Annual Securities Report

English excerpt translation of the "Yukashoken-Houkokusho" for the 99th fiscal year (from April 1, 2021 to March 31, 2022)

Nippon Paper Industries, Co., Ltd. 3863

Note: This document has been translated from the Japanese original for reference purposes only. In the event of any discrepancy between this translated document and the Japanese original, the original shall prevail.

[Business Risks]

The Group has identified the following factors as risks that could affect Nippon Paper Group's business performance and financial position:

(1) Major Risks Associated with Management Strategies

1) Delays in Business Structure Transformation and the Creation of New Businesses

In the Paper Business, which is one of the Nippon Paper Group's businesses, a market contraction has been continuing as a trend in response to IoT and digital transformation (DX), as well as the impact of the COVID-19 pandemic. In response, the Group has been shifting management resources to growing businesses such as the Daily-Life Products Business, and working to early profit contribution from new businesses and products. If these efforts do not progress as planned, the Group's business performance, financial position, and other aspects could be affected.

The Group's main initiatives are to develop paper products to replace plastics, primarily for containers and packaging; expand the use of woody biomass, including cellulose nanofiber (CNF); and invest in growing businesses, reallocate human resources, and expand overseas business. The Group will implement these initiatives as planned as it strives to improve earnings. In particular, with regard to overseas business, the Group is accelerating the speed of our overseas expansion more than ever to achieve the Group's growth. The Nippon Paper Group manufactures and sells pulp and paper and operates forestry plantations and other businesses in North America, South America, Scandinavia, Southeast Asia, Australia, and other overseas entails a number of risks, including changes to laws and regulations by local governments, labor disputes, and the impact of political uncertainty on economic activities. For this reason, the Group strives to prevent the materialization of these risks by sharing information with external law firms and dealing with these risks appropriately.

2) Climate Change

The Group emits a large amount of CO_2 in its manufacturing processes. It is possible that carbon pricing and emissions trading will be more fully introduced toward the goal of reducing greenhouse gas (GHG) emissions to virtually zero by 2050. Such events could affect the Group's business performance, financial position, and other aspects The Group will reduce GHG emissions by analyzing the impact on the Group's business, reviewing energy mix, such as fuel conversion to renewable energy, and promoting energy-saving measures, while keeping an eye on government trends and the global situation. The Group also has forest resources in Japan and overseas as its foundation and will actively maximize value of forest resources by improving their productivity.

3) Product Demand and Market Conditions

The Nippon Paper Group carries out businesses such as the Paper and Paperboard Business, Daily-Life Products Business, Energy Business, and Wood Products and Construction-Related Business. The Group is exposed to the risk of fluctuations in demand for its products based on factors such as economic conditions and fluctuations in product prices based on factors such as market conditions. Such fluctuations could affect the Group's business performance, financial position, and other aspects. Notably, the Paper Business is experiencing a substantial market contraction as a trend due to the lifestyle changes by the COVID-19 pandemic. To address the situation, the Group is working to adjust production output to match market demand by reorganizing its production structure. Concurrently, the Group is implementing measures such as investing in the Daily-Life Products Business, where demand is expected to increase.

4) Raw Material and Fuel Procurement and International Transportation

The Nippon Paper Group is engaged in businesses in which it purchases raw materials and fuel such as wood chips, wastepaper, oil, coal, and chemicals, and uses these resources to manufacture and sell products. The Group is thus exposed to the risk of fluctuations in input prices for raw materials and fuel based on domestic and international market conditions. Such fluctuations could affect the Group's business performance, financial position and other aspects. In addition, the global shortage of container transport capacity triggered by the spread of the COVID-19, the shortage of dockworkers and truck drivers, furthermore, the use of clean energy in response to environmental issues and price pass-through due to the price increases in raw materials and fuel have caused ocean freight rates to rise and delivery times to be delayed. Such occurrences could affect the Group's business performance, financial position and other aspects.

The Group applies risk countermeasures to certain raw materials and fuels, such as establishing and implementing forward contracts for risk hedging purposes. In addition, the Group has established good relationships with shipping companies to ensure stable procurement, and when necessary, the Group considers joint transportation and joint procurement with other companies, and purchasing with long-term contracts and from multiple suppliers and regions to ensure appropriate inventory management and flexible sourcing.

(2) Main Risks Associated with the Business Environment and Business Activities Production

1) Production Facilities

The Nippon Paper Group's production activity is based on the estimated demand and production capacity of existing facilities. The Group is exposed to the risk of a reduction in product supply capability due to equipment trouble or fire. Such fluctuations in the product supply capability could affect the Group's business performance, financial position, and other aspects. The Group conducts periodic inspections of its production facilities and carries out aging countermeasure works, etc., to systematically renew vulnerable areas.

2) Natural Disasters and Infectious Diseases, etc.

The occurrence of an earthquake or large-scale natural disaster in the vicinity of the Nippon Paper Group's production and sales bases may impact its production, sales and other business activities. This may lead to opportunity losses due to a production stoppage, additional costs to restore facilities, and/or damage to products, merchandise and raw material and fuel. Such consequences of natural disasters may affect the business performance, financial position, and other aspects of the Group. In accordance with the Crisis Response Regulations, during emergencies, the Group forms a Crisis Response Headquarters and works to confirm the safety of employees and their families, monitor the status of damage to the Company and its customers, and implement measures to ensure the continuous supply of products to corporate customers. Moreover, the Group has established business continuity management (BCM) to address emergencies. BCM measures include setting up multiple production sites for primary product categories and carrying out drills in preparation for natural disasters.

The spread of the COVID-19 could affect the business performance, financial position, and other aspects of the Group due to changes in consumer behavior, the risk of production line stoppages and reputational damage caused by employee infection, and the impact on procurement of raw materials and fuel. The Nippon Paper Group has set up the COVID-19 Response Office to monitor the Group's condition in relation to COVID-19. The COVID-19 Response Office is also responsible for preparing the Group's guidelines designed to prevent the spread of COVID-19 among employees and ensure business continuity. Based on these guidelines, COVID-19 response measures are implemented in each division. In addition, the Group has put a system in place to form a Response Headquarters whenever needed.

3) Environmental Laws and Regulations

The Group is subject to the application of environmental laws and regulations in various businesses. Revisions and amendments to such regulations could limit production activities and result in additional costs, affecting the Group's business performance, financial position, and other aspects.

4) Human Resources Recruitment and Labor-Related

The Nippon Paper Group considers its human resources strategy to be a key element of its business activities. The Group recognizes that there is a vital need to recruit and develop optimal human resources to expand its business in the future. The Group's inability to recruit optimal human resources could restrict its business operations, which could in turn affect its business performance, financial position, and other aspects. Additionally, if the Group were found to be out of compliance with various labor-related rules (employment issues, harassment, human rights infringements, etc.), the Group could be subject to lawsuits or experience a loss of public trust. Such events could adversely impact the business performance, financial position, and other aspects of the Group.

The Group strives to secure human resources optimally and efficiently through proactive recruitment and development of diverse human resources and the development of workplaces premised on flexible and diverse work styles. From FY2023/3, as a measure to improve employee engagement, the Group has reviewed internal systems, focusing on support for balancing work and life events such as childcare. Moreover, the Group strives to operate all of its business sites with the highest priority on safety, the occurrence of an occupational accident is a serious risk that could result in the loss of workers' health and lives, and depending on the nature of the accident, the Group may be held liable for corporate management and may even have to shut down its facilities. In order to prevent occupational accidents, the Group operates own occupational health and safety management system and incorporate specific, ongoing, and voluntary activities into the health and safety plans of each business site, striving to prevent occupational accidents, promote workers' health, and improve health and safety standards such as a comfortable work environment.

5) Product Liability

The Nippon Paper Group could receive claims for compensation for loss or damage in relation to product liability, but it has not received any significant claims of this sort at present. However, the Nippon Paper Group may be liable for the payment of compensation for loss or damage in the future. While the Group has enrolled in product liability insurance, it may not be enough to cover the amount of compensation for loss or damage for which the Group may be held liable. The Group has established the Nippon Paper Group Product Safety Committee to supervise the product safety risk of Group companies and support efforts to manage and mitigate that risk. Concurrently, Product Safety Committees have been set

up at the Group's main manufacturing companies as part of efforts to prevent product safety incidents.

6) Litigation

The Nippon Paper Group takes the utmost care in compliance management to observe and follow laws and regulations in the course of doing business. However, as it conducts business activities worldwide, the Group is exposed to the risk of litigation or other actions associated with criminal or civil affairs, taxation, antitrust law, product liability law, intellectual property rights, and environmental and labor issues. As a result, such litigation could affect the Group's business performance, financial position, and other aspects. Heightened environmental awareness has made it particularly crucial for the Group to show consideration to local community residents, perform biodiversity surveys and conduct other activities when making use of forestry resources. In addition, ensuring compliance is one of the main principles of the Nippon Paper Group's Action Charter. The Group strives to raise employees' awareness of compliance through awareness-building and training activities for employees.

7) Information Systems

The Nippon Paper Group strengthens and rigorously implements security measures for its information systems. The Group also implements extensive information security measures to address the work-from-home environment, which has been rapidly adopted across society. If there are any problems such as information leakages due to unauthorized access to computers and/or data breaches due to criminal acts, and/or interference with somebody's duties, the Nippon Paper Group may be held liable for the payment of compensation for loss or damage and experience a loss of public trust or suspension of business, etc. in the Group. Such events could affect the business performance, financial position, and other aspects of the Group. The Group installs defense systems and provides employee training on information security in step with current conditions. The Group has set forth rules concerning the handling of personal information, and made those rules known to its executives, employees, and business partners as part of its efforts to strengthen its management structure.

8) Foreign Exchange

The Nippon Paper Group is exposed to the risk of foreign exchange fluctuations associated with import, export and other transactions. In terms of the balance of imports and exports, the Group's imports of raw materials and fuel, such as wood chips, oil, coal, and chemicals, exceed its exports of products and other items. For this reason, the predominant foreign exchange impact is that the depreciation of the yen against the U.S. dollar will have a negative impact on business performance. The Group hedges against this risk through forward contracts and other means in order to mitigate the impact of foreign exchange rate fluctuations on its business performance.

9) M&As and Business Alliances

The Nippon Paper Group may conduct activities such as M&As and business alliances with the aim of realizing sustainable growth by creating new business opportunities. In the process, the Group conducts a thorough examination of business strategies and synergistic effects before it decides to engage in such activities, and it works to maximize its results after it concludes such agreements. However, changes in the operating environment and other factors may prevent the Group from achieving the results it had initially anticipated. In these circumstances, the business performance, financial position, and other aspects of the Group could be affected.

(3) Financial and Accounting Risks

1) Share Prices

The Nippon Paper Group holds marketable shares primarily in business partners and affiliated companies. Therefore, the Group is exposed to the risk of share price fluctuations that could affect its business performance, financial position, and other aspects. With this in mind, the Group conducts regular monitoring of the shares it holds, so that it can detect whether the shares could have a significant impact on its financial position.

2) Interest Rates

The Nippon Paper Group is exposed to the risk of interest rate fluctuations with respect to interest-bearing debt and other items. Such fluctuations could affect the business performance, financial position, and other aspects of the Group. The Company maintains the ratio of fixed interest rate loans to long-term debt above a certain level. Also, the Company mitigates the risk of interest rate fluctuations through the use of financial instruments such as interest rate swaps, in addition to spreading out repayment periods and diversifying financing methods, among other measures.

3) Credit Risk

The Nippon Paper Group takes care to limit its credit risk through measures such as continuously evaluating the financial and related information of its business partners in accordance with credit management rules and establishing credit limits accordingly, but any event that disrupts the collection of receivables, such as a deterioration in the financial condition or bankruptcy of customers, could affect the business performance, financial position, and other aspects of the Group.

