2) Date of adoption

US subsidiaries and certain subsidiaries will apply this accounting standard from the beginning of the fiscal year ending March 31, 2023.

(3) Effect from the application of this accounting standard

The Company is in the process of measuring the effects of applying the accounting standard in future applicable periods.

(Z) Change of Presentation

(Application of "Accounting Standard for Disclosure of Accounting Estimates")

Effective April 1, 2020, the Company adopted ASBJ Statement No. 31, "Accounting Standard for Disclosure of Accounting Estimates." "Significant Accounting Estimates" as described in the notes to the consolidated financial statements.

However, comparative information for the previous fiscal year has not been disclosed in accordance with the transitional provisions set forth in Article 11 of this ASBJ Statement.

3. Significant Accounting Estimates

The Company's consolidated financial statements include management's estimates and assumptions that affect the amounts of assets, liabilities, revenues, and expenses. These estimates and assumptions are based on management's best judgments, taking into account past financial results, various factors considered to be reasonable as of the end of the fiscal year, and other considerations. Due to their inherent nature, actual results may differ from these estimates and assumptions.

Although the impact of COVID-19 in fiscal year 2021 and beyond is uncertain, the economies of various countries are expected to recover gradually.

The items that may have a material impact on the Company's consolidated financial statements are as follows:

(A) Valuation of deferred tax assets

The recoverability of deferred tax assets is determined based on taxable income in the reasonably estimable future periods. The timing and amount of future taxable income are estimated based on the future business plan approved by the Board of Directors, which includes assumptions such as commodity prices and margins.

Since the timing and amount of future taxable income are affected by changes in uncertain economic conditions, if the actual timing and amount of future taxable income differ from the estimates, the amount of available deferred tax assets may change accordingly. As a result, this may have a material impact on the consolidated financial statements.

The content and amount related to deferred tax assets are provided in Note 17 "Income Taxes."

(B) Measurement of equity-method investments and loans to equity-method affiliates

The Company has an equity interest in and loans to Nghi Son Refinery and Petrochemical LLC ("NSRP"), which is an equity-method affiliate of the Company. NSRP's financial performance is reflected in the Company's consolidated financial statements through equity in earnings (losses) of affiliates. Also, NSRP's financial position has an impact on the fair value of long-term loans, whose change is reflected in net income in the Company's consolidated financial statements. The amounts and the line items of the equity interest and the loans recorded in the consolidated balance sheet are as follows:

	Line item	Millions of yen	Thousands of U.S. dollars
Equity interest	Investments in nonconsolidated subsidiaries and affiliates	-	-
Loans	Long-term loans	¥30,110	$271,977

During the current fiscal year, NSRP did not achieve the planned financial performance mainly due to lower product margins, which were significantly affected by changes in market prices. This led NSRP to record an operating loss of ¥78,253 million ($706,837 thousand) in its financial statements. Since this indicated that its fixed assets subject to impairment test may be impaired, NSRP performed an impairment test on such assets. As the recoverable amount of the fixed assets, which had been calculated based on their value in use, exceeded their carrying amount of ¥710,024 million ($6,413,373 thousand) recorded in its balance sheet, NSRP did not record an impairment loss on the fixed assets.

As to the Company's consolidated financial statements, the Company recorded a loss on valuation of long-term loans of ¥18,114 million ($163,620 thousand) since their fair value, which had been based on estimated future cash flows, was less than their carrying amount.

The value in use and the fair value based on estimated future cash flows were calculated by applying NSRP's future business plan and involve the use of certain assumptions such as weighted average cost of capital ("WACC"), product margins and asset utilization rates. The changes in these assumptions may have a material impact on the Company's consolidated financial statements.

4. Securities

Year ended March 31, 2020

(A) Available-for-sale securities with carrying value and acquisition cost as of March 31, 2020, are summarized as follows:

	Millions of yen		
	Carrying value	Acquisition cost	Unrealized gains (losses)
(1) Securities with carrying values exceeding acquisition cost:			
Equity securities	¥10,811	¥5,542	¥5,269
(2) Securities with carrying values not exceeding acquisition cost:			
Equity securities	5,774	6,815	(1,040)
Total	¥16,586	¥12,357	¥4,228

Year ended March 31, 2021

(A) Available-for-sale securities with carrying value and acquisition cost as of March 31, 2021, are summarized as follows:

	Millions of yen		
	Carrying value	Acquisition cost	Unrealized gains (losses)
(1) Securities with carrying values exceeding acquisition cost:			
Equity securities	**¥17,676**	**¥9,318**	**¥8,357**
(2) Securities with carrying values not exceeding acquisition cost:			
Equity securities	**2,165**	**2,682**	**(516)**
Total	**¥19,842**	**¥12,001**	**¥7,841**

	Thousands of U.S. dollars		
	Carrying value	Acquisition cost	Unrealized gains (losses)
(1) Securities with carrying values exceeding acquisition cost:			
Equity securities	**$159,667**	**$84,174**	**$75,493**
(2) Securities with carrying values not exceeding acquisition cost:			
Equity securities	**19,561**	**24,229**	**(4,668)**
Total	**$179,229**	**$108,403**	**$70,825**

Available-for-sale securities sold during the fiscal years ended March 31, 2020 and 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Proceeds from sales	¥2,695	**¥2,615**	**$23,628**
Total gains	¥503	**¥59**	**$533**
Total losses	¥14	**¥205**	**$1,853**

The impairment loss on valuation of investment securities and investment in associated companies for the year ended March 31, 2021, was ¥6,193 million ($55,940 thousand).

5. Consolidated Statement of Cash Flows

For the year ended March 31, 2020, the Company conducted significant non-cash transactions as follows:

(A) Stock exchange

The breakdown of the assets and liabilities of Showa Shell Sekiyu K.K. and its subsidiaries, which were newly consolidated due to the share exchange, at the start of consolidation is as follows:

	Millions of yen	Thousands of U.S. dollars
Current assets	**¥594,095**	**$5,458,928**
Non-current assets	**659,965**	**6,064,183**
Total assets	**¥1,254,060**	**$11,523,112**
Current liabilities	**¥585,437**	**$5,379,371**
Non-current liabilities	**244,147**	**2,243,382**
Total liabilities	**¥829,584**	**$7,622,754**

Current assets include cash and cash equivalents of ¥48,790 million ($448,317 thousand) at the start of consolidation and are recorded in "Increase in cash and cash equivalents resulting from newly consolidated subsidiaries." In addition, capital surplus and treasury stock have changed as follows due to the issuance of new shares and the issuance of treasury stock in connection with the stock exchange.

	Millions of yen	Thousands of U.S. dollars
Increase in capital surplus	**¥341,115**	**$3,134,384**
Decrease in treasury stock	**55,127**	**506,551**

(B) Contribution of securities to retirement benefit trust

	Millions of yen	Thousands of U.S. dollars
Contribution of securities to retirement benefit trust (acquisition cost)	**¥10,818**	**$99,408**
Loss from contribution of securities to retirement benefit trust	**(1,296)**	**(11,913)**
Contribution of securities to retirement benefit trust (fair market value)	**¥9,522**	**$87,494**

For the year ended March 31, 2021, the Company had not conducted significant non-cash transactions.

6. Inventories

Inventories as of March 31, 2020 and 2021, consist of the following:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Merchandise and finished products	¥362,865	**¥371,972**	**$3,359,878**
Work in process	28,695	**29,176**	**263,537**
Raw materials and supplies	231,334	**293,373**	**2,649,930**
Total	¥622,895	**¥694,522**	**$6,273,346**

Write-downs, net of reversal of write-downs recognized during the prior fiscal year, of ¥76,768 million and (¥81,776) million (($738,652) thousand) are included in the cost of sales for the fiscal years ended March 31, 2020 and 2021, respectively.

7. Property, Plant and Equipment

Accumulated depreciation of property, plant and equipment is ¥2,202,252 million and ¥2,274,205 million ($20,542,010 thousand) as of March 31, 2020 and 2021, respectively.

(Investment Property)

The Company and certain subsidiaries own office buildings, crude oil storage tanks, and commercial facilities, including land for rental and unused assets, in areas such as Tokyo, Osaka, and overseas. The net of rental income and related expenses for those properties is ¥1,464 million and ¥1,204 million ($10,880 thousand) for the fiscal years ended March 31, 2020 and 2021, respectively. The rental income is included in net sales and the expenses are included in selling, general and administrative expenses in the consolidated statement of income. The net of losses on disposals and gains on sales of those properties is ¥(248) million and ¥434 million ($3,921 thousand) for the fiscal years ended March 31, 2020 and 2021, respectively. The loss on disposals and gain on sales of those properties are included in non-operating income and expenses in the consolidated statement of income. The impairment loss on those properties were ¥69 million and nil for the fiscal years ended March 31, 2020 and 2021, respectively, and included in non-operating expenses in the consolidated statement of income. The amounts in the consolidated balance sheet of relevant investment properties as of March 31, 2020 and 2021, changes during the fiscal years then ended, and their fair values are as follows:

Millions of yen			
Carrying amount			Fair value
April 1, 2019	Changes during the fiscal year	March 31, 2020	March 31, 2020
¥100,857	¥38,127	¥138,984	¥144,013

Millions of yen			
Carrying amount			Fair value
April 1, 2020	**Changes during the fiscal year**	**March 31, 2021**	**March 31, 2021**
¥138,984	**(¥3,086)**	**¥135,897**	**¥142,446**

Thousands of U.S. dollars			
Carrying amount			Fair value
April 1, 2020	**Changes during the fiscal year**	**March 31, 2021**	**March 31, 2021**
$1,255,394	**($27,882)**	**$1,227,512**	**$1,286,659**

1. Carrying amount recognized in the consolidated balance sheet is net of accumulated depreciation and accumulated impairment losses, if any.
2. Increase during the fiscal year ended March 31, 2020, primarily represents management integration with Showa Shell Sekiyu K.K. of ¥38,847 million and the decrease primarily represents sales and disposals of assets of ¥682 million. And increase during the fiscal year ended March 31, 2021, primarily represents the acquisition of idle assets of ¥157 million ($1,418 thousand) and the decrease primarily represents sales and disposals of assets of ¥2,250million ($20,326 thousand).
3. Fair values of properties as of March 31, 2020 and 2021 are measured by the Group in accordance with its real estate appraisal standard.

8. Land Revaluation

The Company revalued its land used for business activities in accordance with the “Law of Land Revaluation” on March 31, 2002. The difference between the revalued amount and the book value is stated as “Surplus from land revaluation” in equity after deducting the related deferred tax liability. “Surplus from land revaluation” is not available for dividend payments.

