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## Summary of Consolidated Financial Results for the Year Ended March 31, 2023 [Japanese GAAP]

April 28, 2023

Company Name: **NGK INSULATORS, LTD.**Stock Exchange Listings: Tokyo and Nagoya

Listing Code: 5333

URL: https://www.ngk-insulators.com/en/

Representative: (Title) President (Name) Shigeru Kobayashi

Contact: (Title) General Manager, Finance & Accounting Department. (Name) Hideaki Tsukui (TEL) +81-52-872-7230

Scheduled date of the Annual Shareholders' Meeting: June 26, 2023 Scheduled date of the filing of Securities Report: June 26, 2023 Scheduled date of Year-End Dividend Payment: June 27, 2023

Availability of Supplementary Explanatory Materials Prepared for Financial Results: Available

Briefing Session on Financial Results to be held: Yes (for securities analysts and institutional investors)

(All yen amounts are rounded down to the nearest million.)

## 1. Consolidated Financial Results for the Year Ended March 31, 2023 (From April 1, 2022 to March 31, 2023)

(1) Consolidated Operating R	Consolidated Operating Results % represents increase (decrease) from the previous per						s period	
	Net sales		oles Operating income		Ordinary income		Net income attributable to owners of the parent	
Fiscal Year ended	Millions of yen	%	Millions of yen	%	Millions of yen	%	Millions of yen	%
March 31, 2023	559,240	9.6	66,761	(20.1)	65,887	(23.6)	55,048	(22.3)
March 31, 2022	510.439	12.9	83.527	64.3	86.248	62.7	70.851	84.0

	Net income	Diluted net income	Ratio of net income	Ratio of ordinary	Ratio of operating
	per share	per share	to equity	income to total assets	income to net sales
Fiscal Year Ended	Yen	Yen	%	%	%
March 31, 2023	177.47	177.17	9.0	6.5	11.9
March 31, 2022	226.56	226.17	12.9	9.1	16.4

(Reference) Share of profit of entities accounted for using equity method : FY 2022 ¥1,522 million : FY 2021 ¥1,666 million

## (2) Consolidated Financial Position

	Total assets	Net assets	Equity ratio	Net assets per share
Fiscal Year Ended	Millions of yen	Millions of yen	%	Yen
March 31, 2023	1,029,168	642,446	61.7	2,074.66
March 31, 2022	982,833	589,594	59.3	1,871.22

(Reference) Equity : As of March 31, 2023 ¥635,447 million : As of March 31, 2022 ¥583,147 million

#### (3) Consolidated Cash Flows

(b) Collochadica Casil i lows				
	Cash flows from	Cash flows from	Cash flows from	Cash & cash equivalents
	operating activities	investing activities	financing activities	at end of period
Fiscal Year Ended	Millions of yen	Millions of yen	Millions of yen	Millions of yen
March 31, 2023	97,949	(52,006)	(34,568)	168,863
March 31, 2022	94,831	(46,291)	(45,263)	154,855

2. Dividend Payments

		Divio	dend per s	hare		Total amount	Dividend	Dividend on
	1Q-end	2Q-end	3Q-end	Year-end	Total	of dividends	payout ratio (Consolidated)	equity ratio (Consolidated)
Fiscal Year Ended	Yen	Yen	Yen	Yen	Yen	Millions of yen	%	%
March 31, 2022	_	30.00	_	33.00	63.00	19,632	27.8	3.6
March 31, 2023	_	33.00	_	33.00	66.00	20,396	37.2	3.3
Fiscal Year Ending March 31, 2024 (forecast)		25.00	ı	25.00	50.00		39.8	

## 3. Forecasts of Consolidated Financial Results for the Fiscal Year Ending March 31, 2024

% represents increase (decrease) from the previous period

	Net sales	Net sales Operating income Ordinary income		Net sales Operating income Ordinary income Net income attributable to owners of the paren				Net income share	•	
	Millions of yen	%	Millions of yen	%	Millions of yen	%	Millions of yen	%		Yen
Six months Ending September 30, 2023	265,000	(3.5)	25,000	(35.6)	23,000	(33.4)	16,000	(39.6)	5	52.23
Fiscal Year Ending March 31, 2024	565,000	1.0	56,000	(16.1)	53,000	(19.6)	38,500	(30.1)	12	25.67

#### **Notes**

(1) Significant changes in subsidiaries during this period: None

(2) Changes in accounting policies, accounting estimates and retrospective restatements

(i) Changes in accounting policies due to revisions of accounting standards
 Yes
 (ii) Changes in accounting policies other than the above (i)
 None
 (iii) Changes in accounting estimates
 None
 (iv) Retrospective restatement
 None

(3) Number of shares outstanding (Common Shares)

(i) Number of shares outstanding at period end including treasury stocks

(ii) Number of treasury stocks at period end

(iii) Average number of shares outstanding over period

March 31, 2023	311,829,996 shares	March 31, 2022	317,211,996 shares
March 31, 2023	5,539,120 shares	March 31, 2022	5,570,919 shares
March 31, 2023	310,189,352 shares	March 31, 2022	312,726,048 shares

## (Reference) Overview of Non-Consolidated Financial Results

1. Non-Consolidated Financial Results for the Year Ended March 31, 2023 (from April 1, 2022 to March 31, 2023)

(1) Non-Consolidated Operating Results % represents increase (decrease) from the previous period Operating income Ordinary income Net income Net sales Fiscal Year Ended Millions of yen % Millions of yen Millions of yen Millions of yen % 47,544 (28.8) March 31, 2023 296,750 (1.6)31,770 (37.0)44,723 (39.8)March 31, 2022 301,615 25.7 50,453 241.3 74,298 204.9 66,820 245.9