4) Impairment of Fixed Assets

The Nippon Paper Group owns fixed assets such as production facilities and land. Changes in the operating environment and other factors that result in a significant decline in future cash flow generated through these assets may lead to an incurrence of an impairment loss and affect the business performance, financial position, and other aspects of the Group.

5) Retirement Benefit Obligation

The Nippon Paper Group's retirement benefit expenses and obligation are calculated based on actuarial assumptions such as the rate of return and the discount rate on pension assets. However, any circumstances requiring a change in the actuarial assumptions or an impairment to pension assets resulting from stagnation of the stock market and other factors may affect the business performance, financial position, and other aspects of the Group.

6) Reversal of Deferred Tax Assets

The Nippon Paper Group records deferred tax assets after it judges the recoverability of deductible temporary differences and operating loss carryforwards based on an estimation of future taxable income. However, changes in the operating environment and other factors that lead to a decline in taxable income, or changes in the tax regulations and other factors that lead to a revision in recoverability, may cause a reversal of deferred tax assets. Such a reversal could affect the business performance, financial position, and other aspects of the Group.

[Notes to consolidated financial statements of Nippon Paper Industries Co., Ltd. ("the Company") and its subsidiaries (collectively, "the Group")]

(Significant Matters Providing the Basis for the Preparation of the Consolidated Financial Statements)

- 1. The scope of consolidation
 - Number of consolidated subsidiaries: 54
 The names of major consolidated subsidiaries are omitted.
 In the fiscal year ended March 31, 2022, the liquidation of Nippon Paper Logistics Co., Ltd. was completed and it was excluded from the scope of the consolidation.
 - (2) Names, etc., of major unconsolidated subsidiaries Major unconsolidated subsidiary: Douoh Kouhatsu Ltd.

(Reason for exclusion from the scope of consolidation)

All unconsolidated subsidiaries are excluded from the scope of consolidation because the scale of their operations is small and their total amounts in terms of total assets, net sales, profit or loss (corresponding to the equity ratio owned by the Company) and retained earnings (corresponding to the equity ratio owned by the Company) do not have a significant effect on the Company's consolidated financial statements.

2. Application of the equity method

- (1) Number of unconsolidated subsidiaries accounted for by the equity method: 0
- (2) Number of affiliates accounted for by the equity method: 11
 - Names, etc., of major affiliates accounted for by the equity method

DuPont Nippon Paper Papylia Godo Kaisha, Shin Tokai Paper Co., Ltd., Phoenix Pulp & Paper Public Company Limited, Nippon Tokan Package Co., Ltd., and Lintec Corporation

DuPont Nippon Paper Papylia Godo Kaisha, which was previously an affiliate not accounted for by the equity method in the previous fiscal year, has become an affiliate accounted for using the equity method from the current fiscal year due to the increased importance it now has on the consolidated financial statements.

- (3) Unconsolidated subsidiaries (Douoh Kouhatsu Ltd. and 68 other companies) and affiliates (JPT LOGISTICS CO., LTD. and 23 other companies) not accounted for by the equity method are excluded from the scope of the equity method because their total amounts in terms of profit or loss (corresponding to the equity ratio owned by the Company) and retained earnings (corresponding to the equity ratio owned by the Company) are not significant, with insignificant effects on the Company's consolidated financial statements when excluded from the scope of the equity method.
- (4) For the affiliates accounted for by the equity method that close their accounts at different dates than the Company's balance sheet date, the financial statements as of their respective balance sheet dates are used for the preparation of the consolidated financial statements.

3. Accounting period of consolidated subsidiaries

The balance sheet date is December 31 for Jujo Thermal Oy, Siam Nippon Industrial Paper Co., Ltd., Nippon Paper Industries USA Co., Ltd., Opal, Nippon Dynawave Packaging Co., TS Plastics Sdn. Bhd. and its one subsidiary, Amapá Florestal e Celulose S.A. and its two subsidiaries, and Nippon Paper Resources Australia Pty. Ltd.

In preparing the consolidated financial statements, the financial statements as of the said balance sheet date are used for these companies, with necessary adjustments being made for consolidation purposes with regard to material transactions between December 31 and the Company's balance sheet date.

4. Significant accounting policies

(1) Evaluation basis and methods for significant assets

- ① Securities
 - Other securities:

Securities other than shares, etc. that do not have a market price:

Carried at fair value (Unrealized gains or losses, net of the applicable income taxes, are included directly in net assets. Costs of securities sold are determined by the moving-average method.)

Shares, etc. that do not have a market price:

Carried at cost by the moving-average method

2 Derivatives

Fair value method

③ Inventories

Stated at cost, determined principally by the moving-average or periodic-average method. (The balance sheet amount is written down based on any decline in profitability.)

- (2) Depreciation methods for significant assets
 - ① Property, plant and equipment (excluding lease assets)

The declining-balance method is used, except that the straight-line method is employed for some assets of the Company and its consolidated subsidiaries.

However, buildings (excluding building fixtures) acquired on or after April 1, 1998, and building fixtures and structures acquired on or after April 1, 2016, are depreciated by the straight-line method. The useful lives of assets are principally as follows:

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Buildings and structures:	10 to 50 years
Machinery, equipment and vehicles:	7 to 15 years

② Intangible assets (excluding lease assets) The straight-line method is used.

Software for internal use is amortized over an estimated useful life of 5 years on a straight-line basis.

③ Leased assets

Depreciation of leased assets under finance-leasing agreements that do not transfer ownership is calculated using the straight-line method assuming a residual value of zero (or the guaranteed residual value when it is set by the agreement) and a useful life equal to the term of the lease.

- (3) Basis for significant allowances and provisions
 - ① Allowance for doubtful receivables

To cover a loss from uncollectible receivables, allowances for bad debts are provided at the amount determined based on the historical experience of bad debts for ordinary receivables. For specific doubtful receivables, the collectability is considered on an individual basis.

2 Allowance for environmental costs

To cover future expenditures for disposing of PCB waste in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes, an allowance is provided at the estimated amount of disposal costs.

(4) Accounting policies for retirement benefits

Method for allocating projected retirement benefits
 In calculating retirement benefit obligations, the benefit formula method is applied to allocate projected retirement
 benefits to the periods until the end of the fiscal year under review.

2 Amortization of actuarial differences and prior service cost

Prior service cost is amortized evenly using the straight-line method over the determined years (7 to 15 years) that are no longer than the average remaining service years of the employees at the time of occurrence.

Actuarial differences are primarily amortized evenly using the straight-line method over the determined years (5 to 15 years) that are no longer than the average remaining service years of employees, beginning from the fiscal year following the time of occurrence.

(5) Standards for recognizing significant revenue and expenses

The Company and its consolidated subsidiaries' main businesses include production and sales of products or sales of goods in the paper and paperboard business, daily-life products business, and wood products and construction-related business as well as wholesale supply and sales of electricity in the energy business. Regarding domestic sales of products and goods in the paper and paperboard business, daily-life products business, and wood products and construction-related business, revenue is mainly recognized upon shipment given the normal period from shipment to delivery upon which control of products and goods is transferred to customers. In export sales, revenue is mainly recognized when the burden of risk is transferred to customers based on trade conditions stipulated by Incoterms, etc.

Regarding wholesale supply and sales of electricity in the energy business, revenue is mainly recognized at an amount for which the Company has the right to claim according to supplied amounts of electricity, as amounts of consideration corresponding directly to supplied amounts of electricity are received from customers over the contract period.

As considerations for transactions are received within one year after satisfying performance obligations, significant financing components are not included.

For transactions related to sales of goods in which the Company acts as an agent in each business, the transaction price is calculated based on the net amount of consideration received from the customer. Also, revenue is measured at an amount of promised consideration in contracts with customers less discounts, etc. There is no estimate of significant variable consideration.

(6) Accounting policies for translation of significant assets and liabilities denominated in foreign currencies into Japanese yen

Receivables and payables denominated in foreign currencies are translated into Japanese yen, using the spot exchange rates on the balance sheet date, and the resulting translation gains and losses are recognized as income and losses. Assets and liabilities of overseas subsidiaries, etc., are translated into Japanese yen at the spot exchange rates on their balance sheet date, whereas income and expenses are translated into Japanese yen at the average exchange rates. The resulting translation gains and losses are recorded as translation adjustments and non-controlling interests under the net assets section.

- (7) Significant hedge accounting methods
 - ① Hedge accounting methods

Deferral hedge accounting is principally adopted.

Receivables and payables denominated in foreign currencies hedged by qualified forward foreign exchange contracts are translated at their corresponding contract rates (the allocation method "*Furiate-shori*").

The exceptional accounting method is adopted for the interest rate swaps that meet special matching criteria ("*Tokurei-shori*"). The integral accounting method is adopted for currency and interest rate swaps that meet the requirements for integral accounting ("*Ittai-shori*").

- ② Hedging instruments and hedged items
 - a. Hedging instrument: Forward foreign exchange contracts Hedged items: Receivables denominated in foreign currencies arisen from exports of products, payables denominated in foreign currencies arisen from imports of raw materials and fuel, and forecast transactions denominated in foreign currencies
 - b. Hedging instrument: Interest rate swaps Hedged items: Loans payable
 - c. Hedging instrument: Interest rate and currency swaps Hedged items: Loans payable denominated in foreign currencies
 - d. Hedging instrument: Crude oil swaps Hedged items: Forecast fuel purchases
 - e. Hedging instrument: Commodity futures
 - Hedged items: Forecast power purchases

③ Hedging policy

The Company uses derivative transactions to primarily hedge fluctuation risks of foreign currencies, interest rates and prices.

④ Method for evaluating hedge effectiveness

The Company evaluates hedge effectiveness based on semiannual comparisons of changes in cash flows or the fair value of hedged items and hedging instruments.

For interest rate swaps that meet the requirements for exceptional accounting method and currency and interest rate swaps that meet the requirements of integral accounting method, the Company omits to evaluate hedge effectiveness as of the balance sheet date.

Evaluation of hedge effectiveness as of the balance sheet date is also omitted if forward foreign exchange contracts with the same amount denominated in U.S. dollars, etc., and the same timing are allocated when the contracts are concluded in accordance with the risk management policies, because they guarantee a correlation due to subsequent exchange rate movements.

⁽⁵⁾ Hedging relationships that have applied "Treatment of Hedge Accounting for Financial Instruments that Reference LIBOR"

All hedging relationships described above included in the scope of application of "Treatment of Hedge Accounting for Financial Instruments that Reference LIBOR" (ASBJ Practical Solutions No. 40, March 17, 2022) are subject to the exceptional treatment provided in the Practical Solution. The details of the hedging relationships which apply this Practical Solution are as follows.

Hedge accounting methods: Exceptional accounting method for interest rate swaps and integral accounting method for currency and interest rate swaps

Hedging instruments: Interest rate swaps and interest rate and currency swaps

Hedged items: Loans payable and loans payable denominated in foreign currencies

Type of hedge transactions: To fix cash flows

(8) Method and period of amortization of goodwill

Goodwill is amortized by the straight-line method over an appropriate period of within 20 years that is determined based on the actual situations of subsidiaries.