The fair value as of March 31, 2020 and 2021, declined by ¥135,110 million and ¥99,401 million ($897,857 thousand), respectively, compared to the book value after the revaluation.

9. Impairment Loss on Fixed Assets

For the purposes of applying the accounting standard for impairment of fixed assets, the Group categorizes operating assets by business segment, whereas idle assets are assessed on an individual basis. The Group writes down the carrying amount of assets or asset groups where there has been a significant decline in profitability and value compared to the recoverable amount, and records the impairment losses as non-operating expenses.

The recoverable amounts of idle assets are determined by their net selling price at disposition. The net selling price of idle assets with certain significance is based on the appraisal value determined in accordance with real estate appraisal standards. The recoverable amount of the respective asset group is estimated based on the value in use, which is estimated by discounting future cash flows projected by qualified professionals based on the remaining reserve at a discount rate of 7.0% (post-tax) in the oil exploration and production business as of March 31, 2020 and 8.0% (post-tax) in the oil exploration and 6.5% (post-tax) in the coal mining business as of March 31, 2021.

(A) Loss on impairment of fixed assets for the fiscal year ended March 31, 2020, consists of the following:

		Impairment loss	
Use	Location	Type of asset	Millions of yen
(Idle assets)			
Oil depot and others	Training center (Ichihara, Chiba) and other	Land	¥839
		Buildings and others	4,165
			5,005
(Business assets)			
Oil exploration and production	Licensed blocks located in Norway Continental Shelf	Machinery and equipment	1,599
Other	Sales of petroleum products business in Australia	Goodwill and others	2,439
Total			¥9,044

(B) Loss on impairment of fixed assets for the fiscal year ended March 31, 2021, consists of the following:

		Impairment loss		
Use	Location	Type of asset	Millions of yen	Thousands of U.S. dollars
(Idle assets)				
Oil depot and others	Oil depot (Akigunsakacho, Hiroshima) and other	Land	**¥18**	**$163**
		Buildings and others	**103**	**930**
			121	**1,093**
(Business assets)				
Oil exploration and production	Licensed blocks located in Norway Continental Shelf	Machinery and equipment	**12,379**	**111,818**
Coal mining business and others	Licensed blocks located in Australia, and others	Machinery and equipment and buildings and others	**7,664**	**69,228**
Total			**¥20,164**	**$182,142**

10. Short-Term Borrowings and Long-Term Debt

(A) Short-term borrowings

Short-term borrowings are principally unsecured bank borrowings and notes maturing within one year. It is customary in Japan for such borrowings to be rolled over each year. The weighted-average interest rates for the fiscal years ended March 31, 2020 and 2021, are approximately 0.73% and 0.43%, respectively.

(B) Short-term borrowings, commercial paper, and the current portion of long-term debt as of March 31, 2020 and 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Loans from banks, insurance companies, and government agencies:			
Unsecured	¥210,872	**¥277,686**	**$2,508,232**
Commercial paper	315,965	**188,005**	**1,698,182**
Current portion of long-term debt	128,728	**76,622**	**692,105**
Current portion of lease obligations*	8,642	**9,545**	**86,217**
Total	¥664,209	**¥551,860**	**$4,984,738**

* Current portion of lease obligations is included in “Other” current liabilities.

To raise working capital efficiently, the Company entered into commitment line contracts with five banks. Total credit lines as of March 31, 2020 and 2021, are ¥249,178 million and ¥249,855 million ($2,256,847 thousand), respectively. This facility had not been utilized in either of the two fiscal years.

(C) Long-term debt as of March 31, 2020 and 2021, is as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Loans from banks, insurance companies, and government agencies:			
Unsecured	¥696,861	**¥694,091**	**$6,269,456**
Unsecured straight bonds	80,000	**120,000**	**1,083,912**
Lease obligations*	32,591	**29,074**	**262,617**
	809,452	**843,165**	**7,615,986**
Less: Current portion of long-term debt	(128,728)	**(76,622)**	**(692,105)**
Less: Current portion of lease obligations	(8,642)	**(9,545)**	**(86,217)**
Net	¥672,081	**¥756,997**	**$6,837,663**

* Lease obligations (excluding current portion) are included in “Other” long-term liabilities.

The weighted-average interest rates applicable to short-term borrowings, commercial paper, and long-term debt as of March 31, 2020 and 2021, are as follows:

	2020	**2021**
Short-term borrowings	0.73%	**0.43%**
Commercial paper	0.04%	**(0.02)%**
Current portion of long-term debt (excluding lease obligations)	1.03%	**0.57%**
Long-term debt (excluding current portion)	0.60%	**0.47%**

Annual maturities of loans within long-term debt outstanding as of March 31, 2021, are as follows:

Long-term loans

Year ending March 31	Millions of yen	Thousands of U.S. dollars
2022	**¥56,622**	**$511,453**
2023	**82,135**	**741,896**
2024	**102,622**	**926,951**
2025	**81,205**	**733,495**
2026	**74,832**	**675,936**
2027 and thereafter	**296,672**	**2,679,724**
Total	**¥694,091**	**$6,269,456**

Straight bonds

Year ending March 31	Millions of yen	Thousands of U.S. dollars
2022	**¥20,000**	**$180,652**
2023	**10,000**	**90,326**
2025	**10,000**	**90,326**
2026	**30,000**	**270,978**
2027 and thereafter	**50,000**	**451,630**
Total	**¥120,000**	**$1,083,912**

Lease obligations

Year ending March 31	Millions of yen	Thousands of U.S. dollars
2022	**¥9,545**	**$86,217**
2023	**6,664**	**60,200**
2024	**3,160**	**28,546**
2025	**4,072**	**36,781**
2026	**1,052**	**9,510**
2027 and thereafter	**4,578**	**41,359**
Total	**¥29,074**	**$262,617**

The net book value of assets pledged as collateral as of March 31, 2020 and 2021, is as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Land*	¥423,065	**¥415,201**	**$3,750,348**
Investments in securities	6,581	**2,519**	**22,760**
Total	¥429,647	**¥417,720**	**$3,773,109**

As of March 31, 2020 and 2021, the land in the table above is pledged to a bank as collateral for a revolving mortgage. No borrowing secured by the collateral is outstanding at March 31, 2020 and 2021.

* Accounts payable, other for which the land is pledged as collateral are ¥60,466 million and ¥91,843 million ($829,584 thousand) as of March 31, 2020 and 2021, respectively.

In addition, the Company pledged as collateral of borrowings by NSRP from financial institutions, investments in securities of Nghi Son Refinery and Petrochemical LLC ("NSRP"), the Company's equity method affiliate and long-term loans receivable from NSRP. The amounts recognized in the consolidated balance sheet as of March 31, 2020 and 2021 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Investments in nonconsolidated subsidiaries and affiliates	¥25,812	-	-
Long-term loans	70,657	**¥30,110**	**$271,977**
Total	¥96,469	**¥30,110**	**$271,977**

11. Retirement Benefits to Employees

The Company and its subsidiaries maintain a corporate pension fund system and lump-sum retirement payment plans, which are defined benefit retirement plans covering substantially all employees. The benefit amounts are primarily calculated based on a point system. Certain subsidiaries maintain a defined contribution pension plan. A retirement benefits trust is set up for certain defined benefit corporate pension plans. The simplified method is used to calculate defined benefit obligation for the defined benefit plans of certain subsidiaries in accordance with applicable accounting standards.

(A) Defined benefit plans

(1) The changes in defined benefit obligation for the years ended March 31, 2020 and 2021, are as follows*:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Balance at beginning of year	¥97,172	**¥192,286**	**$1,736,847**
Current service cost	4,883	**4,761**	**43,007**
Interest cost	714	**858**	**7,754**
Actuarial losses	95	**686**	**6,196**
Benefits paid	(13,150)	**(13,382)**	**(120,878)**
Increase resulting from inclusion of subsidiaries in consolidation	102,769	—	—
Others	(198)	**(634)**	**(5,735)**
Balance at end of year	¥192,286	**¥184,574**	**$1,667,191**

(*) The defined benefit obligation of the plans for which the Group uses the simplified method is not included in this table (see (3) below).

(2) The changes in plan assets for the years ended March 31, 2020 and 2021, are as follows*:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Balance at beginning of year	¥85,759	**¥126,823**	**$1,145,544**
Expected return on plan assets	2,325	**2,295**	**20,735**
Actuarial gains	(4,305)	**12,976**	**117,209**
Contributions from the employer	31,919	**5,048**	**45,603**
Benefits paid	(6,574)	**(7,452)**	**(67,317)**
Increase resulting from inclusion of subsidiaries in consolidation	17,673	—	—
Others	25	**(401)**	**(3,624)**
Balance at end of year	¥126,823	**¥139,289**	**$1,258,151**

(*) The plan assets of the plans for which the Group uses the simplified method are not included in this table (see (3) below).

(3) The changes in liabilities for employees' retirement benefits of the plans for which the Group uses the simplified method for the years ended March 31, 2020 and 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Balance at beginning of year	¥304	**¥1,582**	**$14,290**
Net periodic benefit costs	1,088	**584**	**5,280**
Benefits paid	(158)	**(175)**	**(1,582)**
Contributions from the employer	(590)	**(267)**	**(2,418)**
Increase resulting from inclusion of subsidiaries in consolidation	938	**71**	**645**
Balance at end of year	¥1,582	**¥1,795**	**$16,213**

(4) Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets is as follows*:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Defined benefit obligation	¥194,654	**¥186,900**	**$1,688,195**
Plan assets	(130,003)	**(142,565)**	**(1,287,742)**
	64,651	**44,334**	**400,453**
Unfunded defined benefit obligation	2,393	**2,714**	**24,517**
Net liability arising from defined benefit obligation	¥67,045	**¥47,048**	**$424,970**

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Liabilities for employees' retirement benefits	¥67,542	**¥49,232**	**$444,694**
Assets for employees' retirement benefits	(496)	**(2,183)**	**(19,723)**
Net liabilities arising from defined benefit obligations	¥67,045	**¥47,048**	**$424,970**

(*) The amounts in the above tables include the balances of the plans for which the Group uses the simplified method.