	Net income per share	Diluted net income per share
Fiscal Year Ended	Yen	Yen
March 31, 2023	153.28	153.02
March 31, 2022	213.67	213.30

(2) Non-Consolidated Financial Position

	Total assets	Net assets	Equity ratio	Net assets per share
Fiscal Year Ended	Millions of yen	Millions of yen	%	Yen
March 31, 2023	634,823	360,118	56.6	1,172.86
March 31, 2022	619,380	342,619	55.2	1,096.38

(Reference) Equity: As of March 31, 2023 ¥359,236 million As of March 31, 2022 ¥341,678 million

- \* The Summary of Consolidated Financial Results is not subject to audit by certified public accountant or audit firm.
- \* Explanation of appropriate use of results forecasts and other notes

This document contains forward-looking statements that are based on information and certain assumption NGK INSULATORS, LTD. ( "the Company") has acquired and deemed reasonable as of the time of the release and the Company does not guarantee the achievement of them. Actual future results and trends may differ materially from those in the forecasts due to a variety of factors. For the basis of presumption of the business forecast and the notes on its use, please refer to "1. Overview of Business Results and Others, (4) Future Outlook.



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#### 1. Overview of Business Results and Others

## (1) Overview of Business Results for the Fiscal Year Ended March 31, 2023

During the fiscal year under review, the Japanese economy was affected primarily by the impact of soaring prices around the world due to the aggravation of the situation in Ukraine but showed signs of a gradual recovery as the normalization of economic and social activities advanced as people coexisted with COVID-19. Overseas, although some countries resumed economic activities in stages and the economy recovered gradually, falling demand and global economic downturn have become noticeable due to the monetary tightening.

Under such circumstances, the Environment Business saw almost the same shipments of automotive-related products with the previous fiscal year against the backdrop of the almost flat global sales quantity of light-vehicles and trucks despite restrictions on economic activities in China. In the Digital Society Business, shipments of components for semiconductor manufacturing equipment and electronic components, such as piezoceramic actuators for HDDs, declined primarily due to reduced investments in semiconductors and data centers. In the Energy & Industry Business, shipments mainly of insulators and industrial heating systems increased.

As a result, net sales for the fiscal year increased 9.6% year on year to ¥559,240 million thanks to the positive effect of the weak yen despite a decrease in the volumes of components for semiconductor manufacturing equipment and others. In terms of income, operating income fell 20.1% year-on-year to ¥66,761 million due to the impact of soaring labor costs, raw material and fuel prices associated with inflation, in addition to a decline in volumes, although there was the positive effect of the weak yen. Ordinary income decreased by 23.6% year-on-year to ¥65,887 million due to the lower operating income and loss on liquidation of subsidiary and associate. Net income attributable to owners of the parent decreased 22.3% to ¥55,048 million year-on-year mainly due to the recording of impairment loss associated with the optimization of production capacity in the Environment Business although income taxes-refund, etc. were recorded.

The results of the business segments are as follows.

## [Environment Business Segment]

Sales in this segment were ¥320,787 million, up 9.6% from the previous fiscal year.

Sales in this segment increased due to the positive effect of the weak yen in addition to almost the same shipments with the previous fiscal year despite restrictions on economic activities in China.

Operating income was down 22.0% year-on-year to ¥ 50,728 million primarily due to the impact of soaring labor costs, raw material and fuel prices associated with inflation despite the positive effect of the weak yen.

#### [Digital Society Business Segment]

Sales in this segment were ¥163,192 million, up 8.6% from the previous fiscal year.

Sales in this segment increased due to the positive effect of the weak yen despite a decline in shipments of components for semiconductor manufacturing equipment, piezoceramic actuators for HDDs and others mainly resulting from the restraint on investments in semiconductors and data centers.

Operating income decreased 11.6% year-on-year to ¥ 17,557 million primarily due to a decrease in shipment volume and an increase of depreciation.

#### [Energy & Industry Business Segment]

Sales in this segment were ¥77,768 million, up 11.3% from the previous fiscal year.

Shipments of insulators increased mainly due to brisk demand in North America and Australia, despite continued restraint in capital investment by domestic electric power companies. Shipments of NAS® batteries rose, mainly in Japan. Shipments of industrial processes increased, centered on industrial heating systems for lithium-ion battery cathode materials.



In terms of income, operating loss worsened from ¥ 1,406 million of the previous fiscal year to ¥ 1,536 million due to the impact of surging raw material prices despite an increase in shipment volume.

Effective from the current fiscal year, the reportable segments, which were the Energy Infrastructure Business, Ceramics Business, Electronics Business, and Process Technology Business, were changed to the Environment Business, Digital Society Business, and Energy & Industry Business due to the organizational change. Year-on-year figures for each segment were calculated after adjusting the figures for the same period of the previous fiscal year to the revised segment classification.

#### (2) Summary of Financial Position for the Fiscal Year Ended March 31, 2023

Total assets at the end of the fiscal year under review increased 4.7% from the end of the previous fiscal year to ¥1,029,168 million.

Current assets grew 8.8% year-on-year to ¥573,718 million due to increases in cash and deposits, and inventories in spite of a decrease of accounts receivable-trade. Non-current assets stood at ¥455,449 million which is almost the same with the previous fiscal year.

Current liabilities decreased 1.5% year-on-year to ¥149,507 million due to a decrease in income taxes payable in spite of increases in short-term borrowings and contract liabilities. Non-current liabilities declined 1.8% year-on-year to ¥237,214 million due to a decrease in long-term borrowings in spite of an increase in bonds payable.