- (9) Cash and cash equivalents in the consolidated statements of cash flows Cash and cash equivalents in the consolidated statements of cash flows include cash on hand, demand deposits at banks and highly liquid short-term investments with negligible risk of fluctuation in value and maturities of not exceeding three months.
- (10) Other significant accounting policies for the preparation of the consolidated financial statements
 - ① Application of the consolidated taxation system
 - The Company and certain consolidated subsidiaries have applied the consolidated taxation system.
 - ② Application of tax effect accounting for the transition from the consolidated taxation system to the group tax sharing system

The Company and some of its consolidated subsidiaries will transition to a group tax sharing system from the fiscal year ending March 31, 2023. However, pursuant to the treatment in Paragraph 3 of the "Practical Solution on the Treatment of Tax Effect Accounting for the Transition from the Consolidated Taxation System to the Group Tax Sharing System" (PITF No. 39; March 31, 2020), the Company and some of its consolidated subsidiaries do not apply the provisions of Paragraph 44 of the "Implementation Guidance on Tax Effect Accounting" (ASBJ Guidance No. 28; February 16, 2018) with respect to items which transitioned to the group tax sharing system established in the "Act for Partial Amendment to the Income Tax Act, etc." (Act No. 8 of March 31, 2020) as well as items for which the non-consolidated taxation system was revised in line with the transition to the group tax sharing system. Accordingly, the amounts of deferred tax assets and deferred tax liabilities are presented pursuant to the provisions in tax laws before the amendment.

From the beginning of fiscal year ending March 31, 2023, the Company plans to apply the "Practical Solution on the Accounting and Disclosure Under the Group Tax Sharing System" (PITF No.42; August 12, 2021) which stipulates the accounting treatment and disclosure of corporate income taxes, local corporate income taxes, and tax effect accounting under the group tax sharing system.

(Significant Accounting Estimates)

1. Impairment loss on noncurrent assets

In the fiscal year ended March 31, 2022, the Group determined that there was an indication of impairment loss for the asset group of ¥141,112 million (¥152,557 million in the fiscal year ended March 31, 2021) related to property, plant and equipment of the paper business, which consists of the Company's printing paper business and other businesses in the paper and paperboard segment, due to a decline in profitability caused by a deterioration in the business environment. However, in determining whether to recognize an impairment loss, as with the fiscal year ended March 31, 2021, no impairment loss was recognized because the total undiscounted future cash flows from the asset group exceeded its book value.

Estimates of future cash flows resulting from the continued use of asset group are based on future business plans. With regard to raw material and fuel prices, the price of coal and fuel oil, which are the Group's primary fuels and raw materials, continues to surge due to the situation in Ukraine and the rapid depreciation of the Japanese yen. However, based on forecasts from external institutions, the Group assumes the price of coal will start to gradually decline. As for fuel oil, the Group assumes the current levels will persist for the time being, before starting to gradually decline. Sales volumes of printing paper for the fiscal year ended March 31, 2022 were up on those for the fiscal year ended March 31, 2021 due to a rebound to the sharp decline in demand due to the impact of the novel coronavirus (COVID-19) in the fiscal year ended March 31, 2021; however, we assume that demand will not return to the previous levels and that domestic sales volumes will continue to diminish in the long term. Further, we have set a unit selling price based on past trends as well as on trends in the price of fuels and raw materials.

Because these assumptions are subject to uncertainty, if the future cash flows from this asset group were to decrease significantly due to factors such as the future situation in Ukraine, the containment of COVID-19, and changes in the business environment, an impairment loss may be incurred, which could have a significant impact on the consolidated financial statements for the fiscal year ending March 31, 2023.

2. Recoverability of deferred tax assets

As of March 31, 2022, the Group has recognized deferred tax assets of \$7,756 million (\$10,582 million as of March 31, 2021) as a domestic consolidated taxation group for deductible temporary differences and tax loss carryforwards, which are considered to be recoverable based on the sufficiency of future taxable income.

Estimates of future taxable income are based on future business plans. With regard to raw material and fuel prices, the price of coal and fuel oil, which are the Group's primary fuels and raw materials, continues to surge due to the situation in Ukraine and the rapid depreciation of the Japanese yen. However, based on forecasts from external institutions, the Group assumes the price of coal will start to gradually decline. As for fuel oil, the Group assumes the current levels will persist for the time being, before starting to gradually decline. Sales volumes of printing paper for the fiscal year ended March 31, 2022 were up on those for the fiscal year ended March 31, 2021 due to a rebound to the sharp decline in demand due to the impact of the novel coronavirus (COVID-19) in the fiscal year ended March 31, 2021; however, we assume that demand will not return to the previous levels and that domestic sales volumes will continue to diminish in the long term. Further, we have set a unit selling price based on past trends as well as on trends in the price of fuels and raw materials.

Because these assumptions are subject to uncertainty, a review of the recoverability of deferred tax assets due to factors including changes in the future situation in Ukraine, the containment of COVID-19, and changes in the business environment,

may result in a reversal of deferred tax assets, which could have a significant impact on the consolidated financial statements for the fiscal year ending March 31, 2023.

(Changes in Accounting Policies)

(Application of accounting standards for revenue recognition, etc.)

The Company has applied the "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 31, 2020; hereinafter "Revenue Recognition Standard") and other standards from the beginning of the current fiscal year. The Company recognizes revenue when control of a promised good or service is transferred to a customer in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods and services.

As a change due to this application, the consideration paid to some customers, which was previously recorded in expenses for sales and general administration, is deducted from net sales. In addition, regarding some transactions for which the Company acts as an agent, the Company has changed to a method of recognizing revenue at the net amount, which is the amount received from customers less the amount paid to suppliers, although the Company previously recognized them at the total amount of consideration received from customers.

The Company applies the Revenue Recognition Standard, etc. in accordance with the transitional treatment provided for in the proviso to Paragraph 84 of the Revenue Recognition Standard. The cumulative impact of retrospectively applying the new accounting policies to prior periods is adjusted to retained earnings at the beginning of the current fiscal year, with the new accounting policies applied from the beginning balance.

As a result of this change, net sales for the current fiscal year decreased by ¥68,923 million, cost of sales decreased by ¥39,040 million, expenses for sales and general administration decreased by ¥29,855 million, and operating income, ordinary income, and net income before tax and other adjustment for the current term decreased by ¥28 million, respectively.

With regard the consolidated statements of cash flows for the fiscal year ended March 31, 2022, net income before tax and other adjustment decreased by ¥28 million.

The cumulative impact of this change has been reflected on net assets at the beginning of the current fiscal year. As a result, the beginning balance of retained earnings decreased by $\frac{1}{4}$ million in the consolidated statements of changes in net assets. The impact on per share information is detailed in the relevant section.

In accordance with the transitional treatment stipulated in Paragraph 89-3 of the Revenue Recognition Standard, "Notes - Revenue Recognition" for the fiscal year ended March 31, 2021 are not provided.

(Application of accounting standard for fair value measurement, etc.)

The Company has applied the "Accounting Standard for Fair Value Measurement" (ASBJ Statement No. 30, July 4, 2019; hereinafter "Fair Value Measurement Standard") and other standards from the beginning of the current fiscal year, and will prospectively apply the new accounting policies stipulated by the Fair Value Measurement Standard, etc. in accordance with the transitional treatment provided in Paragraph 19 of the Fair Value Measurement Standard and Paragraph 44-2 of the "Accounting Standard for Financial Instruments" (ASBJ Statement No. 10, July 4, 2019). This does not affect the consolidated financial statements.

Further, notes on fair value information by level within the fair value hierarchy is provided in "Notes – Financial Instruments." However, in accordance with the transitional treatment provided in Paragraph 7-4 of the "Implementation Guidance on Disclosures about Fair Value of Financial Instruments" (ASBJ Guidance No. 19; July 4, 2019), information pertaining to the fiscal year ended March 31, 2021 among those notes has been omitted.

(Changes in Presentation)

Consolidated statements of operations

"Rent income" and "subsidy income" were listed separately under "Non-operating income" in the previous fiscal year. For the fiscal year ended March 31, 2022, however, its materiality decreased and they are therefore listed under "Other." To reflect this change in presentation, the consolidated financial statements for the fiscal year ended March 31, 2021 have been reclassified.

As a result, ¥1,307 million included in "Rent income," ¥1,052 million included in "Subsidy income," and ¥1,198 million included in "Other" under "Non-operating income" in the consolidated statements of operations for the prior fiscal year are reclassified as ¥3,557 million in "Other."

"Loss on tax purpose reduction entry of noncurrent assets" under "Extraordinary loss" was listed as a separate item in the prior fiscal year. For the fiscal year ended March 31, 2022, however, its materiality decreased and it is therefore listed under "Other." To reflect this change in presentation, the consolidated financial statements for the fiscal year ended March 31, 2021 have been reclassified.

As a result, \$1,738 million included in "Loss on tax purpose reduction entry of noncurrent assets" and \$2,086 million included in "Other" under "Extraordinary loss" in the consolidated statements of operations for the prior fiscal year are reclassified as \$3,825 million in "Other."

Consolidated statements of cash flows

"Loss on valuation of investment securities" and "Loss on tax purpose reduction entry of noncurrent assets" under "Cash flows from operating activities" were listed as separate items in the prior fiscal year. For the fiscal year ended March 31, 2022, however, their materiality decreased and they are therefore included in "Other." To reflect this change in presentation, the consolidated financial statements for the fiscal year ended March 31, 2021 have been reclassified.

As a result, \$189 million included in "Loss on valuation of investment securities," \$1,738 million included in "Loss on tax purpose reduction entry of noncurrent assets," and \$7,329 million included in "Other" under "Cash flows from operating activities" in the consolidated statements of cash flows for the prior fiscal year are reclassified as \$9,258 million in "Other."

"Payments for investments in capital" under "Cash flows from investing activities" was listed as a separate item in the prior fiscal year. For the fiscal year ended March 31, 2022, however, its materiality decreased and it is therefore included in "Other." To reflect this change in presentation, the consolidated financial statements for the fiscal year ended March 31, 2021 have been reclassified.

As a result, $\frac{1}{2}(2,288)$ million included in "Payments for investments in capital" and $\frac{1}{6}(6,601)$ million included in "Other" under "Cash flows from investing activities" in the consolidated statements of cash flows for the prior fiscal year are reclassified as $\frac{1}{8}(8,890)$ million in "Other."

(Notes to Consolidated Balance Sheets)

1. The amounts receivable arising from contracts with customers of notes and accounts receivable-trade are as follows:

	(Millions of yes	n)
	As of March 31, 2022	
Notes receivable-trade	26,825	
Accounts receivable-trade	218,379	
Total	245,205	

2. Pledged assets and secured debts

Assets pledged as collateral and secured debts are as follows:

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		(Millions of yen)
	As of March 31, 2022	As of March 31, 2021
Machinery, equipment and vehicles		4
Land	119	119
Total	119	123
	As of March 31, 2022	As of March 31, 2021
Short-term loans payable	340	520
Long-term loans payable (including current portion)	62	119
Total	402	639

3. Accounts related to unconsolidated subsidiaries and affiliates

Major accounts related to unconsolidated subsidiaries and affiliates are as follows:

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2021
Investment securities (equity securities)	122,833	101,772
Other investments in unconsolidated subsidiaries and affiliates	1,249	5,344

4. Guarantee obligations

The Company guarantees the following obligations, including loans payable to financial institutions, etc., of companies other than consolidated subsidiaries.

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2021
Yufutsu Energy Center, LLC	5,947	4,079
Employees (housing loans)	1,385	1,661
Other	1,907	1,873
Total	9,239	7,614

In addition to the above, the Company also provides guarantees for the following interest rate swaps for subsidiaries and affiliates. The fair values of these swaps are as follows:

	(Millions	
	As of March 31, 2022	As of March 31, 2021
Yufutsu Energy Center, LLC	261	434

5. Loan commitment agreements (as lender)

The Company maintains loan commitment contracts with unconsolidated subsidiaries. The unexercised portion of facilities based on these contracts is as follows:

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2021
Amount of loan commitment contracts	8,195	7,923
Amount of lending	7,314	7,174
Net	880	748

6. Loan commitment agreements (as borrower)

For efficient procurement of working capital, the Company maintains loan commitment contracts with its banks. The unexercised portion of facilities based on these contracts is as follows:

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2021
Amount of loan commitment contracts	50,000	50,000
Amount of borrowing	_	
Net	50,000	50,000

(Notes to Consolidated Statements of Operations)

1. Revenue from contracts with customers

With regard to net sales, revenue from contracts with customers is not listed separately from other revenue. The amounts of revenue from contracts with customers are listed in "Notes – Segment Information – 3. Net sales, income or loss, assets and other items by reportable segment and disaggregation of revenue."