(5) The components of net periodic benefit costs for the years ended March 31, 2020 and 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Service cost	¥4,883	**¥4,761**	**$43,007**
Interest cost	714	**858**	**7,754**
Expected return on plan assets	(2,325)	**(2,295)**	**(20,735)**
Recognized actuarial losses	(397)	**529**	**4,783**
Net periodic benefit costs calculated using simplified method	1,088	**584**	**5,280**
Net periodic benefit costs	¥3,963	**¥4,438**	**$40,090**

(6) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2020 and 2021, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Actuarial (gains) losses	¥4,797	**(¥12,819)**	**($115,796)**

(7) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2020 and 2021, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Unrecognized actuarial (gains) losses	¥5,384	**(¥7,435)**	**($67,160)**

(8) Plan assets

(i) Components of plan assets

Plan assets as of March 31, 2020 and 2021, consist of the following**:

	2020	**2021**
Debt investments	40%	**41%**
Equity investments	23	**31**
Alternative investments	15	**21**
Cash and deposits	18	**3**
Others	4	**4**
Total	100%	**100%**

(*) Total plan assets include 27% and 18% each of retirement benefit trust assets for certain corporate pension plans as of March 31, 2020 and 2021, respectively.

(**) The plan assets for which the Group uses the simplified method are not included in this table.

(ii) Method of determining the expected rate of return on plan assets

The expected rate of return on plan assets is determined considering the long-term rates of return which are expected currently and in the future from the various components of the plan assets.

(9) Assumptions used for the years ended March 31, 2020 and 2021, are set forth as follows*:

	2020	**2021**
Discount rate	0.4%	**0.4%**
Expected rate of return on plan assets	1.8%	**1.9%**

(*)The discount rate and expected rate of return on plan assets for the years ended March 31, 2020 and 2021, are shown as a weighted average.

In calculating benefit obligations, the Group primarily uses the salary increase index by age based on the point system.

(B) Defined contribution retirement benefit plans

Required contribution to the defined contribution plans for the years ended March 31, 2020 and 2021 are ¥3,963 million and ¥3,671 million ($33,160 thousand), respectively. The transfer of ¥13.8 billion ($124 million) to the defined contribution plans is expected to be completed in four years. The accrued transfer of ¥2.6 billion ($23 million) as of March 31, 2021 is recorded in accounts payable, other under current liabilities and other under long-term liabilities.

12. Asset Retirement Obligations

Asset retirement obligations recognized in the consolidated balance sheet are as follows:

(A) Outline of the relevant asset retirement obligations

The Group has recognized the costs of restoration to the original state resulting from real estate leasing agreements on land for service station facilities and the removal costs for petroleum and coal production facilities on the expiry of production or period of mining rights as asset retirement obligations based on a reasonable estimation.

(B) Calculation method for the relevant asset retirement obligations

The estimated periods for the actual expenditure of costs are based on the useful life of the principal facilities for service station facilities and the estimated effective mining period from the startup of operations for oil exploration and production and coal mining. The discount rates to be applied for the fiscal years ended March 31, 2020 and 2021, vary from 0.2% to 4.8% and 0.2% to 3.9%, respectively.

(C) The changes in asset retirement obligations for the fiscal years ended March 31, 2020 and 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Balance at beginning of year	¥53,878	**¥63,603**	**$574,504**
Additional provisions associated with the acquisition of property, plant and equipment	325	**4,678**	**42,258**
Reconciliation associated with passage of time	2,121	**1,884**	**17,022**
Reduction associated with meeting asset retirement obligations	(2,128)	**(1,750)**	**(15,815)**
Changes in estimates*1	6,606	**9,903**	**89,457**
Other increases (decreases)*2	2,800	**407**	**3,676**
Balance at end of year	¥63,603	**¥78,726**	**$711,103**

Notes: *1 The Company changed the estimates of asset retirement costs during the fiscal years ended March 31, 2020 and 2021 mainly because it became clear that the estimated costs at certain overseas subsidiaries will increase when the production ceases or the exploration rights terminate. The breakdown of changes in estimates for the year ended March 31, 2020, is: increase of ¥6,657 million and decrease of ¥50 million. The breakdown of changes in estimates for the year ended March 31, 2021, is: increase of ¥9,950 million ($89,881 thousand) and decrease of ¥47 million ($424 thousand).

*2 Other increases (decreases) primarily relate to changes in foreign currency exchange rates for the fiscal year ended March 31, 2021. Other increases (decreases) primarily relate to increase in new consolidated subsidiaries for the fiscal year ended March 31, 2020.

13. Contingent Liabilities

(A) Debt guarantees

The Group provided guarantees and items of a similar nature to financial institutions for indebtedness of the following parties as of March 31, 2020 and 2021:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Employees	¥239	**¥191**	**$1,726**
Nonconsolidated subsidiaries and affiliates	5,473	**5,421**	**48,968**
Other	11,062	**6,426**	**58,051**
Total	¥16,775	**¥12,039**	**$108,746**

(B) Construction completion guarantee

The Company provided a construction completion guarantee related to project financing for the Nghi Son Refinery and Petrochemical Complex Project in Vietnam by Nghi Son Refinery and Petrochemical Limited Liability Company, whose construction commenced in the previous fiscal year. The Company's portion of construction completion guarantee outstanding as of March 31, 2020 and 2021, was ¥165,127 million and ¥153,428 million ($1,385,860 thousand), respectively.

14. Equity

Japanese companies are subject to the Companies Act. The significant provisions in the Companies Act that affect financial and accounting matters are summarized below:

(A) Dividends

Under the Companies Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. Additionally, for companies that meet certain criteria including (1) having a Board of Directors, (2) having independent auditors, (3) having a Board of Statutory Auditors, and (4) the term of service of the directors being prescribed as one year rather than the normal two-year term by its articles of incorporation, the Board of Directors may declare dividends (except for dividends-in-kind) at any time during the fiscal year if the Company has prescribed so in its articles of incorporation. The Company meets all the above criteria and, accordingly, the Board of Directors may declare dividends (except for dividends-in-kind) at any time during the fiscal year.

Semiannual interim dividends may also be paid once a year upon resolution by the Board of Directors if the articles of incorporation of the company so stipulate. The Companies Act provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the shareholders, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

(B) Increases/decreases and transfer of common stock, reserve, and surplus

The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus), depending on the equity account charged upon the payment of such dividends, until the aggregate amount of legal reserve and additional paid-in capital equals 25% of the common stock. Under the Companies Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus, and retained earnings can be transferred among the accounts within equity under certain conditions upon resolution of the shareholders.

(C) Treasury stock

The Companies Act also provides for companies to purchase treasury stock and dispose of such treasury stock by resolution of the Board of Directors. The amount of treasury stock purchased cannot exceed the amount available for distribution to the shareholders, which is determined by a specific formula.

Changes in treasury stock are as follows:

(Thousands of shares)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Balance at the beginning of the year	10,657	**603**
Increase during the year	4,503	**10**
Decrease during the year	(14,557)	**(17)**
Balance at the end of the year	603	**596**

Notes :

1. The number of shares of treasury stock acquired based on the resolution passed at the Board of Directors' meeting for the fiscal year ended March 31, 2020 was 4,060 thousand, and total acquisition cost was ¥11,999 million.

15. Selling, General and Administrative Expenses

Major elements of selling, general and administrative expenses for the years ended March 31, 2020 and 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Freights	¥101,562	**¥96,388**	**$870,641**
Salaries	68,697	**72,688**	**656,568**
Provision for bonuses	6,572	**7,608**	**68,721**
Retirement benefit expenses	2,433	**2,239**	**20,229**
Operational costs	73,462	**72,138**	**651,600**

Research and development expenses charged to income for the fiscal years ended March 31, 2020 and 2021, are ¥19,436 million and ¥20,468 million ($184,888 thousand), respectively.

16. Related Party Transactions

Significant transactions of the Company and its subsidiaries with related parties for the years ended March 31, 2020 and 2021, are as follows:

(A) Transactions of the Company with related parties

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Collection of accounts receivable during the year*1	¥1,188,166	**¥981,547**	**$8,865,933**
Lease of building from Nissho Kosan K.K.*2	187	**200**	**1,815**
Purchase of petroleum products, etc., from Seibu Oil Co., Ltd.*4		**271,938**	**2,456,313**

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Undertaking of project completion guarantee:			
Nghi Son Refinery and Petrochemical LLC on Nghi Son Refinery and Petrochemical Complex in Vietnam*3	¥165,127	**¥153,428**	**$1,385,860**

The balances due to or from related parties at March 31, 2020 and 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Accounts receivable, other*1	¥45,626	**¥46,112**	**$416,513**
Prepaid rent to Nissho Kosan K.K.*2	18	**18**	**172**
Deposit receivable from Nissho Kosan K.K.*2	109	**109**	**988**
Notes and accounts payable, trade*4		**51,295**	**463,329**

(B) Transactions of subsidiaries with related parties:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Disbursement on behalf of:			
Nghi Son Refinery and Petrochemical LLC*3	¥58,141	**¥45,301**	**$409,191**

The balances due to or from related parties at March 31, 2020 and 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Accounts receivable, other:			
Nghi Son Refinery and Petrochemical LLC*3	¥58,413	**¥99,076**	**$894,916**

(*1) The collection of accounts receivable represents transactions with Idemitsu Credit Co., Ltd. ("Idemitsu Credit"). When customers make payments at service stations operated by the Company's contracted retailers using credit card services provided by Idemitsu Credit, Idemitsu Credit collects credit service receivables from the customers at respective payment due dates. The collected cash is then paid to the Company after deducting the amount to be paid to the contracted retailers. The balance of accounts receivable represents outstanding receivables from Idemitsu Credit at year-end.

(*2) Masakazu Idemitsu, the Company's director, and his relatives have a 100% interest in Nissho Kosan K.K. The rent for the building is determined based on the rent prevailing in the area.

(*3) As of March 31, 2021, the Company holds a 35.1% equity interest in Nghi Son Refinery and Petrochemical LLC ("NSRP"). In addition to the above, the Company pledged investments in securities of NSRP amounting to ¥25,812 million and ¥- million as of March 31, 2020 and 2021, respectively, and long-term loans from NSRP amounting to ¥70,657 million and ¥30,110 million ($271,977 thousand) as of March 31, 2020 and 2021, respectively, as collateral for NSRP's borrowings from financial institutions.

(*4) The transaction amount is determined in view of market price, etc.