Net assets rose 9.0% year-on-year to ¥642,446 million mainly due to an increase in retained earnings and an increase in foreign currency translation adjustments.

As a result, the equity ratio at the end of the fiscal year under review was 61.7% (59.3% at the end of the previous fiscal year), and net assets per share were ¥2,074.66, up ¥203.44 from the previous fiscal year.

#### (3) Summary of Cash Flows for the Fiscal Year Ended March 31, 2023

Cash and cash equivalents at the end of the fiscal year under review increased by ¥14,008 million year-on-year to ¥168,863 million. This was because proceeds from operating activities were ¥97,949 million, and there was a payment of ¥52,006 million from investing activities, and payment of ¥34,568 million from financing activities.

## [Cash flows from operating activities]

Net cash provided by operating activities for the fiscal year under review totaled ¥97,949million. This includes income before income taxes of ¥57,522 million and depreciation, although there was an increase in inventories. Compared with the previous fiscal year, net cash provided increased by ¥3,118 million.

#### [Cash flows from investing activities]

Net cash used in investing activities for the fiscal year under review amounted to ¥52,006 million. This was the result of capital expenditures mainly for automotive related products, in addition to purchase of securities and increase in time deposits. Compared with the previous fiscal year, net cash used in declined by ¥5,715 million.

#### [Cash flows from financing activities]

Net cash used in financing activities for the fiscal year under review amounted to ¥34,568 million. This was mainly because long-term borrowings and dividends were repaid, although long-term borrowings and issuance of bonds were taken out to secure funds for future capital investment and carbon neutral activities. Compared with the previous fiscal year, net cash used in decreased by ¥10,695 million.



## (4) Future Outlook

With regard to the economic outlook, the global economy as a whole is forecast to make slight growth as concerns about an economic downturn, such as a recession and financial instability associated with global monetary tightening, are manifesting themselves in addition to the prolongation of the situation in Ukraine, rising prices and trade conflicts between the US and China.

Under these circumstances, the Company expects an increase in revenue as a whole. The reason is that a stagnant demand for components for semiconductor manufacturing equipment and electronic components will be continued to at least the second half of FY 2023 due to deteriorating economic conditions. On the other hand, the Company projects that demand for automotive-related products will grow due to a recovery in global automobile production against the background of a lessening of supply shortages of semiconductors and other components, and a tightening of exhaust gas regulations in some countries. In terms of income, operating income and ordinary income as well as net income attributable to owners of the parent are expected to decrease year-on-year due to increases in costs including raw material, fuel prices and labor costs in addition to a decrease in the volume of the Digital Society Business.

Based on the exchange rates of ¥130 to U.S. dollar and ¥140 to euro, the Company is targeting net sales of ¥565,000 million (+1.0% y/y), operating income of ¥56,000 million (-16.1%y/y), ordinary income of ¥53,000 million (-19.6%y/y), and net income attributable to owners of the parent of ¥38,500 million (-30.1%y/y).

## (5) Basic Policy on Profit Distribution and Dividends for the Fiscal Year Ended March 31, 2023, and the Fiscal Year Ending March 31, 2024

The Company places a high value on the interests of shareholders and considers continuous enhancement of corporate value and the return of profits to be among the most important management policies.

As one of the major management indicators, the Company considers return on equity (ROE) which exceeds capital costs to be an essential medium- to long-term goal. For this purpose, the Company is working to improve return on equity by using the NGK version of ROIC (calculated by operating income, trade receivable, inventory, and equipment), which each department can manage.

The Company intends to pay dividends by taking into account the management of net assets in line with changes in business risks and a link to operating performance (ROE) over a period of three years or so. The Company will do this while targeting a dividend on equity ratio of 3% and a consolidated dividend payout ratio of approximately 30% over the medium term and considering the outlook for cash flows among other things.

The Company proposes to pay a year-end dividend for the fiscal year ended March 31, 2023 of ¥33 per share, and together with the interim dividend of ¥33 already paid, the total dividend for the fiscal year will be ¥66 per share.

The Company plans to pay an interim dividend of ¥25, a year-end dividend of ¥25, and an annual dividend of ¥50 for the next fiscal year ending March 31, 2024 in consideration of the dividend payout ratio and the dividend on equity ratio.

The Company will use retained earnings to increase corporate value by expanding existing core businesses and investing in new businesses.



## 2. Management Policies

## (1) Basic Management Policies of the Company

The NGK Group Philosophy and NGK Group Vision: "Road to 2050" that we adhere to are as follows:

<NGK Group Philosophy>

Our Mission

"Enriching Human Life by Adding New Value to Society."

Our Values

"Quality of People: Embrace challenges and teamwork"

"Quality of Products: Exceed expectations"

"Quality of Management: Social trust is our foundation"

<NGK Group Vision: "Road to 2050">

We look ahead to a future society in 2050, taking the major trend towards carbon neutrality and the explosive evolution into a digital society as an opportunity for further development. We will work on driving Five Transformations: [1] Promotion of ESG management, [2] Profitability improvement, [3] Focus on R&D, [4] Focus on commercialization, and [5] Digital transformation (DX). With "Surprising Ceramics" as the slogan for our unique ceramic technologies, we intend to convert our business structure toward the "Third Foundation."