2. The Company reduced the book value of inventory for which profitability had decreased. Cost of sales includes the following loss on valuation of inventory (Negative values indicate the amount of reversal).

		(Millions of yer
	Fiscal year ended	Fiscal year ended
	March 31, 2022	March 31, 2021
Loss (gain) on valuation of inventory	(50)	(555)

3. Research-and-development costs included in general and administrative expenses and manufacturing costs are as follows:

	(Millions of yen)
Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2021
5,672	6,217

4. Retirement benefit expenses included in general and administrative expenses are as follows:

	(Millions of yen)
Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2021
1,933	1,545

5. Depreciation expenses included in general and administrative expenses are as follows:

rch 31, 2021
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6. Business preparation expenses

In the fiscal year ended March 31, 2020, the Company's Hokkaido Mill-Yufutsu stopped all paper machines, but the site was prepared as a base for developing new businesses, including biomass power generation and functional specialty materials businesses of subsidiaries and affiliates, as well as continuing the chemical business. As a result, the Company has recorded the related expenses as business preparation expenses under non-operating expenses.

7. Loss on retirement of noncurrent assets

		(Millions of yen)
	Fiscal year ended	Fiscal year ended
	March 31, 2022	March 31, 2021
Machinery, equipment and vehicles	383	634
Removal cost	2,264	1,552
Other	254	381
Total	2,902	2,568

8. Loss on business withdrawal

This is a loss resulting from the withdrawal from the pulp and paper business at the Kushiro Mill. The principle items of this loss are special retirement benefits for employees of the Mill and the suspension of machine operations.

9. Impairment loss

Fiscal year ended March 31, 2022

The Group recorded the impairment loss of ¥1,476 million on the following assets.

			(Millions of yen)
Application	Location	Impairment loss	Notes
Assets to be retired	Ishinomaki-shi, Miyagi Prefecture	1,317	Machinery, equipment and vehicles, etc.
Idle assets, etc. Fuji-shi, Shizuoka Prefecture, and others		159	Land, etc.
	Total	1,476	

To test indicators of the impairment of noncurrent assets, the Group groups assets mainly on a cash-generating unit basis for business-use assets and on an individual property basis for idle assets and assets to be retired.

The recoverable value of idle assets and assets to be retired was measured based on those assets' net sale value or value in use. The breakdown of impairment losses of assets for shut down consists of ¥0 million for buildings and structures, ¥1,316 million for machinery, equipment and vehicles and ¥0 million for others. The breakdown of impairment losses of idle assets, etc. consists of ¥8 million for machinery, equipment and vehicles and ¥151 million for land.

The net sale value was estimated based on a third-party appraisal value, in principle, or by any equivalent means. Because the period of estimation for the value in use is less than one year, the future cash flows are not discounted.

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Fiscal year ended March 31, 2021

The Group recorded the impairment loss of ¥8,584 million on the following assets.

			(Millions of yen)	
Application	Location	Impairment loss	Notes	
Assets to be retired	Kushiro-shi, Hokkaido	5,075	Buildings and	
Assets to be retired	Kushilo-sili, Hokkaldo	5,075	structures, etc.	
Business use essets	Fuji-shi, Shizuoka Prefecture, and	3,297	Machinery, equipment	
Business-use assets	others	5,297	and vehicles, etc.	
Idle assets	Fuji-shi, Shizuoka Prefecture, and	212	Land	
Iule assets	others	212	Lallu	
	Total	8,584		

To test indicators of the impairment of noncurrent assets, the Group groups assets mainly on a cash-generating unit basis for business-use assets and on an individual property basis for idle assets and assets to be retired.

Book value was written down to recoverable value for business-use assets for which profitability had deteriorated significantly, with the difference reported as "Impairment loss" in "Extraordinary loss."

The recoverable value of business-use assets was measured as the value in use, which was calculated by discounting future cash flows using a rate of 3.0% for the assets with expected future cash flows.

The recoverable value of idle assets and assets to be retired was measured based on those assets' net sale value or value in use. The breakdown of impairment losses of assets for shut down consists of $\frac{1}{2},783$ million for buildings and structures, $\frac{1}{2},214$ million for machinery, equipment and vehicles, $\frac{1}{4}45$ million for intangible assets and $\frac{1}{3}2$ million for others. The breakdown of impairment losses of business-use assets consists of $\frac{1}{5},584$ million for machinery, equipment and vehicles, $\frac{1}{5},783$ million for machinery, equipment and vehicles, $\frac{1}{5},705$ million for land, and $\frac{1}{5}$ million for others.

The net sale value was estimated based on a third-party appraisal value, in principle, or by any equivalent means. Because the period of estimation for the value in use is less than one year, the future cash flows are not discounted.

(Notes to Consolidated Statements of Comprehensive Income)

Reclassification adjustments and income tax effects on components of other comprehensive income are as follows:

о <u>і</u>		(Millions of yen)
	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2021
Net unrealized holding gain on other securities:		
Amount recognized during the year	(1,056)	14,631
Reclassification adjustments	(5,948)	(5,888)
Before income tax effect adjustment	(7,005)	8,742
Income tax effect	2,326	(2,448)
Net unrealized holding gain on other securities	(4,678)	6,294
Net deferred gain (loss) on hedges:		
Amount recognized during the year	6,785	12,165
Reclassification adjustments	(1,056)	147
Before income tax effect adjustment	5,729	12,312
Income tax effect	(1,662)	(3,825)
Net deferred gain (loss) on hedges	4,066	8,487
Translation adjustments:		
Amount recognized during the year	14,966	9,106
Reclassification adjustments	_	_
Translation adjustments:	14,966	9,106
Remeasurements of defined benefit plans, net of tax		
Amount recognized during the year	7,720	25,129
Reclassification adjustments	(3,177)	(1,517)
Before income tax effect adjustment	4,543	23,611
Income tax effect	(1,356)	(7,248)
Remeasurements of defined benefit plans, net of tax	3,187	16,363
Share of other comprehensive income of affiliates accounted		
for using the equity method:		
Amount recognized during the year	1,961	(838)
Reclassification adjustments	(650)	(29)
Share of other comprehensive income of affiliates	1,311	(867)
accounted for using the equity method	1,511	
Total other comprehensive income	18,853	39,383

(Notes to Consolidated Statements of Changes in Net Assets)

Fiscal year ended March 31, 2022

1. Matters related to outstanding shares

				(Shares)
Type of shares	As of April 1, 2021	Increase	Decrease	As of March 31, 2022
Common stock	116,254,892	—	—	116,254,892

2. Matters related to treasury stock

				(Shares)
Type of shares	As of April 1, 2021	Increase	Decrease	As of March 31, 2022
Common stock	750,237.31	6,611.00	35,559.51	721,288.80
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Reasons for the change:

The increase in treasury stock (6,611 shares) resulted from the purchase of shares of less than one unit (6,611 shares). The decrease in treasury stock (35,559.51 shares) resulted from the delivery of shares of the Company through the Company's Board Benefit Trust (BBT) (35,000 shares), a decrease in shares of the Company in the current fiscal year due to changes in equity in affiliates accounted for by the equity method (3.51 shares) and the sale of shares of less than one unit (556 shares).

The number of shares at the end of the current fiscal year includes 168,100 shares of the Company held through the BBT.

3. Matters related to stock acquisition rights, etc. None applicable.

4. Matters related to dividends

(1) Dividends paid

Resolution	Type of shares	Total amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
Ordinary General Meeting of Shareholders held on June 29, 2021	Common stock	3,476	30	March 31, 2021	June 30, 2021
Meeting of Board of Directors held on November 5, 2021	Common stock	1,158	10	September 30, 2021	December 1, 2021

Notes: 1. The total amount of dividends resolved at the Ordinary General Meeting of Shareholders held on June 29, 2021 includes the amount of dividends (¥6 million) on shares of the Company held through the BBT.

2. The total amount of dividends resolved at the meeting of the Board of Directors held on November 5, 2021 includes the amount of dividends (¥1 million) on shares of the Company held through the BBT.

(2) Dividends for which the record date falls in the fiscal year ended March 31, 2022, but for which the effective date comes after March 31, 2022

Resolution	Type of shares	Source of funds for dividends	Total amount of dividends (Millions of yen)	Dividend per	Record date	Effective date
Ordinary General Meeting of Shareholders held on June 29, 2022	Common stock	Retained earnings	3,476	30	March 31, 2022	June 30, 2022

Note: The total amount of dividends resolved at the Ordinary General Meeting of Shareholders held on June 29, 2022 includes the amount of dividends (¥5 million) on shares of the Company held through the BBT.

Fiscal year ended March 31, 2021

1. Matters related to outstanding shares

				(Shares)
Type of shares	As of April 1, 2020	Increase	Decrease	As of March 31, 2021
Common stock	116,254,892			116,254,892

2. Matters related to treasury stock

				(Snares)
Type of shares	As of April 1, 2020	Increase	Decrease	As of March 31, 2021
Common stock	746,679.82	9,437.00	5,879.51	750,237.31
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Reasons for the change:

The increase in treasury stock (9,437.00 shares) resulted from an increase in shares of the Company in the current fiscal year due to changes in equity in affiliates accounted for by the equity method (3,066.00 shares) and the purchase of shares of less than one unit (6,371.00 shares).

The decrease in treasury stock (5,879.51 shares) resulted from the delivery of shares of the Company through the Company's Board Benefit Trust (BBT) (5,500.00 shares), a decrease in shares of the Company in the current fiscal year due to changes in equity in affiliates accounted for by the equity method (3.51 shares) and the sale of shares of less than one unit (376.00 shares).

The number of shares at the end of the current fiscal year includes 203,100.00 shares of the Company held through the BBT.

3. Matters related to stock acquisition rights, etc. None applicable.

4. Matters related to dividends

(1) Dividends paid

Resolution	Type of shares	Total amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
Ordinary General Meeting of Shareholders held on June 25, 2020	Common stock	3,477	30	March 31, 2020	June 26, 2020
Meeting of Board of Directors held on November 5, 2020	Common stock	1,159	10	September 30, 2020	December 1, 2020

Notes: 1. The total amount of dividends resolved at the Ordinary General Meeting of Shareholders held on June 25, 2020 includes the amount of dividends (¥6 million) on shares of the Company held through the BBT.

- 2. The total amount of dividends resolved at the meeting of the Board of Directors held on November 5, 2020 includes the amount of dividends (¥2 million) on shares of the Company held through the BBT.
- (2) Dividends for which the record date falls in the fiscal year ended March 31, 2021, but for which the effective date comes after March 31, 2021

Resolution	Type of shares	Source of funds for dividends	Total amount of dividends (Millions of yen)	Dividend per	Record date	Effective date
Ordinary General Meeting of Shareholders held on June 29, 2021	Common stock	Retained earnings	3,476	30	March 31, 2021	June 30, 2021

Note: The total amount of dividends resolved at the Ordinary General Meeting of Shareholders held on June 29, 2021 includes the amount of dividends (¥6 million) on shares of the Company held through the BBT.