(C) A significant affiliate for the year ended March 31, 2021 was Nghi Son Refinery and Petrochemical LLC and a summary of its financial information is as follows:

	Nghi Son Refinery and Petrochemical LLC		
	Millions of yen		Thousands of U.S. dollars
	2019	**2020**	**2020**
Current assets	157,902	**¥149,105**	**$1,346,810**
Non-current assets	815,644	**720,428**	**6,507,348**
Current liabilities	238,985	**321,729**	**2,906,059**
Long-term liabilities	661,020	**602,184**	**5,439,298**
Equity	73,540	**(54,380)**	**(491,198)**
Net Sales	406,986	**342,473**	**3,093,429**
(Loss)/income before income taxes	(104,905)	**(127,826)**	**(1,154,609)**
Net (loss)/income	(104,905)	**(127,826)**	**(1,154,609)**

17. Income Taxes

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes which, in the aggregate, resulted in normal effective statutory tax rates of approximately 30% for each of the fiscal years ended March 31, 2020 and 2021.

(A) The tax effects of significant temporary differences and tax loss carryforwards which resulted in deferred tax assets and liabilities at March 31, 2020 and 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Tax loss carryforwards	¥88,703	**¥ 76,184**	**$688,141**
Asset retirement obligations	34,329	**39,606**	**357,746**
Non-deductible impairment in values of investment securities	41,986	**39,486**	**356,664**
Impairment loss on fixed assets	36,802	**31,788**	**287,131**
Liability for employees' retirement benefits	31,892	**25,760**	**232,686**
Reserve for repair work	19,424	**22,354**	**201,921**
Estimated sales discounts for the year	6,169	**5,028**	**45,421**
Accrued bonuses to employees	3,267	**3,945**	**35,634**
Deferred losses on hedging activities	3,203	**2,676**	**24,177**
Withdrawal Accounts payable	2,816	**2,560**	**23,126**
Loss on penalty for LPG business	2,755	**2,449**	**22,126**
Business taxes for previous years	353	**2,015**	**18,203**
Accounts payable by transition to defined contribution pension plan	1,804	**787**	**7,116**
Amortization of software	1,117	**567**	**5,128**
Allowance for doubtful accounts	208	**222**	**2,008**
Unrealized losses on available-for-sale securities	117	**125**	**1,130**
Other	16,797	**19,533**	**176,439**
Subtotal deferred tax assets	291,751	**275,092**	**2,484,805**
Less valuation allowance for tax loss carryforwards	(28,629)	**(30,506)**	**(275,551)**
Less valuation allowance for temporary differences	(81,332)	**(75,280)**	**(679,979)**
Total valuation allowance	(109,961)	**(105,786)**	**(955,530)**
Total deferred tax assets	181,789	**169,306**	**1,529,275**
Value difference arising from business combinations	(78,681)	**(75,377)**	**(680,851)**
Special amortization of overseas development costs, etc.	(40,378)	**(44,735)**	**(404,076)**
Special tax reserve on property, plant and equipment	(23,818)	**(23,789)**	**(214,885)**
Retained earnings in subsidiaries and affiliates	(5,054)	**(2,527)**	**(22,826)**
Unrealized gains on available-for-sale securities	(1,784)	**(2,373)**	**(21,436)**
Deferred gains on hedging activities	(778)	**(1,829)**	**(16,523)**
Adjustment amount of change in the valuation method for inventories	(2,097)	**(1,737)**	**(15,697)**
Reserve for loss on overseas investments	(95)	**(58)**	**(528)**
Other	(7,013)	**(5,501)**	**(49,690)**
Total deferred tax liabilities	(159,702)	**(157,929)**	**(1,426,517)**
Net deferred tax assets (liabilities)	¥22,087	**¥11,376**	**$102,757**

The expiration of tax loss carryforwards, the related valuation allowances and the resulting net deferred tax assets as of March 31, 2021, were as follows:

	Millions of yen						
March 31, 2021	1 Year or Less	After 1 Year through 2 Years	After 2 Years through 3 Years	After 3 Years through 4 Years	After 4 Years through 5 Years	After 5 Years	Total
Deferred tax assets relating to tax loss carryforwards *1	¥5,013	23	1,270	19,049	3,966	46,860	76,184
Less valuation allowances for tax loss carryforwards	(5,013)	(23)	(12)	(3,789)	(3,827)	(17,839)	(30,506)
Net deferred tax assets relating to tax loss carryforwards	—	—	1,257	15,259	139	29,020	*2 45,677

	Thousands of U.S. dollars						
March 31, 2021	1 Year or Less	After 1 Year through 2 Years	After 2 Years through 3 Years	After 3 Years through 4 Years	After 4 Years through 5 Years	After 5 Years	Total
Deferred tax assets relating to tax loss carryforwards *1	$ 45,282	215	11,471	172,066	35,832	423,273	688,141
Less valuation allowances for tax loss carryforwards	(45,282)	(215)	(113)	(34,231)	(34,568)	(161,140)	(275,551)
Net deferred tax assets relating to tax loss carryforwards	—	—	11,358	137,834	1,264	262,132	*2 412,590

Notes: *1 Figures for the tax loss carryforward were the amounts multiplied by effective statutory tax rate.
*2 A part of tax loss carryforward was determined to be recoverable as future taxable income is anticipated, and therefore valuation allowance for the tax loss carryforward has not been recognized.

(B) A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying consolidated statement of income for the year ended March 31, 2021, with the corresponding figures for 2020, is as follows:

	2020	**2021**
Statutory tax rate	30.62%	**30.62%**
Increase (decrease) in taxes resulting from:		
Equity in earnings and losses of nonconsolidated subsidiaries and affiliates, net	(39.74)	**18.86**
Non-taxable benefits of sales of fixed assets in overseas subsidiaries	—	**(12.72)**
Differences in tax rates applied to foreign subsidiaries	(20.20)	**12.22**
Tax credits	8.16	**(8.71)**
Amortization of goodwill	(17.20)	**4.57**
Non-deductible expenses for tax purposes	(19.51)	**2.29**
Valuation allowance	21.93	**(1.09)**
Gain from step acquisition	30.60	—
Tax effect from investment in subsidiaries and affiliates	(9.43)	—
Dividends from consolidated subsidiaries and equity-method affiliates	(5.18)	—
Other	(0.72)	**(0.61)**
Effective income tax rate	(20.67)%	**45.43%**

18. Other Comprehensive Income

The components of other comprehensive income for the fiscal years ended March 31, 2020 and 2021, are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Unrealized gains (losses) on available-for-sale securities:			
Gains (losses) arising during the year	(¥6,859)	**¥5,467**	**$49,381**
Reclassification adjustments to profit or loss	1,134	**140**	**1,271**
Amount before income tax effect	(5,725)	**5,607**	**50,653**
Income tax effect	1,416	**(1,574)**	**(14,221)**
Total	(¥4,308)	**¥4,033**	**$36,432**
Deferred gains (losses) on hedging activities, net:			
Gains (losses) arising during the year	(¥1,839)	**¥5,952**	**$53,767**
Reclassification adjustments to profit or loss	1,665	**2,216**	**20,025**
Amount before income tax effect	(174)	**8,169**	**73,792**
Income tax effect	347	**(2,949)**	**(26,638)**
Total	¥173	**¥5,220**	**$47,154**
Surplus from land revaluation:			
Income tax effect	¥2,913	**¥825**	**$7,454**
Total	¥2,913	**¥825**	**$7,454**
Foreign currency translation adjustments:			
Adjustments arising during the year	(¥14,182)	**(¥11,256)**	**($101,675)**
Reclassification adjustments to profit or loss	(39)	**(10)**	**(97)**
Amount before income tax effect	(14,221)	**(11,267)**	**(101,773)**
Income tax effect	—	**—**	**—**
Total	(¥14,221)	**(¥11,267)**	**($101,773)**
Defined retirement benefit plans:			
Adjustments arising during the year	(¥4,400)	**¥12,065**	**$108,980**
Reclassification adjustments to profit or loss	(397)	**754**	**6,816**
Amount before income tax effect	(4,797)	**12,819**	**115,796**
Income tax effect	1,582	**(3,901)**	**(35,245)**
Total	(¥3,215)	**¥8,917**	**$80,551**
Share of other comprehensive income (loss) in affiliates:			
Loss arising during the year	(¥2,808)	**(¥2,409)**	**($21,760)**
Reclassification adjustments to profit or loss	1,773	**3,560**	**32,163**
Total	(¥1,035)	**¥1,151**	**$10,402**
Total other comprehensive income (loss)	(¥19,693)	**¥8,881**	**$80,221**

19. Lease Transactions

(A) Lessee

(1) Finance leases

Information regarding finance lease transactions has not been presented because it is not material.

(2) Operating leases

Information regarding operating lease transactions has not been presented because it is not material.

(B) Lessor

The Group operates a finance sublease business. Future lease income under finance leases that do not transfer the ownership of the leased assets to the sublessee has not been presented because it is not material.

20. Financial Instruments and Related Disclosures

(A) Policy for financial instruments

The Group raises funds for capital investment through bank borrowings and issuance of bonds. Cash surpluses, if any, are invested in low-risk and short-term instruments. Short-term working capital is generated through bank borrowings and issuance of commercial paper. Derivatives are used not for speculative purposes, but to manage exposure to financial risks as described in (B) below. The Company and certain consolidated subsidiaries have applied hedge accounting.

(B) Nature and extent of risks arising from financial instruments

Notes and accounts receivable, trade are exposed to credit risk in relation to customers. Short-term investments and investments in securities are exposed to market risk. The Group also has long-term loans receivable from Group companies, etc.

Substantially all notes and accounts payable, trade have payment due dates within six months. Although the Group is exposed to foreign currency exchange risk arising from import payables denominated in foreign currencies, foreign currency forward contracts are arranged to reduce the risk, after netting receivables in the same currencies.

Short-term borrowings are used mainly in connection with operating activities such as purchases of raw material, and long-term debt is used principally for the purpose of making capital investments. Long-term debt with variable interest rates is exposed to interest rate fluctuation risk, and long-term debt denominated in foreign currencies is exposed to foreign currency exchange risk; the Group utilizes interest rate swap transactions or interest rate currency swap transactions as a hedging instrument to reduce such risk.

Regarding derivatives, the Group enters into foreign exchange forward contracts and foreign currency option transactions to reduce the foreign currency exchange risk arising from the receivables and payables denominated in foreign currencies, and enters into interest rate swap transactions to reduce fluctuation risk arising from interest payable on long-term debts bearing interest at variable rates. The Group also enters into interest rate currency swap transactions to reduce fluctuation risk arising from interest payable and foreign currency exchange risk on long-term debt denominated in foreign currencies. In addition, the Group enters into crude oil and petroleum product swaps and forward contracts to hedge the risk of price fluctuations of crude oil and petroleum products. Information regarding the method of hedge accounting, hedging instruments and hedged items, hedging policy, and the assessment of the effectiveness of hedging activities is found in Note 2(J).