## (2) Targeted Management Indicators and Capital Policy

The NGK Group is pursuing management that prioritizes capital efficiency based on return on equity (ROE) as one of our key management indicators. We employ return on invested capital (the NGK version of ROIC), which is closely linked to ROE, as a management indicator, and use business assets (accounts receivable, inventories and fixed assets) in lieu of invested capital, and operating income in lieu of after-tax operating income, to allow our business divisions to proactively take control of their targets. Aiming to achieve a minimum medium-to long-term target ROE of 10%, we will implement a capital policy that is conducive to the sustained enhancement of corporate value by accommodating changes in business risks. We will strive to reduce capital costs through communication with shareholders and investors, as well as conducting the decision-making process for business planning and capital investment, to secure earnings exceeding capital costs. We will also work on active shareholder returns, reviewing our payout ratio and dividend on equity (DOE) ratio. Through these efforts, we aim to maintain sound levels of profitability, capital turnover, and financial leverage, which are components of ROE, consistent with our business strategy while maintaining financial health of the Company.

Furthermore, as a management indicator which will be contributing to improve enterprise value, we employed the NGK version of value added (NGK Value-added) that considering costs of CO<sub>2</sub> emissions, labor and R&D; and ESG target achievement rates. In a bid to improve corporate citizenship in a super-long term in addition to "financial value" such as short-term profitability and medium- to long-term growth potential, we will work on continuous improvement of human capital and intellectual capital, which are sources of future competitiveness of the Company, and also fulfill a broad range of social responsibilities including initiatives to reduce environmental burden and respect human rights. We will improve our corporate value by increasing "non-financial value" of the Company through these initiatives.

## (3) Medium-to Long-Term Management Strategies and Issues to Be Addressed

The environment surrounding the NGK Group is expected to remain uncertain mainly due to the prolongation of the situation in Ukraine, rising prices, semiconductor shortages and trade conflicts between the U.S. and China. On the other hand, from a medium-to long-term viewpoint, the Group expects the sophistication of information and telecommunications and the digitization of society, such as autonomous driving, to advance in addition to the shift to carbon neutrality against the backdrop of the global trend toward the realization of a decarbonized society. With the aim of becoming a corporation that adds new value to society, the Group has set "A Company to contribute to carbon neutrality and a digital society with our unique ceramic technologies" as what it wants to be in the



NGK Group Vision. Accordingly, the Group is pushing forward with the "Five Transformations" to bring the vision into being. Although there is concern that automotive-related products, the Group's core business, will shrink as electrification advances, the Group will work on "Advancement of ESG management" and "Improving the earning capability of existing businesses and creating new businesses" in the attempt to expand the lineup of products related to carbon neutrality and a digital society for a future society of 2050 and transform its business structure.

The NGK Group's initiatives for key issues are as follows:

#### [1] Advancement of ESG management

The Group has placed ESG at the center of its corporate management to drive sustainable growth and transformation into what it wants to be in the future. The raison d'être of the Group is to resolve social issues through its products and services, and initiatives in "Environment," "Society" and "Governance," all of which are the bases of business activities, and are key issues essential for long-term growth. The NGK Group has 37 group companies (including 19 manufacturing companies) operating in 19 countries overseas and has been establishing an environment that enables all members working in the Group to behave in accordance with fair values and international criteria to ensure that these issues are addressed and that the transparency and autonomy of corporate management is enhanced. The Board of Directors will appropriately supervise the initiatives to address sustainability issues, including ESG factors, at the management level, which the Group is pushing forward with under the ESG Management Committee chaired by the President.

#### [Environment (E)]

Holding up the goal of achieving net zero CO<sub>2</sub> emissions by 2050, the Group has formulated the "NGK Group Environmental Vision," which is formed around making a contribution to carbon neutrality, a recycling-oriented society and harmony with nature. Based on it, the Group has compiled the "Carbon Neutrality Strategic Roadmap" and the five-year environmental plan as concrete action plans and is striving to fulfill the goals therein. In fiscal 2025, the Group has set a target of 550,000 metric tons of CO<sub>2</sub> emissions in Scope 1 and Scope 2 (a 25% reduction compared with the fiscal 2013 base year), and a milestone target (an interim goal) of 370,000 metric tons in fiscal 2030 (a 50% reduction compared with the base year). As an effort to achieve these targets, the Group plans to switch all electricity consumed by overseas sites to that derived from renewable energy and to adopt solar power generation facilities with a total output of 40 megawatts in manufacturing sites in Japan and overseas by fiscal 2025. In addition, in order to achieve these goals ahead of schedule, the Group has started to develop ceramics firing facilities using carbon-neutral fuels such as hydrogen and ammonia, and technologies related to CCU and CCS (CO<sub>2</sub> capture, utilization and storage) such as CO<sub>2</sub> separation membranes and DAC (Direct Air Capture). The Group will continue to demonstrate and apply these technologies within its group and at the same time, engage in the development of carbon-neutral-related products and services. The Group issued green bonds (unsecured bonds) in November 2022, the second round following the first one two years ago. The Group will speed up the provision of environmentally effective products and services, and particularly, initiatives to achieve carbon neutrality in its business and production activities.

With regard to the Task Force on Climate-related Financial Disclosures (TCFD), in April 2022, we posted information on our website regarding the result of scenario analysis based on the four categories: "Governance," "Strategy," "Risk management," and "Metrics and Targets." We will continue to expand and improve disclosure of relevant information without delaying the response to social demand.

## [Society (S)]

The NGK Group will expand initiatives to respect human rights in its companies and supply chains, thereby contributing to the creation of a society in which the human rights of all people affected by business activities will not be violated. Not only did the Group establish the "NGK Group Human Rights Policy" based on the "United Nations' Guiding Principles on Business and Human Rights" but it also disclosed a statement on the UK Modern Slavery Act. Furthermore, the Group endorses "Children's Rights and Business Principles" and has declared that the Group will respect children's rights in business activities and engage in social contribution activities and others for the promotion of children's rights.