(Notes to Consolidated Statement of Cash Flows)

1. Cash and cash equivalents at year-end are reconciled to the amounts reported in the consolidated balance sheets as follows:

		(Millions of yen)
	Fiscal year ended	Fiscal year ended
	March 31, 2022	March 31, 2021
Cash and deposits	136,845	69,733
Term deposits with maturities of more than three months	(629)	(34)
Cash and cash equivalents	136,216	69,698

2. Breakdown of assets and liabilities increased due to a business acquisition Fiscal year ended March 31, 2022

None applicable

Fiscal year ended March 31, 2021

The relationship between the assets and liabilities increased due to the business acquisition and its expenditure is as follows:

	(Millions of yen)	(Millions of AUD)
Current assets	34,780	472
Noncurrent assets	123,422	1,675
Goodwill	9,295	126
Current liabilities	(18,013)	(244)
Long-term liabilities	(18,343)	(248)
Value of business acquisition	131,141	1,780
Payments for acquisition of business	131,141	1,780

Note: Yen amounts are converted at the average rate for the period.

(Leases)

Operating lease transactions

As lessee:

Future minimum lease payments for noncancelable operating leases are summarized as follows:

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2021
Due within one year	2,551	2,667
Due after one year	53	2,569
Total	2,604	5,236
Note: As certain overseas consolidated subsidiaries h	ave applied the IFRS No. 16 "Leases	," operating leases related to

Note: As certain overseas consolidated subsidiaries have applied the IFRS No. 16 "Leases," operating leases related to such subsidiaries are not included.

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As lessor:

Future minimum lease income for noncancelable operating leases is summarized as follows:

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2021
Due within one year	215	215
Due after one year	644	859
Total	859	1,075

(Financial Instruments)

1. Status of financial instruments

(1) Policy for financial instruments

Domestically, the Group has implemented a Cash Management System (CMS), which is controlled by the finance department of the Company, to manage funds within the Group. The Group manages temporary cash surpluses through low-risk financial assets.

The Group raises funds it requires through bank borrowings, commercial paper and bond issuances based on projected cash demand according to the Group's capital investment plans. The Group spreads out repayment dates so that it can secure long-term capital continually. Furthermore, the Group diversifies financing resources to maintain liquidity, raising short-term working capital through bank loans, commitment line contracts and securitization of receivables and notes. The Group adheres to a policy of using derivative transactions for the purpose of reducing interest rate fluctuation risk, foreign currency exchange risk and price fluctuation risk, and it does not enter into speculative transactions.

(2) Types of financial instruments and related risk

Trade receivables—trade notes and accounts receivable—are exposed to credit risk in relation to buyers. The due dates for all receivables and notes should be within one year. In addition, the Group is exposed to foreign currency exchange risk arising from receivables and notes denominated in foreign currencies. In principle, foreign currency exchange risk is hedged by forward foreign exchange contracts while the amounts of such receivables and notes are continually within that of liabilities denominated in foreign currencies.

Investments in securities mainly consist of shares of business partners and affiliates. The Group is exposed to market risk for listed securities.

Trade payables—trade notes and accounts payable—are due within one year. The payables denominated in foreign currencies are exposed to foreign currency exchange risk, which is hedged by foreign currency forward contracts.

The Group raises funds through short-term borrowings for working capital and raises funds through long-term loans payable and bonds mainly for capital investments. Some long-term loans payable bears variable interest rates and therefore is exposed to interest rate fluctuation risk. To reduce and fix interest expense for long-term loans payable bearing interest at variable rates, the Group utilizes interest rate swap and currency and interest rate swap transactions as a hedging instrument on an individual basis.

Regarding derivatives, the Group enters into forward foreign currency contracts to reduce the foreign exchange risk arising from receivables and payables denominated in foreign currencies and forecast transactions denominated in foreign currencies. The Group also enters into interest rate swap transactions to reduce fluctuation risk for interest payable for long-term loans payable bearing interest at variable rates. The Group also enters into currency and interest rate swap transactions to reduce exchange and interest rate fluctuation risk for loans payable denominated in foreign currencies, crude oil swap transactions to reduce price fluctuation risk on certain fuel purchase transactions, and commodities futures transactions to reduce price fluctuation risk on power purchase transactions.

For information regarding the method of hedge accounting, such as hedging instruments, hedged items, hedging policy and the assessment of the effectiveness of hedging activities, please refer to "Notes - Significant Matters Providing the Basis for the Preparation of the Consolidated Financial Statements, 4. Significant accounting policies, (7) Significant hedge accounting methods."

(3) Risk management for financial instruments

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

The Group's marketing division and finance division have established a regular screening system to monitor the financial status of clients, which allows them to closely supervise transactions, in accordance with the credit management rules prepared by the Company and its respective consolidated subsidiaries based on the "Group credit management policy." The two divisions give each other frequent and detailed reports on the status of credit collections on a daily basis to minimize risks. The divisions acquire information on clients in financial difficulty to protect related claims.

For all derivative transactions, the Group enters into transactions only with financial institutions that have a sound credit profile to minimize counterparty risk.

2 Management of market risks (the risks arising from fluctuations in exchange rates, interest rates, prices, etc.)

To minimize the foreign exchange risk arising from trade receivables and payables denominated in foreign currencies and forecast transactions denominated in foreign currencies, the Group identifies the risk deriving from future export and import transactions for each currency twice each year and enters into forward foreign exchange contracts to hedge such risk.

The Group enters into interest rate swap transactions to minimize interest rate fluctuation risk for loans payable and bonds bearing interest at variable rates, and enters into currency and interest rate swap transactions to minimize exchange and interest rate fluctuation risk for foreign currency denominated loans payable. The Group also regularly monitors the ratio of loans with fixed interest rates and ones with variable interest rates, and optimizes such ratio according to interest rate movements.

The Group uses crude oil swap transactions to reduce the risk of price fluctuations for certain fuel purchases, and commodity futures transactions to reduce the risk of price fluctuations for power purchases.

As to investments in securities, the Group periodically reviews the fair values of such financial instruments and the financial position of the issuers. In addition, the Group periodically evaluates whether to continue to hold certain securities taking into account the relationship with the issuers.

③ Monitoring of liquidity risk (the risk that the Group might not be able to meet its obligations on scheduled due dates) In the Group, to minimize liquidity risk, the finance department of the Company prepares a cash flow plan every half year, which is updated on monthly and daily basis.

The Group obtains funds in consideration of diversification of fund-raising schemes, lengthens loan periods and staggers maturities to minimize refinancing risk. In addition, to diminish liquidity risk, the Group enters into commitment line contracts and overdraft arrangements with financial institutions.

(4) Supplementary explanation of items relating to the fair values of financial instruments

Because various assumptions and factors are reflected in estimating the fair value of financial instruments, different assumptions and factors could result in a different fair value. In addition, the contract amounts of derivatives provided in "Derivatives" are not necessarily indicative of the actual market risk involved in derivative transactions.

2. Estimated fair value and other matters related to financial instruments

The book value of financial instruments on the consolidated balance sheets and their estimated fair value, as well as the difference between these values, are shown in the following table.

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As of March 31, 2022

			(Millions of yen)
	Book value	Fair value	Difference
(1) Notes and accounts receivable-trade	245,205	245,205	_
(2) Investments in securities			
Other securities	52,151	52,151	_
Stocks of subsidiaries and affiliates	58,827	54,170	(4,656)
Golf club membership	92	106	14
Total assets	356,277	351,635	(4,642)
(3) Notes and accounts payable-trade	141,435	141,435	
(4) Short-term loans payable	185,703	185,891	187
(5) Long-term loans payable	597,259	604,120	6,861
Total liabilities	924,398	931,447	7,049
(6) Derivatives ³	5,849	5,849	

1. "Cash and deposits" has been omitted because it represents cash and the book value of deposits approximates the fair value as deposits are settled in a short period of time.

2. Shares etc., that do not have a market price are not included in "(2) Investments in securities." The book values of the relevant financial instruments are as follows:

Classification	As of March 31, 2022
Unlisted equity securities	69,284

3. Net assets and liabilities arising from derivatives are presented on a net basis, and net liabilities in total are presented in parentheses.

As of March 31, 2021

			(Millions of yen)
	Book value	Fair value	Difference
(1) Notes and accounts receivable-trade	251,210	251,210	_
(2) Investments in securities			
Other securities	54,430	54,430	—
Stocks of subsidiaries and affiliates	55,106	56,888	1,782
Total assets	360,746	362,529	1,782
(3) Notes and accounts payable-trade	125,115	125,115	_
(4) Short-term loans payable	199,009	203,766	4,756
(5) Long-term loans payable	574,846	578,381	3,534
Total liabilities	898,971	907,262	8,291
(6) Derivatives ³	(299)	(299)	_

1. "Cash and deposits" has been omitted because it represents cash and the book value of deposits approximates the fair value as deposits are settled in a short period of time.

2. Financial instruments for which it is extremely difficult to determine the fair value

	(Millions of yen)
Classification	As of March 31, 2021
Unlisted equity securities	51,838

Because the fair values of these financial instruments are extremely difficult to determine, given that they do not have market prices, they are not included in "(2) Investments in securities."

3. Net assets and liabilities arising from derivatives are presented on a net basis, and net liabilities in total are presented in parentheses.

Notes:

1. Redemption schedule for receivables after the consolidated balance sheet date

As of March 31, 2022

				(Millions of yen)
	Within and year	Over 1 but	Over 5 but	Over
	Within one year	within 5 years	within 10 years	10 years
Cash and deposits (*)	136,768	-	_	_
Notes and accounts receivable-trade	245,205	—	_	_
Total	381,974		_	_

*"Cash and deposits" does not include the amount of cash on hand.

As of March 31, 2021

				(Millions of yen)
	Within one year	Over 1 but within 5 years	Over 5 but within 10 years	Over 10 years
		within 5 years	within 10 years	10 years
Cash and deposits (*)	69,641	—	—	_
Notes and accounts receivable-trade	251,210	—	—	
Total	320,851	_	_	_

*"Cash and deposits" does not include the amount of cash on hand.

2. Redemption schedule for long-term loans payable and other interest-bearing debt after the consolidated balance sheet date

As of March 31, 2022

					(Mill	lions of yen)
	Within one year	Over 1 but within 2 years	Over 2 but within 3 years	Over 3 but within 4 years	Over 4 but within 5 years	Over 5 years
Short-term loans payable	143,531	—	—	—	—	—
Long-term loans payable	42,172	58,264	89,613	100,650	61,503	287,228
Total	185,703	58,264	89,613	100,650	61,503	287,228

(Millions of yen) Over 1 but Over 2 but Over 3 but Over 4 but Within one Over within within within within year 5 years 2 years 3 years 4 years 5 years Short-term loans payable 138,727 ____ ____ Long-term loans payable 60,281 41,048 60,696 54,483 99,786 318,832 Total 199,009 41,048 60,696 54,483 99,786 318,832

3. Fair value information by level within the fair value hierarchy

The fair value of financial instruments is classified into the following three levels according to the observability and materiality of inputs used to measure fair value.

Level 1 fair value: Fair value measured using observable inputs, i.e. quoted prices in active markets for assets or liabilities that are the subject of the measurement.

Level 2 fair value: Fair value measured using observable inputs other than Level 1 inputs.

Level 3 fair value: Fair value measured using unobservable inputs.

If multiple inputs are used that are significant to the fair value measurement, the fair value measurement is categorized in its entirety in the level of the lowest level input that is significant to the entire measurement.