(C) Risk management for financial instruments

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

In accordance with the internal policies of the Group for managing credit risk arising from receivables, each related division of the Group monitors the creditworthiness of its customers and manages the terms and conditions of payment, price, and collateral and identifies the default risk of customers at an early stage. The Group believes that the credit risk of derivatives is insignificant as it enters into derivative transactions only with financial institutions which have a sound credit profile.

(2) Monitoring of market risks (the risks arising from fluctuations in foreign exchange rates, interest rates, prices of crude oil and petroleum products, and others)

For trade receivables and payables denominated in foreign currencies, the Company and certain consolidated subsidiaries identify the foreign currency exchange risk for each currency on a monthly basis and enter into foreign exchange forward contracts and currency option transactions to hedge such risk. In order to mitigate the interest rate risk for loans payable bearing interest at variable rates, the Group enters into interest rate swap transactions (pay-fixed, received-variable), and in order to mitigate foreign currency exchange risk and fluctuation risk arising from interest payable on long-term debt denominated in foreign currencies, the Group enters into currency and interest rate swap transactions. The Company and certain consolidated subsidiaries also enter into crude oil and petroleum product swaps and forward contracts in order to mitigate the risk of price fluctuations of crude oil and petroleum products.

For short-term investments and investments in securities, the Group holds a minimum number of shares of the companies with which the Group has business relationships. The Group reviews the market prices of listed shares quarterly and the financial position of the issuers of unlisted shares annually. The Board of Directors annually approves the plan for derivative transactions under internal rules established with respect to the purposes, policies, procedures, approvals, and reporting for derivatives. In conducting derivative transactions, the division in charge of each derivative transaction follows the internal rules. Reports including actual transaction data are submitted monthly to the derivative committee and at the time of finalization of the annual plan to the management committee. Consolidated subsidiaries have established similar internal rules and follow them in conducting derivative transactions in principle.

(3) Monitoring of liquidity risk (the risk that the Group may not be able to meet its obligations on scheduled due dates)
The Group manages its liquidity risk by holding adequate volumes of liquid assets, along with adequate financial planning by the Treasury department. Consolidated subsidiaries raise funds by using loans from the Company, based on their financing plan.

(D) 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 values. In addition, the notional amounts of derivatives in Note 20 are not necessarily indicative of the actual market risk involved in derivative transactions.

(Fair Value of Financial Instruments)

The carrying value of financial instruments recorded in the consolidated balance sheets as of March 31, 2020 and 2021, their fair values, and unrealized gains (losses) are as follows. In addition, financial instruments for which market values are not available or fair values are extremely difficult to determine are not included in the table below.

March 31, 2020

	Millions of yen		
	Carrying amount	Fair value	Unrealized gains (losses)
Cash and cash equivalents	¥129,335	¥129,335	—
Notes and accounts receivable, trade	593,730	593,730	—
Investments in securities	22,623	20,409	(¥2,213)
Long-term loans	79,825	78,253	(1,572)
Total assets	¥825,514	¥821,728	(¥3,785)
Notes and accounts payable, trade	¥475,664	¥475,664	—
Short-term borrowings	210,872	210,872	—
Commercial paper	315,965	315,965	—
Current portion of long-term debt	128,728	128,728	—
Accounts payable, other	343,611	343,611	—
Long-term debt	648,133	651,066	¥2,933
Total liabilities	¥2,122,976	¥2,125,909	¥2,933
Derivative transactions*	(¥4,939)	(¥4,939)	—

* Net debits and credits arising from derivative transactions are presented in each net value, and the values of net debits after totaling credits and debits are shown in parentheses.

March 31, 2021

	Millions of yen		
	Carrying amount	Fair value	Unrealized gains (losses)
Cash and cash equivalents	**¥130,956**	**¥130,956**	**—**
Notes and accounts receivable, trade	**602,661**	**602,661**	**—**
Investments in securities	**25,078**	**27,525**	**¥2,446**
Long-term loans	**37,720**	**35,841**	**(1,878)**
Total assets	**¥796,416**	**¥796,984**	**¥568**
Notes and accounts payable, trade	**¥530,697**	**¥530,697**	**—**
Short-term borrowings	**277,686**	**277,686**	**—**
Commercial paper	**188,005**	**188,005**	**—**
Current portion of long-term debt	**76,622**	**76,622**	**—**
Accounts payable, other	**406,890**	**406,890**	**—**
Long-term debt	**737,468**	**738,623**	**¥1,154**
Total liabilities	**¥2,217,371**	**¥2,218,525**	**¥1,154**
Derivative transactions*	**(¥10,694)**	**(¥10,694)**	**—**

	Thousands of U.S. dollars		
	Carrying amount	Fair value	Unrealized gains (losses)
Cash and cash equivalents	**$1,182,875**	**$1,182,875**	**—**
Notes and accounts receivable, trade	**5,443,603**	**5,443,603**	**—**
Investments in securities	**226,526**	**248,625**	**$22,098**
Long-term loans	**340,711**	**323,744**	**(16,966)**
Total assets	**$7,193,716**	**$7,198,848**	**$5,132**
Notes and accounts payable, trade	**$4,793,579**	**$4,793,579**	**—**
Short-term borrowings	**2,508,232**	**2,508,232**	**—**
Commercial paper	**1,698,182**	**1,698,182**	**—**
Current portion of long-term debt	**692,105**	**692,105**	**—**
Accounts payable, other	**3,675,280**	**3,675,280**	**—**
Long-term debt	**6,661,264**	**6,671,693**	**$10,428**
Total liabilities	**$20,028,644**	**$20,039,072**	**$10,428**
Derivative transactions*	**($96,595)**	**($96,595)**	**—**

* Net debits and credits arising from derivative transactions are presented in each net value, and the values of net debits after totaling credits and debits are shown in parentheses.

Notes:

1. Calculation method for fair values of financial instruments and securities and derivatives transactions

Cash and cash equivalents

Cash and cash equivalents are based on their book values since all deposits are short term and, thus fair values approximate book value.

Notes and accounts receivable, trade

Notes and accounts receivable, trade approximate book value since they are settled in the short term.

Investments in securities

With respect to fair values of investments in securities, fair values of stocks are based on quotations from the stock exchange, and those bonds are based on quotations from the stock exchange or quotations presented by a financial institution.

Long-term loans

The fair market value of long-term loans, which are valued at fair value, is based on the book value. The fair market value of the other long-term loans is based on the present value, which is estimated by discounting future cash flows at a discount rate that would be applied to a similar new loan.

Notes and accounts payable, trade; short-term borrowings; commercial paper; current portion of long-term debt; and accounts payable, other

Notes and accounts payable, trade; short-term borrowings; commercial paper; current portion of long-term debt; and accounts payable, other approximate book value since they are settled in the short term.

Long-term debt

The fair value of loans is determined by discounting the cash flows related to the loan at an estimated interest rate to be applied to a similar new borrowing. The fair value of bonds payable is based on the quoted market price.

2. Carrying amount of financial instruments whose fair value cannot be reliably determined

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Investments in securities that do not have a quoted market price in an active market	¥221,384	**¥214,117**	**$1,934,043**

3. Redemption schedule for receivables and short-term investments with maturities at March 31, 2020 and 2021

March 31, 2020

	Millions of yen			
	Within 1 year	Over 1 year within 5 years	Over 5 years within 10 years	Over 10 years
Cash and cash equivalents	¥129,335	—	—	—
Notes and accounts receivable, trade	593,730	—	—	—
Long-term loans	—	¥30,475	¥48,825	¥524
Total	¥723,065	¥30,475	¥48,825	¥524

March 31, 2021

	Millions of yen			
	Within 1 year	Over 1 year within 5 years	Over 5 years within 10 years	Over 10 years
Cash and cash equivalents	**¥130,956**	—	—	—
Notes and accounts receivable, trade	**602,661**	—	—	—
Long-term loans	—	**¥4,875**	**¥32,161**	**¥683**
Total	**¥733,617**	**¥4,875**	**¥32,161**	**¥683**

	Thousands of U.S. dollars			
	Within 1 year	Over 1 year within 5 years	Over 5 years within 10 years	Over 10 years
Cash and cash equivalents	**$1,182,875**	—	—	—
Notes and accounts receivable, trade	**5,443,603**	—	—	—
Long-term loans	—	**$44,041**	**$290,499**	**$6,169**
Total	**$6,626,478**	**$44,041**	**$290,499**	**$6,169**

4. The redemption schedule for long-term debt is presented in Note 10.

21. Derivatives and Hedging Activities

March 31, 2020

(A) Derivative transactions to which hedge accounting is not applied

(1) Currency related

March 31, 2020	Millions of yen			
	Notional amount		Fair value	Unrealized gains (losses)
	Contract amount	Maturing after one year		
Foreign currency forward contracts, etc.:				
Selling U.S. dollars, etc.	¥139,839	—	(¥704)	(¥704)
Buying U.S. dollars, etc.	103,248	—	568	568
Interest rate currency swap contracts: USD receive-variable, pay-fixed	1,632	—	(56)	(56)
Total	¥244,720	—	(¥193)	(¥193)

(2) Commodity related

March 31, 2020	Millions of yen			
	Notional amount		Fair value	Unrealized gains (losses)
	Contract amount	Maturing after one year		
Commodity swap contracts:				
Selling petroleum products	¥144,461	—	(¥2,951)	(¥2,951)
Buying petroleum products	103,409	—	3,069	3,069
Total	¥247,870	—	¥117	¥117

(B) Derivative transactions to which hedge accounting is applied

(1) Currency related

March 31, 2020	Hedged item	Millions of yen		
		Notional amount		Fair value
		Contract amount	Maturing after one year	
Foreign currency forward contracts:				
Selling U.S. dollars, etc.	Notes and accounts receivable, trade	¥11,000	—	¥260
Buying U.S. dollars, etc.	Short-term borrowings	1,505	—	22
Total		¥12,506	—	¥283

(2) Interest rate related

March 31, 2020	Hedged item	Millions of yen		
		Notional amount		Fair value
		Contract amount	Maturing after one year	
Interest rate swap contracts:				
Pay-fixed, receive-variable	Long-term debt	¥245,050	¥191,749	(¥5,769)
Interest rate currency swap contracts:				
USD receive-variable, pay-fixed		1,632	—	(62)
Total		¥246,682	¥191,749	(¥5,832)

(3) Commodity related

March 31, 2020	Hedged item	Notional amount (Millions of yen)		Fair value
		Contract amount	Maturing after one year	
Commodity swap contracts:				
Selling petroleum products	Crude oil and	¥948	—	(¥172)
Buying petroleum products	petroleum products	350	—	795
Total		¥1,298	—	¥623

Notes:

1. Fair value is computed based on exchange rates and prices obtained from correspondent financial institutions.
2. Unrealized gains and losses in the table above are debited (credited) in the accompanying consolidated statement of income.