In the NGK Group Philosophy, the Group positions human resources as the starting point of what it aims for. And it intends to undertake the development of human resources essential for the "Five Transformations" outlined in the NGK Group Vision, and bring



about a workplace that encourages people to tackle challenges and achieve transformation as a venue in which diverse human resources try their best. We are providing diverse career paths that allow self-directed growth of each employee and also deploying various measures including creating an internal work environment through flexible work styles utilizing telecommuting and reduction of long working hours. In a bid to promote the advancement of women, we have set numerical targets for the percentage of female new college graduates hired and are expanding the scope of their responsibility in the organizations that they are assigned or transferred to. We have implemented a system to support early return from parental leave to encourage employees who took maternity and childcare leave to resume their careers early. In addition to systems such as providing training for employees returning from childcare leave and expansion and improvement of childcare leave for male employees, we have been working on creating an environment that allows women to thrive through organizing internal lectures that aim for deeper understanding of balancing work and family responsibilities. In respect of human resources overseas, approximately 60 percent of a total of about 20,000 employees of the Group are stationed overseas. We believe the advancement of local human resources is essential for prompt and appropriate decision-making based on the circumstances, culture and practices in each local community for management of the NGK Group. Therefore, we actively hire local human resources and assign them to senior management-level positions at overseas sites.

In the Group's supply chain, in order to conduct fair and equitable transactions with procurement partners who make up the supply chain and to thrive side by side, the Group has established the "Basic Purchasing Policy." This bases its basic policy on procurement on "Open & Fair," "Mutual Prosperity" and "Close Relationship with Society," and the Group has announced the "Declaration of Partnership Building," which is being advanced by the Cabinet Office and the Small and Medium Enterprise Agency. We are pushing forward with CSR procurement in response to the growing social demand for consideration for CSR in our supply chain. Accordingly, we select suppliers and adopt raw materials and services for our use that accommodate CSR, in accordance with the "CSR Procurement Guidelines." We make detailed risk and CSR assessments through measures such as visits to and reality-check questionnaires with business partners. In fiscal 2022, we reached out to support such companies in improving in accordance with the significance of suppliers and the actual situation of their business.

## [Governance (G)]

With regard to corporate governance, in light of enhancing the functions of the Board of Directors, the Company appoints independent outside directors who can contribute to the Company's sustainable growth and mid- to long-term improvement of corporate value. The number of independent outside directors is one-third or more of the total members of the Board of Directors. The Company also founded the Business Ethics Committee, whose primary members are outside directors, and it handles response to fraudulent acts or violations of laws and regulations where the officers and others of the Company have been involved and provides response, reports and advice to the Board of Directors. The committee strives to strengthen the compliance system by establishing a whistleblowing system ("Hotline"), which is directly linked to the Business Ethics Committee. This serves as a mechanism to prevent any such fraudulent act or violation of laws and regulations in addition to the existing Helpline System, which provides advice and receives reports from employees.

From the compliance perspective, the Company has established the NGK Group Code of Conduct as guidelines for all members of the NGK Group to conduct sound business activities based on a sense of ethics. Moreover, the "Basic Guidelines for NGK Group Compliance Activities" are in place with the aim of establishing a mechanism for evaluating and verifying its compliance activities, taken in various domains, in light of international norms and for continuous improvement based on shared understanding and values.

For compliance with applicable laws and regulations such as competition laws and anti-bribery laws, the Company ensures thorough compliance through continuously disseminating messages from the top management, carrying out compliance education programs for officers and employees of the NGK Group companies in and outside Japan, and organizing competition law compliance programs that meet international norms and utilizing the "Competition Law Compliance Handbook."

Regarding a quality compliance system, the Company has been working on improving corporate characteristics through enhancement of mechanisms such as quality control activities by the top management and direct guidance by the quality committee as well as ensuring thorough quality education for the management members and employees. In terms of safety of the working environment, the Company works on reducing work-related injuries by strengthening the control capability of each site across the NGK Group in addition to identifying significant accident risks and enhancing preventative measures through conducting risk assessment of



the NGK Group companies in and outside Japan.

In respect of risk management, risks that are deemed significant from the management perspective are classified into categories of business environment, strategy and internal factors, and continuously reviewed. Regarding individual risk items that include sustainability issues of the Group, we are managing the risks by setting up various committees. Additionally, amid an environment at home and overseas that is changing more rapidly, we have had the Risk Management Committee in place since fiscal 2023. It serves as the supervisory committee directly reporting to the President for the purpose of building a cross-departmental mechanism that manages risks from a company-wide perspective and that is connected to the Board of Directors.

## [2] Improving earning capacity of existing businesses and creating new businesses

The Group has developed a business portfolio policy in order to enhance corporate value from a company-wide perspective and carefully examines businesses from two perspectives: profitability measured using the NGK version of ROIC and growth potential that employs a net sales growth rate. We consider investing management resources in core businesses and business groups where future growth is anticipated. In addition, we evaluate the quantitative aspects of businesses in the low-growth, low-profit categories based on the annual and medium-term business plans and discuss their growth potential and profitability at internal strategy meetings, etc., which will be supervised by the Board of Directors as important matters concerning the company management. To decide on capital investments, we take into account the payback time of individual investments and the NGK version of ROIC as well as evaluations from the perspective of ESG that uses the internal carbon prices (ICP) and that has been adopted since fiscal 2022. Furthermore, we strive to strike a good balance between the pursuit of profits and investment in human resources and intellectual capital, which are the sources of future corporate value, and simultaneously, to comprehensively evaluate initiatives related to sustainability, such as reduction of environmental burden and the effort to respect human rights. To this end, we have adopted NGK Value-added as a management indicator, which is determined by factoring in CO<sub>2</sub> emission costs, labor costs, R&D expenses and an ESG target achievement rate into operating income. We will connect this to the enhancement of corporate value by raising non-financial value, which is not presented in financial statements, in addition to financial value, such as short-term profitability and medium- to long-term growth potential.