(1) Financial instruments measured at fair value As of March 31 2022

Cotocomi	Fair value (Millions of yen)					
Category	Level 1	Level 2	Level 3	Total		
Investments in securities Other securities	52,151	_	_	52,151		
Derivatives		5,849	_	5,849		

(2) Financial instruments other than those measured at fair value

As of March 31, 2022

Catagory	Fair value (Millions of yen)					
Category	Level 1	Level 2	Level 3	Total		
Notes and accounts receivable-trade	_	245,205	_	245,205		
Notes and accounts payable-trade	_	141,435	_	141,435		
Short-term loans payable	_	185,891	—	185,891		
Long-term loans payable	_	604,120	—	604,120		
Investments in securities						
Stocks of subsidiaries and affiliates	54,170	_	_	54,170		
Golf club membership	—	106	_	106		

Note: A description of the valuation technique(s) and inputs used in the fair value measurement

Investments in securities

Listed shares are valued using quoted prices. As listed shares are traded in active markets, their fair value is classified as Level 1. For information on other securities, please refer to "Securities."

Derivatives

Currency, interest rates and commodities subject to principle accounting are measured using prices quoted by counterparty financial institutions regarding the relevant transactions, and are classified as Level 2.

Since those, to which the exceptional accounting for interest rate swap and the integrated accounting for interest rate and currency swap were applied, are treated as a part of the hedged long-term loan payable, the fair value of them are included in the fair value of relevant long-term loan payable (see "Long-term loan payable" below).

Since those, to which the appropriation method was applied, such as the forward exchange contracts, etc., were treated as a part of hedged accounts receivable-trade, notes payable and accounts payable-trade, their fair values are included in the fair values of accounts receivable-trade, notes payable, and accounts payable-trade.

For information on derivatives, please refer to "Notes - Derivatives."

Notes and accounts receivable-trade

The fair value of these items is measured using the discounted cash flow method based on the amount of receivables, period to maturity and an interest rate reflecting credit risk, for each receivable categorized by a specified period, and is classified as Level 2.

Notes and accounts payable-trade and short-term loans payable

The fair value of these items is measured using the discounted cash flow method based on future cash flows, period to repayment and an interest rate reflecting credit risk, for each liability categorized by a specified period, and is classified as Level 2.

Long-term loans payable

The fair value of long-term loans payable is calculated by classifying the total amount of principal and interest by a specified period and discounting its future cash flow at a rate determined based on the risk-free rate and the credit spread. It is therefore classified as Level 2.

Long-term loans payable with variable interest rates are covered by interest rate swap transactions that meet special accounting criteria and currency and interest rate swaps that meet integral accounting criteria (see the Derivatives section above) and are accounted for together with the corresponding interest rate swaps and currency and interest rate swaps. The fair value of such loans is calculated by discounting the total amount of principal and interest of the loans thus accounted for at a rate determined as stated above.

Golf club membership

Golf club membership is assessed using prices quoted by shops handling golf club memberships. However, they are not deemed to be quoted prices in active markets and accordingly, the fair value is classified as Level 2.

(Securities)

1. Other securities

As of March 31, 2022

		(Millions of yen)
Book value	Cost	Valuation difference
45,641	18,180	27,461
45,641	18,180	27,461
6,510	9,521	(3,011)
6,510	9,521	(3,011)
52,151	27,702	24,449
	45,641 45,641 6,510 6,510	45,641 18,180 45,641 18,180 6,510 9,521 6,510 9,521

Note: With regard to the fair value of unlisted equity securities as of March 31, 2022 (¥5,371 million on the consolidated balance sheet), given that those securities do not have market prices, they are not included in "other securities" above.

As of March 31, 2021

			(Millions of yen)
	Book value	Cost	Valuation difference
Securities for which the book value exceeds their			
cost:			
Equity securities	47,133	14,231	32,902
Subtotal	47,133	14,231	32,902
Securities for which the book value does not			
exceed their cost:			
Equity securities	7,296	8,659	(1,363)
Subtotal	7,296	8,659	(1,363)
Total	54,430	22,890	31,539

Note: Because the fair value of unlisted equity securities as of March 31, 2021 (¥5,172 million on the consolidated balance sheet) is extremely difficult to determine, given that those securities do not have market prices, they are not included in "other securities" above.

2. Sales of other securities

Fiscal year ended March 31, 2022

			(Millions of yen)
	Sales	Aggregate gain	Aggregate loss
Equity securities	6,421	6,140	—

Fiscal year ended March 31, 2021

			(Millions of yen)
	Sales	Aggregate gain	Aggregate loss
Equity securities	6,155	5,951	0

3. Impairment of securities

For the fiscal year ended March 31, 2022, the Company recorded a loss on impairment of securities in the amount of \pm 244 million (including \pm 52 million of equity securities that do not have a market price). For the fiscal year ended March 31, 2021, the Company recorded a loss on impairment of securities in the amount of \pm 189 million (including \pm 127 million of equity securities for which fair values are extremely difficult to determine).

Loss on impairment of securities are recorded for all securities for which the fair values at year-end have declined by 50% or more, compared with their acquisition costs. The impairment of securities for which the rate of decline in fair value is between 30% and 50% depends on how significant the amount of the decline is, how the decline is recoverable and other factors.

(Derivatives)

1. Derivative instruments not subject to hedge accounting

(1) Currency-related transactions

As of March 31, 2022 None applicable.

As of March 31, 2021

(Millions of yen)

	Hedging instrument	Contract amount	More than 1 year	Fair value	Valuation gain/loss
Off-market transactions	Foreign exchange forward contracts Buy Euro	159	_	(44)	(44)

(2) Interest-related transactions

As of March 31, 2022

715 01 Waren 51, 20					(Millions of yen)
	Hedging instrument	Contract amount	More than 1 year	Fair value	Valuation gain/loss
Off-market transactions	Interest rate swap transactions Pay/fixed and receive/floating	251	250	(13)	(13)

As of March 31, 2021

, 					(Millions of yen)
	Hedging instrument	Contract amount	More than 1 year	Fair value	Valuation gain/loss
Off-market transactions	Interest rate swap transactions Pay/fixed and receive/floating	504	_	(13)	(13)

Note: Hedge accounting was not applied for certain derivative transactions since they no longer met the criteria for hedge accounting.

2. Derivative instruments subject to hedge accounting

(1) Currency-related transactions

As of March 31, 2022

S 01 Watch 31, 2022	,			(Millions of yen)
Hedge accounting method	Hedging instrument	Principal hedged items	Contract amount	More than 1 year	Fair value
Deferral hedge method	Foreign exchange forward contracts Sell U.S. dollars Other	Accounts receivable-trade	8,221 823		187 10
	Buy U.S. dollars Other	Notes and accounts payable-trade	43,986 15,443	15,074 5,896	1,091 813 Millions of yen)
Hedge accounting method	Hedging instrument	Principal hedged items	Contract amount	More than 1 year	Fair value
Allocation method (Furiate-shori)	Foreign exchange forward contracts Sell U.S. dollars Other	Accounts receivable-trade	133 25	_ _	(Note)
	Buy U.S. dollars Other	Notes and accounts payable-trade	831		4 1 1 1 4

Note: Foreign exchange forward contracts subject to the allocation method are recognized together with hedged items (i.e., accounts receivable-trade, notes and accounts payable-trade). The fair values of such transactions are included in those of the relevant hedged items.

As of March 31, 2021

(Millions of yer
lged Contract More than Fair value
amount 1 year (Note)
de 8,771 1,553 96 2,812 —
ounts 13,478 1,307 280 14,337 6,984 30'
ra

(Millions of yen)

Hedge accounting method	Hedging instrument	Principal hedged items	Contract amount	More than 1 year	Fair value
Allocation method (Furiate-shori)	Foreign exchange forward contracts Sell U.S. dollars Other	Accounts receivable-trade	113 23		
	Buy U.S. dollars Other	Notes and accounts payable-trade	301		(Note)

Note: Foreign exchange forward contracts subject to the allocation method are recognized together with hedged items (i.e., accounts receivable-trade, notes and accounts payable-trade). The fair values of such transactions are included in those of the relevant hedged items.

(2) Interest rate-related transactions

As of March 31, 2022

					(Millions of yen)
Hedge accounting method	Hedging instrument	Principal hedged items	Contract amount	More than 1 year	Fair value
Deferral hedge method	Interest rate swap transaction Pay/fixed and receive/floating	Long-term loans payable	8,116	8,116	22
Exceptional accounting method (<i>Tokurei-shori</i>)	Interest rate swap transaction Pay/fixed and receive/floating	Long-term loans payable	142,700	142,700	(Note)

Note: Interest-rate swaps that qualify for the exceptional accounting method are recognized together with the corresponding long-term loans payable. The fair values of such transactions are included in those of the loans.

As of March 31, 2021

15 01 10101 5 1, 2021					(Millions of yen)
Hedge accounting method	Hedging instrument	Principal hedged items	Contract amount	More than 1 year	Fair value
Deferral hedge method	Interest rate swap transaction Pay/fixed and receive/floating	Long-term loans payable	3,468	3,468	(55)
Exceptional accounting method (<i>Tokurei-shori</i>)	Interest rate swap transaction Pay/fixed and receive/floating	Long-term loans payable	145,700	140,700	(Note)

Note: Interest-rate swaps that qualify for the exceptional accounting method are recognized together with the corresponding long-term loans payable. The fair values of such transactions are included in those of the loans.

(3) Currency and interest rate-related transactions

As of March 31, 2022

(Millions of yen)

(M:11: ---- - f -----)

				(
Hedge accounting method	Hedging instrument	Principal hedged items	Contract amount	More than 1 year	Fair value
Integral accounting method (<i>Ittai-shori</i>)	Currency and interest rate swap transaction Pay/fixed and receive/floating Pay/JPY and receive/USD	Long-term loans payable	10,122	10,122	(Note)

Note: Currency and interest rate swaps that qualify for the integral accounting method are recognized together with the corresponding long-term loans payable. The fair values of such transactions are included in those of the loans.

As of March 31, 2021

					Millions of yen)
Hedge accounting method	Hedging instrument	Principal hedged items	Contract amount	More than 1 year	Fair value
Integral accounting method (<i>Ittai-shori</i>)	Currency and interest rate swap transaction Pay/fixed and receive/floating Pay/JPY and receive/USD	Long-term loans payable	10,122	10,122	(Note)

Note: Currency and interest rate swaps that qualify for the integral accounting method are recognized together with the corresponding long-term loans payable. The fair values of such transactions are included in those of the loans.

(4) Commodities-related transactions

As of March 31, 2022

					(Millions of yen)
Hedge accounting method	Hedging instrument	Principal hedged items	Contract amount	More than 1 year	Fair value
Deferral hedge method	Commodity swaps Pay/fixed and receive/floating	Marine fuel	3,295	440	1,134
Deferral hedge method	Commodity swaps Pay/fixed and receive/floating	Brent crude	11,819	7,490	2,339
Deferral hedge method	Commodity futures transactions	Power	8,081	6,833	250

As of March 31, 2021

(Millions of yen)

		1			
Hedge accounting method	Hedging instrument	Principal hedged items	Contract amount	More than 1 year	Fair value
Deferral hedge method	Commodity swaps Pay/fixed and receive/floating	Marine fuel	2,242	279	164
Deferral hedge method	Commodity swaps Pay/fixed and receive/floating	Brent crude	11,346	8,122	(1,345)
Deferral hedge method	Commodity futures transactions	Power	8,912	1,209	(559)

(Retirement Benefits)

1. Overview of retirement benefit plans

The Company and its consolidated subsidiaries adopt funded and unfunded types of defined-benefit plans and definedcontribution plans.

Defined-benefit corporate pension plans offer lump-sum or pension payments mainly according to the employee's salary and period of service.

Employee retirement benefit trusts are set up for some defined-benefit corporate pension plans. Lump-sum payment plans – which are basically unfunded, although the creation of retirement benefit trusts has resulted in some plans becoming funded – offer lump-sum payments as retirement benefits according to the employee's salary and period of service.