March 31, 2021

(A) Derivative transactions to which hedge accounting is not applied

(1) Currency related

March 31, 2021	Notional amount (Millions of yen)		Fair value	Unrealized gains (losses)
	Contract amount	Maturing after one year		
Foreign currency forward contracts, etc.:				
Selling U.S. dollars, etc.	**¥46,747**	—	**(¥1,174)**	**(¥1,174)**
Buying U.S. dollars, etc.	**134,711**	**29,845**	**1,937**	**1,937**
Interest rate currency swap contracts: USD receive-variable, pay-fixed	**1,328**	—	**(21)**	**(21)**
Total	**¥182,787**	**29,845**	**¥741**	**¥741**

March 31, 2021	Notional amount (Thousands of U.S. dollars)		Fair value	Unrealized gains (losses)
	Contract amount	Maturing after one year		
Foreign currency forward contracts, etc.:				
Selling U.S. dollars, etc.	**$422,251**	—	**($10,610)**	**($10,610)**
Buying U.S. dollars, etc.	**1,216,794**	**269,582**	**17,504**	**17,504**
Interest rate currency swap contracts: USD receive-variable, pay-fixed	**12,000**	—	**(195)**	**(195)**
Total	**$1,651,045**	**269,582**	**$6,698**	**$6,698**

(2) Interest rate related

March 31, 2021	Hedged item	Notional amount (Millions of yen)		Fair value
		Contract amount	Maturing after one year	
Interest rate swap contracts: Pay-fixed, receive-variable	Long-term debt	**¥13,408**	**¥6,520**	**(¥476)**
Total		**¥13,408**	**¥6,520**	**(¥476)**

March 31, 2021	Hedged item	Notional amount (Thousands of U.S. dollars)		Fair value
		Contract amount	Maturing after one year	
Interest rate swap contracts: Pay-fixed, receive-variable	Long-term debt	**$121,113**	**$58,897**	**($4,300)**
Total		**$121,113**	**$58,897**	**($4,300)**

(3) Commodity related

March 31, 2021	Notional amount (Millions of yen)		Fair value	Unrealized gains (losses)
	Contract amount	Maturing after one year		
Commodity swap contracts:				
Selling petroleum products	**¥161,415**	―	**(¥12,783)**	**(¥12,783)**
Buying petroleum products	**118,897**	―	**6,383**	**6,383**
Total	**¥280,313**	―	**(¥6,400)**	**(¥6,400)**

March 31, 2021	Notional amount (Thousands of U.S. dollars)		Fair value	Unrealized gains (losses)
	Contract amount	Maturing after one year		
Commodity swap contracts:				
Selling petroleum products	**$1,458,004**	―	**($115,469)**	**($115,469)**
Buying petroleum products	**1,073,954**	―	**57,655**	**57,655**
Total	**$2,531,959**	―	**($57,813)**	**($57,813)**

(B) Derivative transactions to which hedge accounting is applied

(1) Currency related

March 31, 2021	Hedged item	Millions of yen Notional amount		
		Contract amount	Maturing after one year	Fair value
Foreign currency forward contracts:				
Selling U.S. dollars, etc.	Notes and accounts receivable, trade	**¥5,356**	—	**¥237**
Buying U.S. dollars, etc.	Short-term borrowings	**1,905**	—	**(7)**
Total		**¥7,261**	—	**¥230**

March 31, 2021	Hedged item	Thousands of U.S. dollars Notional amount		
		Contract amount	Maturing after one year	Fair value
Foreign currency forward contracts:				
Selling U.S. dollars, etc.	Notes and accounts receivable, trade	**$48,381**	—	**$2,149**
Buying U.S. dollars, etc.	Short-term borrowings	**17,207**	—	**(70)**
Total		**$65,589**	—	**$2,079**

(2) Interest rate related

March 31, 2021	Hedged item	Millions of yen Notional amount		
		Contract amount	Maturing after one year	Fair value
Interest rate swap contracts:				
Pay-fixed, receive-variable	Long-term debt	**¥156,819**	**¥136,092**	**(¥4,096)**
Interest rate currency swap contracts:				
USD receive-variable, pay-fixed		**1,328**	—	**(52)**
Total		**¥158,148**	**¥136,092**	**(¥4,148)**

March 31, 2021	Hedged item	Thousands of U.S. dollars Notional amount		
		Contract amount	Maturing after one year	Fair value
Interest rate swap contracts:				
Pay-fixed, receive-variable	Long-term debt	**$1,416,492**	**$1,229,269**	**($36,998)**
Interest rate currency swap contracts:				
USD receive-variable, pay-fixed		**12,000**	—	**(477)**
Total		**$1,428,492**	**$1,229,269**	**($37,475)**

(3) Commodity related

March 31, 2021	Hedged item	Notional amount (Millions of yen)		Fair value
		Contract amount	Maturing after one year	
Commodity swap contracts:				
Selling petroleum products	Crude oil and petroleum products	**¥2,198**	—	**(¥695)**
Buying petroleum products		—	—	—
Total		**¥2,198**	—	**(¥695)**

March 31, 2021	Hedged item	Notional amount (Thousands of U.S. dollars)		Fair value
		Contract amount	Maturing after one year	
Commodity swap contracts:				
Selling petroleum products	Crude oil and petroleum products	**$19,854**	—	**($6,285)**
Buying petroleum products		—	—	—
Total		**$19,854**	—	**($6,285)**

Notes:

1. Fair value is computed based on exchange rates and prices obtained from correspondent financial institutions.
2. Unrealized gains and losses in the table above are debited (credited) in the accompanying consolidated statement of income.

22. Net Income per Share

Reconciliation of the differences between basic and diluted net income per share ("EPS")

Reconciliation of the differences between basic and diluted EPS for the years ended March 31, 2020 and 2021, is as follows:

	Millions of yen	Thousands of shares	Yen	U.S. Dollars
	Net income attributable to owners of the parent	Weighted-average shares	EPS	
Year ended March 31, 2020:				
Basic EPS:				
Net income (loss) attributable to common shareholders	(¥22,935)	300,558	(¥76.31)	
Effect of dilutive securities:				
Dilution of subsidiary stock	–			
Diluted EPS:				
Net income (loss) for computation	(¥22,935)	300,558	—*	
Year ended March 31, 2021:				
Basic EPS:				
Net income attributable to common shareholders	**¥34,920**	**297,269**	**¥117.47**	**$ 1.06**
Effect of dilutive securities:				
Dilution of subsidiary stock	–			
Diluted EPS:				
Net income for computation	**¥34,920**	**297,269**	—*	—*

* Diluted net income per share for the fiscal year ended March 31, 2021, is not calculated because dilutive shares do not exist. Diluted net income per share for the fiscal year ended March 31, 2020, is not calculated because of net loss per share during the current fiscal year and because dilutive shares do not exist.

The following appropriation of retained earnings at March 31, 2021, was approved at the Board of Directors' meeting held on May 11, 2021:

	Millions of yen	Thousands of U.S. dollars
Year-end cash dividends, ¥60 (U.S. $0.54) per share	**¥17,870**	**$161,413**

23. Non-operating income (expenses)

Gain and Loss on sales of fixed assets

Gain on sales of fixed assets are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Land, leasehold rights (former SS sites and others)	¥337	**¥1,609**	**$14,540**
Buildings and others	1,876	**11,471**	**103,617**
Total	¥2,214	**¥13,081**	**$118,158**

Loss on sales of fixed assets are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	**2021**	**2021**
Land, leasehold rights (former SS sites and others)	(¥46)	**(¥708)**	**($6,395)**
Buildings and others	(382)	**(413)**	**(3,735)**
Total	(¥428)	**(¥1,121)**	**($10,131)**

Gain from step acquisition

As a result of a share exchange that the Company and Showa Shell conducted on April 1, 2019, gain from step acquisition is recorded as non-operating income.

24. Subsequent Events

(Reduction of legal capital surplus and transfer to other capital surplus)

At the Board of Directors' meeting held on May 11, 2021, the Board of Directors resolved that it will propose a reduction of legal capital surplus and transfer to other capital surplus for resolution at the 106th annual general meeting of shareholders scheduled for June 23, 2021.

1. Objectives

   The Company plans to reduce its legal capital surplus and to transfer the reduced amount to other capital surplus pursuant to Article 448 Paragraph 1 of the Companies Act in order to enhance flexibility in its future capital policies.

2. Overview

   (1) Amount of legal capital surplus to be reduced

   Legal capital surplus will be reduced by ¥416,000,000,000, and the entire reduced amount will be transferred to other capital surplus. As a result, legal capital surplus will decrease from ¥458,105,285,625 to ¥42,105,285,625.

3. Schedule

(1) Board of Directors resolution date	May 11, 2021
(2) Shareholder resolution date	June 23, 2021
(3) Notice for objections of creditors	July 1, 2021 (planned)
(4) Deadline for objections of creditors	August 1, 2021 (planned)
(5) Effective date	August 31, 2021 (planned)

25. Segment Information

Years ended March 31, 2020 and 2021

Under ASBJ Statement No. 17, "Accounting Standard for Disclosures about Segments of an Enterprise and Related Information," and ASBJ Guidance No. 20, "Guidance on Accounting Standard for Disclosures about Segments of an Enterprise and Related Information," an entity is required to report financial and descriptive information about its reportable segments. Reportable segments are operating segments or aggregations of operating segments that meet specified criteria. Operating segments are components of an entity about which separate financial information is available and for which such information is evaluated regularly by the chief operating decision-maker in deciding how to allocate resources and in assessing performance. Generally, segment information is required to be reported on the same basis as is used internally for evaluating operating segment performance and deciding how to allocate resources to operating segments.

(A) Description of reportable segments

The Company's business segments cover the Group's business units for which separate financial information is available on the business units for the whole Group and for which the Board of Directors carries out a periodic review in order to determine the allocation of management resources and to evaluate their operating performance.

Major businesses in each segment are shown in the following table.