In order to improve the profitability of each business, we will appropriately pass increased costs associated with global inflation on to selling prices, and at the same time, we are advancing the initiative of "manufacturing ∞ (chain) innovation" to further enhance our profitability. The two central focuses of the initiative are "production innovation activities" which fill in the gap between the ideal and reality in the manufacturing chain and "cost reduction activities," which improve manufacturing costs by reducing loss at production sites. The activities of this initiative will be driven by digital technology to achieve greater transparency and global integration in manufacturing, thereby leading to greater competitiveness.

In April 2022, the Group publicized the "NGK Group Digital Vision" to carry out corporate transformation for the future, and it is strongly advancing DX in line with the promotion roadmap to 2030. With the Digital Transformation and Innovation Department, a cross-sectional organization, as the core, various departments, including development, manufacturing, sales and purchasing, are pushing improvement activities based on the three pillars: "Human resources" (internal activities for raising awareness of DX and training DX human resources for literacy improvement), "Digital" (building a foundation for digital utilization, developing the next-generation technology, and solid IT security), and "Organization and Culture" (commitment of the management members through formulation of a vision, global cooperation and promotion, and reforming the mentality of all members of the NGK Group). In fiscal 2023, we will promote data utilization and accelerate and strengthen collaboration between the supply chain and engineering chain.

As transforming the business structure requires the creation of new business, we have set up "New Value 1000" as the key measure to boost net sales of newly commercialized products to a minimum of 100 billion yen in 2030. The three business groups of Corporate NV Creation, tasked mainly with the marketing function, Corporate R&D with the Group's unique differentiating technology and Corporate Manufacturing Engineering, responsible for manufacturing including prototyping and mass-production technology, coordinate to speed up the process from R&D to commercialization. In fiscal 2022, the R&D and Business Development Committee was established as a higher body in charge of policy development and to oversee the entire processes of the company's internal research and development and commercialization. In fiscal 2023, we plan to make an investment of 31 billion yen for R&D expenses, a record high in our history. The investments will total 300 billion yen for ten years, of which 80 percent will be allocated to fields related to carbon neutrality and a digital society. In this way, we will focus management resources on promising themes that help solve social issues. Additionally, in order to



create more effective differentiating technologies while accelerating the speed of development, we will engage in concurrent development that involves Corporate Manufacturing Engineering at an early stage. In parallel, by advancing materials informatics, a combination of a database containing massive amounts of our test data with AI technology, we aim to connect it to the development of innovative ceramic materials in a short period of time. Furthermore, we strive to actively push forward with the creation of new products and businesses that utilize alliances with external parties such as investment in venture capital funds and start-ups whereby the transformation of the business structure will be moved forward.

Priority issues by segment are as follows.

#### [Environment Business]

We will respond to increasing demand mainly due to a recovery in automobile production and a tightening of exhaust gas regulations in various countries in the foreseeable future, and will aim to maximize profit by improving productivity, optimizing the global production system and building a stable supply system. The internal combustion engine business will gradually decline in the future due to the popularization of electric vehicles. But in the short term, we will accelerate the development of new products such as NOx sensors for gasoline and electrically heated catalysts (EHC) in response to a further tightening of regulations in Europe and other regions. We will also launch our CCU- and CCS-related products, such as DAC, into carbon-neutral-related markets, which are expected to expand globally, and we will promote the introduction of high-value-added products as a business that encompasses the environment-related market in a broad sense.

## [Digital Society Business]

In the digital society-related business areas outlined in the NGK Group Vision, demand is expected to decline in the short term as economic conditions deteriorate. But in the medium to long term, demand is projected to grow in semiconductor-related and electronic component-related fields primarily due to the advancement of the IoT and 5G. Regarding products for semiconductor manufacturing equipment and electronic components, in addition to developing next-generation products and cultivating customers, we will continue to make capital investments with an eye on the medium to long term in order to accommodate growing demand. We will also steadily advance the development of new products, such as chip-type ceramic secondary batteries (EnerCera®) and insulated circuit boards with high heat dissipation qualities, with the aim of expanding our range of products that contribute to a digital society.

#### [Energy & Industry Business]

To realize carbon neutrality by 2050, with measures, such as subsidies for the adoption of renewable energy, showing up in Japan, the significance of storage batteries is gaining momentum across the world. In respect of the energy-storage-related field, it will take a while for demand for NAS® batteries to expand on a full-scale basis. Meanwhile, we will work to build a business model that leverages the NAS® battery features of large capacity, long life and long-hour charging and discharging. Combining NAS® batteries and NGK's unique energy management system (EMS) makes it possible to make the most of NAS® battery capacity and maximize the value of energy resources. We will further develop businesses to "sell value and services" in addition to the conventional business of "selling products." Amid the continued reduction in capital spending by domestic power companies, we will make the Insulator Business more efficient assuming that there will be mid- to long-term market changes. The Industrial Process Business strives to expand earnings in refractory products and pharmaceutical water purifiers, and simultaneously, launch products and facilities that contribute to meeting environmental needs in society, such as for CO<sub>2</sub> separation, hydrogen separation, and a bio-economy, in an attempt to expand into a business field that will become a receptacle of new carbon neutral products.