Defined-benefit corporate pension plans and lump-sum payment plans adopted by some consolidated subsidiaries use a simplified method to calculate net defined benefit liability and retirement benefit expenses.

2. Defined-benefit plans

(1) Reconciliation between the beginning and ending balances of retirement benefit obligations (excluding plans using a simplified method)

	(Millions of yen)
Fiscal year ended	Fiscal year ended
March 31, 2022	March 31, 2021
122,152	125,667
3,807	3,771
693	740
(143)	886
(10,390)	(8,855)
374	(57)
116,494	122,152
	March 31, 2022 122,152 3,807 693 (143) (10,390) 374

(2) Reconciliation between the beginning and ending balances of plan assets (excluding plans using a simplified method)

		(Millions of yen)
	Fiscal year ended	Fiscal year ended
	March 31, 2022	March 31, 2021
Plan assets at the beginning of year	130,700	110,714
Expected return on plan assets	2,608	2,507
Actuarial differences generated	1,215	22,991
Contribution from employers	796	1,166
Retirement benefits paid	(9,692)	(6,693)
Other	362	14
Plan assets at the end of year	125,991	130,700

(3) Reconciliation between the beginning and ending balances of net defined benefit liability for plans using a simplified method

		(Millions of yen)
	Fiscal year ended	Fiscal year ended
	March 31, 2022	March 31, 2021
Net defined benefit liability at the beginning of year	2,132	2,313
Retirement benefit expenses	555	506
Retirement benefits paid	(405)	(433)
Contribution to plans	(278)	(212)
Other	33	(41)
Net defined benefit liability at the end of year	2,037	2,132

(4) Reconciliation between the ending balances of retirement benefit obligations and plan assets and the net defined benefit liability and net defined benefit asset reported on the consolidated balance sheets

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2021
Retirement benefit obligations for funded plans	119,028	124,657
Plan assets	(130,431)	(135,164)
	(11,403)	(10,506)
Retirement benefit obligations for unfunded plans	3,944	4,090
Net asset or liability reported on the consolidated balance sheets	(7,458)	(6,416)
Net defined benefit liability	12,495	12,790
Net defined benefit asset	(19,954)	(19,206)
Net asset or liability reported on the consolidated balance sheets	(7,458)	(6,416)
Note: Plang using a simplified method are included		

Note: Plans using a simplified method are included.

(5) Breakdown of retirement benefit expenses

		(Millions of yen)
	Fiscal year ended	Fiscal year ended
	March 31, 2022	March 31, 2021
Service cost	3,807	3,771
Interest cost	693	740
Expected return on plan assets	(2,608)	(2,507)
Amortization of unrecognized actuarial differences	3,218	1,652
Amortization of unrecognized prior service cost	(140)	(93)
Retirement benefit expenses calculated by a simplified method	555	506
Retirement benefit expenses for defined benefit plans	5,525	4,070
Special retirement benefits (Note)	1,077	

Note: Special retirement benefits are included in "Loss on business withdrawal" and "Other" under "Extraordinary loss."

(6) Remeasurements of defined benefit plans

Remeasurements of defined benefit plans in other comprehensive income consist of the following (before tax effect).

		(Millions of yen)
	Fiscal year ended	Fiscal year ended
	March 31, 2022	March 31, 2021
Past service costs	140	139
Actuarial differences	(4,683)	(23,750)
Total	(4,543)	(23,611)

(7) Remeasurements of defined benefit plans

Remeasurements of defined benefit plans in accumulated other comprehensive income consist of the following (before tax effect).

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2021
Unrecognized past service costs	(3,275)	(3,416)
Unrecognized net actuarial differences	(9,396)	(4,712)
Total	(12,672)	(8,128)

(8) Matters regarding plan assets

① Major components of plan assets

Plan assets mainly consist of the following:

	As of March 31, 2022	As of March 31, 2021
Stocks	55%	56%
Bonds	22%	24%
General account	13%	12%
Cash and deposits	9%	6%
Other	1%	2%
Total	100%	100%

Note: Total plan assets for the fiscal years ended March 31, 2022 and March 31, 2021 include securities contributed to the retirement benefit trust (29% and 30%) created for corporate pension plans, respectively.

- ② Method for determining the long-term expected rate of return on plan assets To determine the long-term expected rate of return on plan assets, the current and expected portfolio of plan assets and the current and future expected long-term profitability of the various plan assets are considered.
- (9) Assumptions used in actuarial calculations

Major assumptions used in actuarial calculations are as follows:

Fiscal year ended	Fiscal year ended
March 31, 2022	March 31, 2021
Mainly 0.5%	Mainly 0.5%
Mainly 2.0%	Mainly 2.0%
-	March 31, 2022 Mainly 0.5%

Note: Expected rate of salary increase is not presented because the Company and its consolidated subsidiaries do not generally use it in actuarial calculations for their retirement benefit plans.

3. Defined-contribution plans

The required amount of contribution to the defined-contribution plans was \$1,766 million for the fiscal year ended March 31, 2022 and \$1,678 million for the fiscal year ended March 31, 2021.

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(Tax-effect Accounting)

1. Significant components of deferred tax assets and liabilities

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2021
Deferred tax assets:		
Accrued enterprise taxes	410	532
Accrued bonuses	2,387	2,527
Net defined benefit liability	4,853	5,519
Impairment loss	23,230	22,704
Loss on valuation of investment securities	2,481	2,452
Provision for environmental measures	3,360	4,104
Unrealized profit eliminated in consolidation	856	1,404
Tax loss carryforwards (Note 2)	32,890	38,991
Loss on revaluation of land	12,299	12,307
Other	12,420	13,427
Gross deferred tax assets	95,191	103,971
Valuation allowance relating to tax loss carryforwards (Note 2)	(28,477)	(35,358)
Valuation allowance for total deductible temporary differences	(48,497)	(46,148)
Valuation allowance subtotal (Note 1)	(76,974)	(81,506)
Total deferred tax assets	18,216	22,465
Deferred tax liabilities:		
Reserve for advanced depreciation of noncurrent assets	(2,091)	(2,087)
Unrealized holding gain on other securities	(6,594)	(8,897)
Gain on revaluation of land, etc.	(27,098)	(27,129)
Other	(9,953)	(10,114)
Total deferred tax liabilities	(45,737)	(48,229)
Net deferred tax liabilities	(27,520)	(25,763)

Notes:

1. The primary reason for the change in valuation allowance is the expiration of tax loss carryforwards.

2. Tax loss carryforwards and deferred tax assets amounts by carryforward periods

As of March 31, 2022

						(10111110	ons of yen)
	Within one year	Over 1 but within 2 years	Over 2 but within 3 years	Over 3 but within 4 years	Over 4 but within 5 years	Over 5 years	Total
Tax loss carryforwards (a)	36	64	36	4,805	171	27,775	32,890
Valuation allowance	(36)	(64)	(36)	(4,805)	(171)	(23,362)	(28,477)
Deferred tax assets		—	_	_	_	4,413	4,413

A (* 11 ·

(a) Tax loss carryforwards are calculated based on the statutory tax rate.

As of March 31, 2021

1 11 2021						(Millio	ons of yen)
	Within one year	Over 1 but within 2 years	Over 2 but within 3 years	Over 3 but within 4 years	Over 4 but within 5 years	Over 5 years	Total
Tax loss carryforwards (a)	9,976	36	64	36	4,840	24,038	38,991
Valuation allowance	(9,976)	(36)	(64)	(36)	(4,298)	(20,945)	(35,358)
Deferred tax assets	_	—	_	_	541	3,092	3,633

(a) Tax loss carryforwards are calculated based on the statutory tax rate.

2. Reconciliation of the effective tax rate and the statutory tax rate

	As of March 31, 2022	As of March 31, 2021
Statutory tax rate	30.6%	30.6%
(Adjustments)		
Entertainment expenses not qualifying for deduction	1.7	1.1
Dividend income excluded from gross revenue	(1.5)	(7.1)
Inhabitant tax per capita, etc.	2.8	2.0
Acquisition-related expenses for business acquisitions	—	22.2
Increase or decrease in valuation allowance	(69.8)	(15.5)
Expiration of tax loss carryforwards	127.9	5.4
Amortization of goodwill	4.0	6.5
Equity in gain and loss of affiliates	(33.8)	(13.2)
Other	(3.6)	10.3
Effective tax rate after adoption of tax-effect accounting	58.3	42.3

(Changes in presentation)

"Expiration of tax loss carryforwards" was included in "Other" in the prior fiscal year. For the fiscal year ended March 31, 2022, however, its materiality increased and it is therefore listed as a separate item. Further, "Effect of exchange rate fluctuations at overseas subsidiaries" was listed as a separate item in the prior fiscal year. For the fiscal year ended March 31, 2022, however, its materiality decreased and it is therefore included in "Other." To reflect this change in presentation, the consolidated financial statements for the fiscal year ended March 31, 2021 have been reclassified.

As a result, 6.1% of "Effect of exchange rate fluctuations at overseas subsidiaries" and 9.6% of "Other" in the prior fiscal year have been reclassified as "Expiration of tax loss carryforwards" 5.4% and "Other" 10.3%.

(Asset Retirement Obligations)

Due to its low significance, detailed information regarding asset retirement obligations is not provided, although the Group reports asset retirement obligations.

(Investment and Rental Property)

Due to its low significance, detailed information regarding investment and rental property is not provided, although the Group has rental property and idle land and buildings.

(Revenue Recognition)

- 1. Disaggregation of revenue from contracts with customers The disaggregation of revenue from contracts with customers is as presented in "Notes – Segment Information."
- Useful information in understanding revenue from contracts with customers
 Useful information in understanding revenue is as presented in "Notes Significant Matters Providing the Basis for the
 Preparation of the Consolidated Financial Statements 4. Significant accounting policies (5) Standards for recognizing
 significant revenue and expenses."
- 3. Useful information on the relationship between the satisfaction of performance obligations according to contracts with customers and cash flows generated from such contracts, and on the amounts and timing of revenue from contracts with existing customers as of the end of the current fiscal year that is expected to be recognized during or after the following fiscal year
 - (1) Balance, etc. of contract assets and contract liabilities

	(Millions of yen)
	As of March 31, 2022
Receivables from contracts with customers (Beginning balance)	251,210
Receivables from contracts with customers (Ending balance)	245,205

The balances of contract assets and contract liabilities of the Group are not significant and have not undergone any major fluctuations, and thus statement thereof is omitted. Additionally, there are no significant amounts of revenue recognized in the current fiscal year as a result of performance obligations satisfied (or partially satisfied) in prior periods.

(2) Transaction price allocated to remaining performance obligations

In the sales of finished goods and merchandise in the paper and paperboard business, the daily-life products business and the wood products and construction-related business, there are no significant transactions with an expected term of contract exceeding one year, and in the wholesale, supply, and sales of electrical power in the energy business, revenue is recognized in accordance with Paragraph 19 of the "Implementation Guidance on Accounting Standard for Revenue Recognition," and therefore, statement thereof is omitted.

(Segment Information)

[Segment information]

- 1. Overview of reportable segments
- (1) Method of determining reportable segments

The reportable segments of the Company are defined as individual units, for which independent financial information is available and which are subject to regular review to evaluate their results and decide the allocation of management resources by the Board of Directors of the Company.

The Company recognizes its consolidated subsidiaries as the units that define its business segments because those are used as the main basis to evaluate results. The reportable segments are defined by integrating business segments that exhibit similarities in terms of economic characteristics, markets for products and services, or customers.