Reportable segment	Major businesses
Petroleum	Production, sales, import/export, trading, etc., of refined petroleum products
Basic chemicals	Production, sales, etc. of olefin/aroma products
Functional materials	Lubricants, performance chemicals, electronic materials, high functional asphalt, agricultural biotechnology products business, etc.,
Power and renewable energy	Power generation (thermal power, solar power, wind power, etc.), sales of electricity and solar cell business
Resources	Exploration, development, production and sales of crude oil, natural gas and other energy resources such as coals

(B) Methods of measurement for the amounts of sales, income (loss), assets, and other items for each reportable segment

The accounting policies of each reportable segment are consistent with those disclosed in Note 2, "Summary of Significant Accounting Policies."

(C) Information about sales, income, assets, and other items:

Year ended March 31, 2020

	Millions of yen									
	Reportable segment									
	Petroleum	Basic chemicals	Functional materials	Power and renewable energy	Resources	Total	Others	Total	Recon-ciliation	Consoli-dated
Net sales:										
Customers	¥4,820,992	¥459,227	¥393,837	¥127,713	¥241,775	¥6,043,546	¥2,304	¥6,045,850	¥—	¥6,045,850
Intersegment	26,916	22,244	21,737	1,499	1,027	73,424	957	74,381	(74,381)	—
Total	¥4,847,908	¥481,471	¥415,575	¥129,212	¥242,802	¥6,116,970	¥3,261	¥6,120,232	(¥74,381)	¥6,045,850
Operating income (loss)	(¥76,692)	¥10,337	¥26,544	(¥1,073)	¥40,868	(¥14)	¥412	¥397	(¥4,257)	(¥3,860)
Equity in earnings (losses) of non-consolidated subsidiaries and affiliates, net	(32,674)	1,584	1,884	569	909	(27,725)	—	(27,725)	5,366	(22,358)
Segment income (loss)	(109,366)	11,922	28,429	(503)	41,778	(27,740)	412	(27,327)	1,108	(26,219)
Segment assets	2,549,289	337,420	289,493	170,210	378,736	3,725,150	66,682	3,791,832	95,105	3,886,938
Other items:										
Depreciation and amortization	53,057	6,013	8,473	1,916	25,012	94,473	9	94,482	454	94,937
Amortization of goodwill	7,208	34	289	2,142	—	9,674	0	9,675	—	9,675
Impairment loss on fixed assets	6,741	106	—	597	1,599	9,044	—	9,044	—	9,044
Investment in equity method affiliates	108,043	42,817	9,104	4,366	6,036	170,368	—	170,368	21,873	192,241
Unamortized balance of goodwill	125,920	113	361	40,707	—	167,103	0	167,104	—	167,104
Capital expenditures	¥71,952	¥7,340	¥9,915	¥17,441	¥35,701	¥142,352	¥51	¥142,403	¥632	¥143,036

Year ended March 31, 2021

	Millions of yen									
	Reportable segment									
	Petroleum	Basic chemicals	Functional materials	Power and renewable energy	Resources	Total	Others	Total	Recon-ciliation	Consoli-dated
Net sales:										
Customers	¥3,593,399	¥329,044	¥332,592	¥123,745	¥171,977	¥4,550,760	¥5,860	¥4,556,620	¥ —	¥4,556,620
Intersegment	18,448	19,045	16,913	1,722	1,045	57,175	1,664	58,839	(58,839)	—
Total	¥3,611,848	¥348,089	¥349,505	¥125,468	¥173,022	¥4,607,935	¥7,524	¥4,615,459	(¥58,839)	¥4,556,620
Operating income (loss)	¥143,199	¥3,010	¥12,193	(¥17,229)	¥4,101	¥145,275	¥931	¥146,207	(¥6,144)	¥140,062
Equity in earnings (losses) of non-consolidated subsidiaries and affiliates, net	(41,093)	391	804	(75)	628	(39,344)	—	(39,344)	(444)	(39,789)
Segment income (loss)	102,105	3,401	12,998	(17,305)	4,729	105,931	931	106,862	(6,589)	100,273
Segment assets	2,510,048	347,851	265,906	202,789	341,652	3,668,249	157,929	3,826,178	128,264	3,954,443
Other items:										
Depreciation and amortization	57,274	6,141	7,857	2,215	24,119	97,608	27	97,635	523	98,158
Amortization of goodwill	7,162	34	289	2,142	—	9,628	0	9,629	—	9,629
Impairment loss on fixed assets	362	—	—	510	19,292	20,164	—	20,164	—	20,164
Investment in equity method affiliates	82,189	42,148	8,213	4,291	5,236	142,079	—	142,079	25,075	167,155
Unamortized balance of goodwill	120,288	79	72	38,565	—	159,006	0	159,006	—	159,006
Capital expenditures	¥55,958	¥13,075	¥10,155	¥32,013	¥35,475	¥146,678	¥26	¥146,704	¥4,709	¥151,414

Year ended March 31, 2021

	Thousands of U.S. dollars									
	Reportable segment									
	Petroleum	Basic chemicals	Functional materials	Power and renewable energy	Resources	Total	Others	Total	Recon-ciliation	Consoli-dated
Net sales:										
Customers	$32,457,772	$2,972,129	$3,004,176	$1,117,745	$1,553,406	$41,105,230	$52,932	$41,158,162	$ —	$41,158,162
Intersegment	166,637	172,029	152,771	15,560	9,440	516,439	15,036	531,475	(531,475)	—
Total	$32,624,410	$3,144,159	$3,156,947	$1,133,305	$1,562,847	$41,621,669	$67,968	$41,689,638	($531,475)	$41,158,162
Operating income (loss)	$1,293,464	$27,195	$110,143	($155,631)	$37,047	$1,312,219	$8,410	$1,320,630	($55,499)	$1,265,130
Equity in earnings (losses) of nonconsolidated subsidiaries and affiliates, net	(371,183)	3,533	7,268	(679)	5,676	(355,385)	—	(355,385)	(4,016)	(359,401)
Segment income (loss)	922,281	30,728	117,412	(156,311)	42,723	956,834	8,410	965,245	(59,516)	905,728
Segment assets	22,672,280	3,142,009	2,401,831	1,831,717	3,086,015	33,133,854	1,426,514	34,560,369	1,158,566	35,718,935
Other items:										
Depreciation and amortization	517,340	55,474	70,974	20,007	217,858	881,655	244	881,900	4,729	886,629
Amortization of goodwill	64,695	310	2,614	19,352	—	86,973	1	86,975	—	86,975
Impairment loss on fixed assets	3,270	—	—	4,614	174,257	182,142	—	182,142	—	182,142
Investment in equity method affiliates	742,388	380,712	74,186	38,761	47,298	1,283,344	—	1,283,344	226,501	1,509,846
Unamortized balance of goodwill	1,086,523	718	653	348,346	—	1,436,241	1	1,436,243	—	1,436,243
Capital expenditures	$505,453	$118,108	$91,728	$289,162	$320,437	$1,324,890	$238	$1,325,128	$42,535	$1,367,663

Notes:

1. The segment "Others" refers to the total of other business segments that are not included in the reportable segments, including insurance businesses and intra-group service businesses.
2. The amounts of reconciliation for the operating income (loss) mainly represents research and development costs, which do not belong to reportable segments.
3. The amount of reconciliation for equity in earnings (losses) of nonconsolidated subsidiaries and affiliates and that for investment in equity method nonconsolidated subsidiaries and affiliates mainly represent those related to equity method nonconsolidated subsidiaries and affiliates, which do not belong to reportable segments.
4. The segment income (loss) of the reportable segments is reconciled to the amount of operating income (loss) and equity in earnings (losses) of nonconsolidated subsidiaries and affiliates in the consolidated statement of income.
5. The amount of reconciliation for the segment assets represents elimination among the reportable segments and the amount of Company assets that are not allocated to reportable segments.
6. The amounts of reconciliation for "Depreciation and amortization" and "Capital expenditures" mainly represent depreciation and increases in fixed assets for research and development that do not belong to the reportable segments.

(D) Related Information

Year ended March 31, 2020

1. Information for each product and service

Since the consolidated business segment information includes similar information, descriptions have been omitted.

2. Geographic segment information

(1) Sales

Millions of yen				
Japan	Asia and Oceania	North America	Other	Total
¥4,740,127	¥844,313	¥341,067	¥120,342	¥6,045,850

Note: 1. Areas are segmented based on their geographical proximity.

2. The principal countries or regions included in each geographic segment are as follows:

Asia and Oceania	: Singapore, Australia, China, South Korea, etc.
North America	: USA and Canada
Other	: U.K., Norway, South America, etc.

(2) Property, plant and equipment

Millions of yen			
Japan	Asia and Oceania	Other	Total
¥1,244,744	¥138,301	¥95,077	¥1,478,122

Note: 1. Areas are segmented based on their geographical proximity.

2. The principal countries or regions included in each geographic segment are as follows:

Asia and Oceania	: Australia, Indonesia, China, Malaysia, etc.
Other	: Norway, USA, Canada, etc.

3. Principal customer information

Of the net sales to outside customers, no customer accounted for 10% or more of net sales in the consolidated statement of income. Thus, this information has been omitted.

Year ended March 31, 2021

1. Information for each product and service

Since the consolidated business segment information includes similar information, descriptions have been omitted.

2. Geographic segment information

(1) Sales

Millions of yen				
Japan	Asia and Oceania	North America	Other	Total
¥3,476,849	**¥775,478**	**¥216,468**	**¥87,823**	**¥4,556,620**

Thousands of U.S. dollars				
Japan	Asia and Oceania	North America	Other	Total
$31,405,016	**$7,004,590**	**$1,955,279**	**$793,276**	**$41,158,162**

Note: 1. Areas are segmented based on their geographical proximity.

2. The principal countries or regions included in each geographic segment are as follows:

Asia and Oceania : Singapore, Australia, China, South Korea, etc.

North America : USA and Canada

Other : U.K., Norway, South America ,etc.

(Certain reclassifications have been made in 2020 to conform to the classifications used in 2021)

Since the amount for Europe decreased, Other in 2021 includes the amount of Europe that was disclosed separately in 2020. The amounts of Europe and Other, ¥89,182 million and ¥31,159 million, respectively, in 2020 are reclassed to Other, ¥120,342 million.

(2) Property, plant and equipment

Millions of yen			
Japan	Asia and Oceania	Other	Total
¥1,248,163	**¥145,121**	**¥128,615**	**¥1,521,899**

Thousands of U.S. dollars			
Japan	Asia and Oceania	Other	Total
$11,274,167	**$1,310,821**	**$1,161,736**	**$13,746,725**

Note: 1. Areas are segmented based on their geographical proximity.