Through these initiatives, the Group will work to further reinforce its management base and continue conducting corporate management with emphases placed on capital efficiency and shareholders, while aiming to become what it wants to be in the future through sustainable growth and enhancement of corporate value.



## 3. Basic Policies Concerning Selection of Accounting Standards

The Company applies Japanese GAAP, on the other hand, the Company has already unified its accounting standards for accounting period, depreciation and amortization methods, etc. to standards which are same as those of IFRS, in order to make a financial report more appropriate.



## 4. Consolidated Financial Statements and Primary Notes

## (1) Consolidated Balance Sheets

(M	lillio	ns	6 (	of :	ye	el	n)	)

	March 31, 2023	March 31, 2022
Assets		
Current assets		
Cash and deposits	168,447	139,19
Notes receivable-trade	2,941	2,5
Accounts receivable-trade	108,132	119,63
Contract assets	9,044	9,5
Securities	46,260	46,4
Inventories	*1 214,423	*1 188,3
Other	24,632	21,7
Allowance for doubtful accounts	(162)	(15
Total current assets	573,718	527,3
Non-current assets		
Property, plant and equipment		
Buildings and structures, net	126,436	122,6
Machinery, equipment and vehicles, net	172,418	180,2
Tools, furniture and fixtures, net	9,836	10,3
Land	30,360	28,9
Construction in progress	25,393	30,9
Other, net	2,001	2,1
Total property, plant and equipment	366,446	375,3
Intangible assets		
Software	6,225	6,0
Other	188	1
Total intangible assets	6,414	6,1
Investments and other assets		
Investment securities	58,223	59,0
Deferred tax assets	7,522	5,8
Retirement benefit assets	12,887	6,6
Other	4,258	2,6
Allowance for doubtful accounts	(303)	(34
Total investments and other assets	82,588	73,9
Total non-current assets	455,449	455,4
Total assets	1,029,168	982,8



		(Willions of year)
	March 31, 2023	March 31, 2022
Liabilities		
Current liabilities		
Notes and accounts payable-trade	44,872	44,328
Short-term borrowings	11,143	6,198
Current portion of long-term borrowings	34,860	32,26
Accounts payable-other	15,482	16,24
Accrued expenses	22,245	20,96
Income taxes payable	4,164	19,83
Contract liabilities	6,079	1,82
Provision for NAS battery safety measures	763	97
Other	9,895	9,15
Total current liabilities	149,507	151,79
Non-current liabilities		
Bonds payable	40,000	35,00
Long-term borrowings	167,353	178,88
Deferred tax liabilities	4,077	1,08
Provision for product warranties	655	63
Retirement benefit liabilities	20,283	21,42
Other	4,843	4,42
Total non-current liabilities	237,214	241,44
Total liabilities	386,721	393,23
Net assets		
Shareholders' equity		
Share capital	69,955	69,84
Capital surplus	70,305	70,19
Retained earnings	440,530	416,20
Treasury shares	(10,294)	(10,944
Total shareholders' equity	570,496	545,30
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	17,101	17,06
Deferred gains or losses on hedges	(9)	(199
Foreign currency translation adjustment	42,849	21,62
Remeasurements of defined benefit plans	5,009	(642
Total accumulated other comprehensive income	64,951	37,83
Share acquisition rights	882	94
Non-controlling interests	6,116	5,50
Total net assets	642,446	589,59
Total liabilities and net assets	1,029,168	982,833



# (2) Consolidated Statement of Income and Consolidated Statement of Comprehensive Income Consolidated Statement of Income

		(Willions of year)
	Fiscal Year Ended March 31, 2023	Fiscal Year Ended March 31, 2022
Net sales	559,240	510,43
Cost of sales	405,463	347,74
Gross profit	153,776	162,69
Selling, general and administrative expenses	*1 87,015	*1 79,16
Operating income	66,761	83,52
Non-operating income		
Interest income	786	39
Dividend income	1,336	1,04
Share of profit of entities accounted for using equity method	1,522	1,66
Foreign exchange gains	694	1,45
Interest on refund of income taxes	*2 550	1,19
Other	1,124	2,18
Total non-operating income	6,015	7,94
Non-operating expenses		
Interest expense	3,861	3,59
Loss on valuation of derivatives	205	83
Depreciation	739	34
Loss on liquidation of subsidiary and associate	963	_
Other	1,119	44
Total non-operating expense	6,889	5,22
Ordinary income	65,887	86,24
Extraordinary income	<u> </u>	,
Gain on sales of non-current assets	231	7
Gain on sales of investment securities	1,312	1,16
Subsidies income	1,124	4,89
Total extraordinary income	2,669	6,13
Extraordinary losses	·	,
Loss on disposals of non-current assets	550	39
Impairment loss	*3 9,952	1,15
Loss on business of subsidiary	*4 532	· <u>-</u>
Total extraordinary losses	11,034	1,55
Income before income taxes	57,522	90,81
Income taxes-current	15,254	25,55
Income taxes-refund	*2 (7,661)	(5,758
Income taxes for prior periods	*5 (4,100)	(-)
Income taxes-deferred	(1,222)	(6
Total income taxes	2,270	19,78
Net income	55,251	71,03
Net income attributable to non-controlling interests	202	18
Net income attributable to owners of the parent	55,048	70,85