(2) Types of products and services of each reportable segment

The principal products and services of each reportable segment are as follows:

Paper and paperboard segment:

Manufacturing and marketing of paper, paperboard, pulp and materials for paper making

Daily-life products segment:

Manufacturing and marketing of household paper, processed paper goods and chemical products

Energy segment: Generating and marketing of electric power

Wood products and construction-related segment: Stocking, manufacturing and marketing of lumber and building materials, as well as civil engineering and construction

2. Method used to calculate net sales, income or loss, assets and other items by reportable segments

Accounting methods applied for the reportable segments are the same as those described under "Significant Matters Providing the Basis for the Preparation of the Consolidated Financial Statements."

Income for each reportable segment denotes operating income, and intersegment sales and transfers are based on market prices in general.

As noted in "Notes – Changes in Accounting Policies – Application of accounting standards for revenue recognition, etc.," the Company has applied the Revenue Recognition Standard and other standards, and changed the accounting method regarding revenue recognition from the consolidated financial statements for the fiscal year ended March 31, 2022. For this reason, the Company has also similarly changed the method used for calculating income or loss by reportable segment.

As a result of these changes, in the fiscal year ended March 31, 2022, net sales for the "paper and paperboard," "daily-life products," "wood products and construction-related," and "other" segments decreased by $\pm 57,405$ million, ± 871 million, $\pm 10,493$ million, and $\pm 1,026$ million, respectively. The impact on income for each segment is minor.

3. Net sales, income or loss, assets and other items by reportable segment, and disaggregation of revenue

Fiscal year ended March 31, 2022

								(M1	llions of yen)
	Reportable segments								
	Paper and paperboard	Daily-life products	Energy	Wood products and construction- related	Subtotal	Other ¹	Total	Adjustment	Consolidated 4
Net sales Goods transferred at a point in time	532,097	386,465	3,357	56,878	978,798	14,075	992,874	_	992,874
Goods and services transferred over time	_	_	28,455	7,639	36,095	15,375	51,471	_	51,471
Revenue from contracts with customers	532,097	386,465	31,813	64,518	1,014,894	29,451	1,044,345	—	1,044,345
Revenue from other sources	_	_	_	_	_	740	740	_	740
Sales to third parties Intersegment sales and transfers	532,097 8,143	386,465 6,582	31,813 —	64,518 48,774	1,014,894 63,500	30,192 46,472	1,045,086 109,973	(109,973)	1,045,086 —
Total	540,240	393,047	31,813	113,293	1,078,395	76,664	1,155,060	(109,973)	1,045,086
Segment income (loss)	(5,575)	4,770	1,586	7,613	8,394	2,117	10,511	1,578	12,090
Segment assets	692,354	488,028	53,598	67,628	1,301,610	33,900	1,335,510	303,776	1,639,286
Other items: Depreciation Amortization of	34,100	26,699 1,016	3,643	769	65,213 1,016	1,336	66,549 1,016		66,549 1,016
goodwill Increase in property, plant and equipment and intangible assets	26,158	26,879	2,762	767	56,568	1,538	58,107	_	58,107

(Millions of ven)

Notes: 1. The "Other" category is a business segment that includes the logistics, leisure and other businesses, and is not a reportable segment.

2. The segment income (loss) adjustments are due to intersegment elimination, etc.

3. The segment assets adjustment of ¥303,776 million includes ¥(40,248) million of intersegment eliminations for receivables and payables and ¥344,024 million of corporate assets that are not allocated to reportable segments. The corporate assets mainly consist of "cash and deposits" for the management of surplus funds, "investments in securities" for long-term investment and "deferred tax assets," which are not allocatable to reportable segments.

4. Adjustments are made to reconcile segment income (loss) with operating income in the consolidated statements of operations.

Fiscal year ended March 31, 2021

2	, i i i i i i i i i i i i i i i i i i i							(Mi	llions of yen)
		Re	portable segn	nents					
	Paper and paperboard	Daily-life products	Energy	Wood products and construction- related	Subtotal	Other ¹	Total	Adjustment	Consolidated 4
Net sales									
Sales to third parties	568,255	317,918	33,407	59,917	979,499	27,840	1,007,339	—	1,007,339
Intersegment sales and transfers	8,898	5,735	—	53,737	68,370	43,526	111,897	(111,897)	—
Total	577,154	323,653	33,407	113,654	1,047,869	71,367	1,119,237	(111,897)	1,007,339
Segment income	2,482	7,898	6,876	6,499	23,756	1,887	25,644	(6,410)	19,233
Segment assets	722,308	448,685	53,798	64,420	1,289,213	34,363	1,323,577	223,749	1,547,326
Other items:									
Depreciation	36,789	20,537	3,899	811	62,037	1,320	63,357		63,357
Amortization of goodwill	1,718	620	—	_	2,338	—	2,338	-	2,338
Increase in property, plant and equipment and intangible assets	31,774	24,810	53	565	57,203	1,061	58,265	_	58,265

Notes: 1. The "Other" category is a business segment that includes the logistics, leisure and other businesses, and is not a reportable segment.

2. The segment income adjustments are due to intersegment elimination, etc., and acquisition-related expenses of ¥6,053 million for a paperboard fiber-based packaging business in Australia and New Zealand.

3. The segment assets adjustment of ¥223,749 million includes ¥(42,720) million of intersegment eliminations for receivables and payables and ¥266,469 million of corporate assets that are not allocated to reportable segments.

The corporate assets mainly consist of "cash and deposits" for the management of surplus funds, "investments in securities" for long-term investment and "deferred tax assets," which are not allocatable to reportable segments.

4. Adjustments are made to reconcile segment income with operating income in the consolidated statements of operations.

[Related information]

Fiscal year ended March 31, 2022

1. Information by product and service

Information by product and service approximates the information provided in "Segment Information" and is therefore not provided here.

2. Information by geographical area

(1) Net sales

					(Millions of yen)
Japan	Oceania	Asia	North America	Others	Total
762,653	135,681	82,942	36,472	27,335	1,045,086

Note: Net sales information is based on the geographical location of customers and categorized by country or region.

(2) Property, plant and equipment

					(Millions of yen)
Japan	Oceania	Asia	North America	Others	Total
558,745	164,531	5,432	34,821	11,458	774,989

3. Information by customer

Information by customer is omitted because no single external customer accounts for 10% or more of net sales in the consolidated statements of operations.

Fiscal year ended March 31, 2021

1. Information by product and service

Information by product and service approximates the information provided in "Segment Information" and is therefore not provided here.

2. Information by geographical area

(1) Net sales

					(Millions of yen)
Japan	Oceania	Asia	North America	Others	Total
800,576	97,275	65,692	24,843	18,951	1,007,339

Note: Net sales information is based on the geographical location of customers and categorized by country or region.

(2) Property, plant and equipment

					(Millions of yen)
Japan	Oceania	Asia	North America	Others	Total
575,468	157,621	5,580	32,713	10,628	782,012

3. Information by customer

Information by customer is omitted because no single external customer accounts for 10% or more of net sales in the consolidated statements of operations.

[Impairment loss by reportable segment]

Fiscal year ended March 31, 2022

J J								(Mi	illions of yen)
		Rep	ortable segm	ents					
	Paper and paperboard	Daily-life products	Energy	Wood products and construction -related	Subtotal	Other	Total	Adjustment	Consolidated
Impairment loss on noncurrent assets	1,476	_	_	—	1,476	_	1,476	—	1,476

Fiscal year ended March 31, 2021

	-)							(Mi	illions of yen)
		Rep	ortable segm	ents					
	Paper and paperboard	Daily-life products	Energy	Wood products and construction -related	Subtotal	Other	Total	Adjustment	Consolidated
Impairment loss on noncurrent assets	5,296		3,287	_	8,584		8,584	_	8,584

[Amortization of goodwill and balance of unamortized goodwill by reportable segment]

Fiscal year ended March 31, 2022

								(Mil	lions of yen)
		Rep	ortable segm	ents					
	Paper and paperboard	Daily-life products	Energy	Wood products and construction -related	Subtotal	Other	Total	Adjustment	Total
Amortization of goodwill	_	1,016	_	_	1,016	_	1,016	_	1,016
Balance of unamortized goodwill at year-end	_	8,653		—	8,653		8,653	_	8,653

Fiscal year ended March 31, 2021

	uren 51, 20	-1						(Mil	llions of yen)
		Rep	ortable segm	ents					
	Paper and paperboard	Daily-life products	Energy	Wood products and construction -related	Subtotal	Other	Total	Adjustment	Total
Amortization of goodwill	1,718	620	-	—	2,338	-	2,338	_	2,338
Balance of unamortized goodwill at year-end	_	9,294	_	_	9,294		9,294	_	9,294

[Gain on negative goodwill by reportable segment]

Fiscal year ended March 31, 2022 None applicable.

Fiscal year ended March 31, 2021 None applicable.

[Related party transactions]

1. Transactions with related parties

(1) Transactions of the Company with related parties

The Company's unconsolidated subsidiaries and affiliates, etc.

Fiscal year ended March 31, 2022 None applicable.

Fiscal year ended March 31, 2021 None applicable.

- (2) Transactions of the Company's consolidated subsidiaries with related parties None applicable.
- 2. Information on the parent company and significant affiliates
 - (1) Information on the parent company None applicable.
 - (2) Financial statements of significant affiliates

Fiscal year ended March 31, 2022

The significant affiliates in the fiscal year ended March 31, 2022 are Lintec Corporation and Phoenix Pulp & Paper Public Company Limited. Summarized aggregate financial statement data of the companies are as follows. Further, the total figures are presented.

	(Millions of yen)
Total current assets	144,657
Total noncurrent assets	198,989
Total current liabilities	69,449
Total long-term liabilities	21,400
Total net assets	252,797
Net sales	222,386
Profit before income taxes	27,483
Profit	22,311

Fiscal year ended March 31, 2021

A significant affiliate in the fiscal year ended March 31, 2021 is Lintec Corporation. Summarized aggregate financial statement data of the company is as follows:

	(Millions of yen)
Total current assets	112,429
Total noncurrent assets	135,593
Total current liabilities	54,373
Total long-term liabilities	15,136
Total net assets	178,512
Net sales	158,024
Profit before income taxes	17,851
Profit	14,636

(Per Share Information)

		(Yen)
	Fiscal year ended	Fiscal year ended
	March 31, 2022	March 31, 2021
Net assets per share	3,695.31	3,570.15
Profit per share	17.23	27.67

Notes: 1. Diluted profit per share is not stated because no potentially dilutive securities were outstanding.

2. For the purpose of calculating net assets per share and profit per share, shares of the Company held through the Board Benefit Trust (BBT) are included in the number of treasury stock deducted when calculating the total number of shares outstanding at the end of the fiscal year and the weighted-average number of common shares outstanding during the fiscal year. The number of treasury stock deducted when calculating the total number of shares outstanding at the end of the fiscal year was 168,100 shares as of March 31, 2022 and 203,100 shares as of March 31, 2021. The weighted-average number of treasury stock deducted when calculating the weighted-average number of common shares outstanding during the fiscal year are number of treasury stock deducted when calculating the weighted-average number of common shares outstanding during the fiscal year was 168,100 shares as 179,141 shares in the fiscal year March 31, 2022 and 204,627 shares in the fiscal year ended March 31, 2021.

3. As noted in "Changes in Accounting Policies," the Company has applied the "Accounting Standard for Revenue Recognition" and other standards. As a result, "Net assets per share" and "Profit per share" for the fiscal year ended March 31, 2022 decreased by ¥0.21 and ¥0.17, respectively.

4. The basis for calculation of profit per share is as follows.

	(Millions of	(Millions of yen unless otherwise stated)			
Item	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2021			
Profit attributable to owners of parent	1,990	3,196			
Profit attributable to owners of parent related to common shares	1,990	3,196			
Weighted-average number of common shares outstanding (shares)	115,525,868.61	115,508,022.29			