2. The principal countries or regions included in each geographic segment are as follows:

Asia and Oceania : Australia, China, Indonesia, Malaysia, etc.

Other : Norway, USA, Canada, etc.

(Certain reclassifications have been made in 2020 to conform to the classifications used in 2021)

Since the amount for Europe decreased, Other in 2021 includes the amount of Europe that was disclosed separately in 2020. The amounts of Europe and Other, ¥59,700 million and ¥35,376 million, respectively, in 2020 are reclassed to Other, ¥95,077 million.

3. Principal customer information

Of the net sales to outside customers, no customer accounted for 10% or more of net sales in the consolidated statement of income. Thus, this information has been omitted.

Deloitte Touche Tohmatsu LLC
Marunouchi Nijubashi Building
3-2-3 Marunouchi
Chiyoda-ku, Tokyo 100-8360
Japan

Tel: +81 (3) 6213 1000
Fax: +81 (3) 6213 1005
www2.deloitte.com/jp/en

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Idemitsu Kosan Co.,Ltd.:

Opinion

We have audited the consolidated financial statements of Idemitsu Kosan Co.,Ltd. and its consolidated subsidiaries (the "Group"), which comprise the consolidated balance sheet as of March 31, 2021, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, all expressed in Japanese yen.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of March 31, 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Convenience Translation

Our audit also comprehended the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made in accordance with the basis stated in Note 1 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of readers outside Japan.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the provisions of the Code of Professional Ethics in Japan, and we have fulfilled our other ethical responsibilities as auditors. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of deferred tax assets	
Key Audit Matter Description	**How the Key Audit Matter Was Addressed in the Audit**
The Group, as disclosed in the consolidated financial statements, recorded deferred tax assets of 21,019 million yen. Of the recorded amount, 11,317 million yen was recorded by Idemitsu Kosan Co.,Ltd. (hereafter referred to as "Company") and represents the majority of the consolidated Group's deferred tax assets. The deferred tax assets recognized before offsetting against deferred tax liabilities amount to 107,596 million yen, of which 42,214 million yen was related to the deferred tax assets for tax loss carryforwards. The Company's deferred tax assets are determined by assessing the recoverability of the deferred tax assets based on the sufficiency of future taxable income. The assessment involves verification of the temporary differences and the tax loss carryforwards (hereafter referred to as "temporary differences") and estimating the timing of the reversal of the temporary differences and tax loss carryforwards. It also involves evaluating both the classification of the Company based on the definition stated in the "Implementation Guidance on Recoverability of Deferred Tax Assets" (hereafter referred to as "Implementation Guidance") and the Company's future business plan for fiscal year 2021 and beyond. We determined that the attainability of future taxable income, estimated based on the Company's future business plan, has a material impact on the assessment of the recoverability of deferred tax assets. The Company's fuel oil business represents a large portion of the estimated future taxable income and especially depends on the "future crude oil prices and estimated petroleum product margins (differences between crude oil costs and product sales prices)" assumption. This assumption may vary significantly due to changes in the external environment such as trends in oil-producing countries, geopolitical risks, and trends related to the COVID-19 pandemic, and is also subject to high levels of uncertainty. Therefore, we determined to evaluate the assumption as a key audit matter.	Our audit procedures to evaluate the appropriateness of management's assumption on the recoverability of deferred tax assets included the following, among others: ① With the assistance of our tax specialists, we examined whether the balances of temporary differences were calculated appropriately by reviewing the related documents. We also evaluated the timing as to when the temporary differences are expected to be reversed by reviewing the related documents. ② We compared the level of past taxable income and the level of future taxable income with the balance of tax loss carryforwards, assessed the significance of the balance and determined whether the Company's classification was in accordance with the Implementation Guidance. ③ We performed a variance analysis between the budget and assumptions for fiscal year 2020 and the actual financial results to test whether management bias was involved. We also determined whether the future business plan had been approved by the Board of Directors. Through interviews with management and inspections of related documents, we also evaluated the appropriateness of the estimated future taxable income prepared based on the future business plan. ④ Regarding the particularly significant assumption of "Future crude oil prices and estimated petroleum product margins" used in future business plan of the fuel oil business, we performed the following audit procedures: • We read the reports of future crude oil prices published by external institutions, which took into consideration trends by oil-producing countries, geopolitical risk and trends related to the COVID-19 pandemic, and compared them with the assumptions used by management in the future business plan to determine if there are differences or not. • We assessed the reliability of management's estimates by comparing the assumptions used in the future business plan with the actual petroleum product margins in fiscal year 2020. ⑤ To consider certain risks in the future business plan with more conservative assumptions, we performed a sensitivity analysis of the future taxable income.

<table>
<tr><th colspan="2">Valuation of equity shares and loans in NSRP</th></tr>
<tr><th>Key Audit Matter Description</th><th>How the Key Audit Matter Was Addressed in the Audit</th></tr>
<tr>
<td>
The Company holds 35.1% of the shares in Nghi Son Refinery and Petrochemical LLC (hereafter referred to as "NSRP") operating the Nghi Son refinery and provides NSRP with loans through a consolidated subsidiary. The Group accounts for the equity shares in NSRP under the equity method and, accordingly, the performance of NSRP is reflected within income and loss from the equity method investment. Also, the financial position of NSRP influences the fair value of loans and the fluctuation is reflected in net profit or loss. As described in Note 3 of "Significant Accounting Estimates," the amounts of these shares and loans recognized on the consolidated balance sheet as of March 31, 2021, are as follows:
<table>
<tr><th></th><th>Account Name on the Consolidated Balance Sheet</th><th>Balance on the Consolidated Balance Sheet (in Millions of Yen)</th></tr>
<tr><td>Shares</td><td>Investments in nonconsolidated subsidiaries and affiliates</td><td>—</td></tr>
<tr><td>Loans</td><td>Long-term loans</td><td>¥30,110</td></tr>
</table>
The Nghi Son refinery began commercial operations in Vietnam in November 2018; however, the commencement of operations was delayed compared to the initial plan, and NSRP's business performance for the prior year deteriorated significantly as compared to the plan due to a decrease in asset utilization rate resulting from equipment issues and sluggish overseas product markets. The asset utilization rate recovered during the year due to equipment maintenance, but the fluctuations in market condition had material impacts on product margins. Consequently, the actual performance of NSRP for the current year was below the budgeted target and NSRP recorded an operating loss of 78,253 million yen. Therefore, NSRP determined that there were impairment indicators for fixed assets and calculated the value in use.
</td>
<td>
With the assistance of the component auditor of NSRP, we performed the following audit procedures, among others, over the "Product margin," "Asset utilization rate," and "WACC" (i.e. management assumptions) included in the future business plan.
In evaluating the "Product margin" and "WACC," we deemed it appropriate to utilize the assistance of component auditor's valuation specialists (hereafter referred to as "valuation specialists") due to the following. Evaluation of "Product margin" requires a high level of expertise as it involves estimation over a long period and requires evaluation of market analyses. Evaluation of "WACC" involves several estimates and requires complex calculations.
<Product margin>

We evaluated multiple third parties' external data of the forecasted future product margin, which reflected external environments such as COVID-19 and the IMO ("International Maritime Organization") regulations, and compared them with the estimation used by NSRP to determine whether there are any significant differences between the external data and NSRP's estimation.
We compared the actual product margin against the budget to determine the reliability of the management estimate of product margin.

<Asset utilization rate>

We inquired of NSRP management to gain an understanding of the management process for preparing the asset utilization rate.
Through inquiry with NSRP management and inspection of external reports related to market trend, we obtained an understanding of product supply/demand balances for Southeast Asia and inspected equipment evaluation reports approved by NSRP to determine whether the asset utilization rate was corroborated by such information.

</td>
</tr>
</table>

Management utilizes the future business plan, which covers extensive periods and includes management assumptions, in calculating the value in use of the fixed assets. Furthermore, the balance of the fixed assets subject to the impairment assessment was 710,024 million yen, which is quantitatively material. Thus, there may be a significant impact on the consolidated financial statements through income/loss from the equity method investment if impairment losses on the fixed assets are recognized. Also, the future business plan affects the fair value of the loans. We determined that the significant management assumptions in the future business plan were "Product margin," "Asset utilization rate," and "Weighted Average Cost of Capital" (hereafter referred to as "WACC"), and thus, identified these assumptions as a key audit matter due to the following reasons: ① The "Product margin" largely fluctuates due to external environments, and the uncertainty is considered high. ② The "Asset utilization rate" is an estimate for which external data does not exist. Furthermore, considering a risk of being a large-scale oil refinery, it is subject to management bias that to which extent the possibility of unforeseen events should be factored into the planned asset utilization rate. ③ Discounted future cash flows are very sensitive to changes in WACC. Furthermore, the estimate has a high degree of uncertainty, as it involves many assumptions made by management such as the inherent risks of projects.	• We performed a sensitivity analysis to evaluate the reasonableness of the asset utilization rate prepared by management. • We obtained the change in actual utilization rates post maintenance and performed a comparison of the actual utilization with planned utilization rates for FY 2020 and for the period from January to March 2021. <WACC> • We obtained an understanding of WACC components and its derivation process. • We evaluated the consistency between changes in the business environment and WACC fluctuations. • With the assistance of valuation specialists, we evaluated the management estimate and determined whether the applied WACC was reasonable. By performing the above procedures, we determined the reliability of the future business plan and the reasonableness of NSRP's impairment assessment of fixed assets. We also determined whether income/loss from equity method of NSRP on the consolidated financial statements and the fair value assessment of the loans were appropriately accounted by the Group.

Responsibilities of Management and Audit & Supervisory Board Members and the Audit & Supervisory Board for the Consolidated Financial Statements

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

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern in accordance with accounting principles generally accepted in Japan and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Audit & Supervisory Board members and the Audit & Supervisory Board are responsible for overseeing the Directors' execution of duties relating to the design and operating effectiveness of the controls over the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in Japan will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks. The procedures selected depend on the auditor's judgment. In addition, we obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain, when performing risk assessment procedures, an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate whether the overall presentation and disclosures of the consolidated financial statements are in accordance with accounting principles generally accepted in Japan, as well as the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with Audit & Supervisory Board members and the Audit & Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide Audit & Supervisory Board members and the Audit & Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with Audit & Supervisory Board members and the Audit & Supervisory Board, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Interest Required to Be Disclosed by the Certified Public Accountants Act of Japan

Our firm and its designated engagement partners do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

Deloitte Touche Tohmatsu LLC

June 23, 2021