## **Consolidated Statement of Comprehensive Income**

		` ,
	Fiscal Year Ended March 31, 2023	Fiscal Year Ended March 31, 2022
Net income	55,251	71,032
Other comprehensive income		
Valuation difference on available-for-sale securities	41	(2,195)
Deferred gain or (loss) on hedges	180	(4)
Foreign currency translation adjustment	21,206	26,625
Remeasurements of defined benefit plans, net of tax	5,680	2,966
Share of other comprehensive income of entities accounted for using equity method	391	261
Total other comprehensive income	27,501	27,652
Comprehensive income	82,753	98,684
Comprehensive income attributable to		
Owners of the parent	82,161	98,170
Non-controlling interests	591	514



## (3) Consolidated Statement of Changes in Equity

Year Ended March 31, 2023 (From April 1, 2022 to March 31, 2023)

		5	Shareholders' equi	ty	
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholder's equity
Balance at March 31, 2022	69,849	70,199	416,205	(10,944)	545,308
Changes during period					
Dividends of surplus			(20,572)		(20,572)
Net income attributable to owners of the parent			55,048		55,048
Purchase of treasury shares				(9,635)	(9,635)
Disposal of treasury shares		(4)		63	59
Cancellation of treasury shares		(10,222)		10,222	_
Transfer from retained earnings to capital surplus		10,226	(10,226)		_
Restricted stock compensation	106	106			212
Change in scope of consolidation			74		74
Net changes in items other than shareholders' equity					
Total changes during period	106	106	24,324	650	25,187
Balance at March 31, 2023	69,955	70,305	440,530	(10,294)	570,496

	Accumulated other comprehensive income							
	Valuation difference on available-for- sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Share acquisition rights	Non- controlling interests	Total net assets
Balance at March 31, 2022	17,060	(199)	21,620	(642)	37,838	941	5,505	589,594
Changes during period								
Dividends of surplus								(20,572)
Net income attributable to owners of the parent								55,048
Purchase of treasury shares								(9,635)
Disposal of treasury shares								59
Cancellation of treasury shares								1
Transfer from retained earnings to capital surplus								_
Restricted stock compensation								212
Change in scope of consolidation								74
Net changes in items other than shareholders' equity	40	190	21,229	5,652	27,112	(59)	610	27,664
Total changes during period	40	190	21,229	5,652	27,112	(59)	610	52,852
Balance at March 31, 2023	17,101	(9)	42,849	5,009	64,951	882	6,116	642,446



## Year Ended March 31, 2022 (From April 1, 2021 to March 31, 2022)

	Shareholders' equity				
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholder's equity
Balance at March 31, 2021	69,849	70,199	372,640	(11,205)	501,483
Cumulative effects of changes in accounting policies			(1,777)		(1,777)
Restated balance	69,849	70,199	370,863	(11,205)	499,706
Changes during period					
Dividends of surplus			(15,679)		(15,679)
Net income attributable to owners of the parent			70,851		70,851
Purchase of treasury shares				(9,700)	(9,700)
Disposal of treasury shares		(6)		138	131
Cancellation of treasury shares		(9,823)		9,823	_
Transfer from retained earnings to capital surplus		9,830	(9,830)		_
Net changes in items other than shareholders' equity					
Total changes during period	_		45,341	260	45,602
Balance at March 31, 2022	69,849	70,199	416,205	(10,944)	545,308

		Accumulated other comprehensive income						
	Valuation difference on available-for- sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Share acquisition rights	Non- controlling interests	Total net assets
Balance at March 31, 2021	19,257	(186)	(4,918)	(3,632)	10,520	872	5,017	517,892
Cumulative effects of changes in accounting policies								(1,777)
Restated balance	19,257	(186)	(4,918)	(3,632)	10,520	872	5,017	516,115
Changes during period								
Dividends of surplus								(15,679)
Net income attributable to owners of the parent								70,851
Purchase of treasury shares								(9,700)
Disposal of treasury shares								131
Cancellation of treasury shares								_
Transfer from retained earnings to capital surplus								_
Net changes in items other than shareholders' equity	(2,197)	(13)	26,539	2,989	27,318	69	488	27,875
Total changes during period	(2,197)	(13)	26,539	2,989	27,318	69	488	73,478
Balance at March 31, 2022	17,060	(199)	21,620	(642)	37,838	941	5,505	589,594



## (4) Consolidated Statement of Cash Flows

	Fiscal Year Ended March 31, 2023	Fiscal Year Ended March 31, 2022
Cash flows from operating activities	,	
Income before income taxes	57,522	90,81
Depreciation	53,729	49,27
Impairment loss	9,952	1,15
Interest and dividend income	(2,123)	(1,441
Interest expense	3,861	3,59
Share of profit of entities accounted for using equity method	(1,522)	(1,666
Gain on sales of investment securities	(1,312)	(1,16
Decrease (increase) in trade receivables	15,452	(1,65
Decrease (increase) in contract assets	934	(3,73
Increase in inventories	(19,613)	(27,90
Increase in other current assets	(1,337)	(11)
(Decrease) increase in trade payables	(497)	33
Increase (decrease) in other current liabilities	4,347	(28
Other	258	(2,09
Subtotal	119,651	105,11
Interest and dividends received	2,083	1,45
Dividends received from entities accounted for using equity method	424	42
Interest paid	(3,938)	(3,83
Income taxes paid	(31,378)	(12,92
Tax refunds and interest on tax refunds received	11,107	4,58
Net cash provided by operating activities	97,949	94,83
Cash flows from investing activities	31,343	94,00
Purchase of securities	(69,638)	(54,69
Proceeds from sales and redemption of securities	61,895	51,23
Purchase of property, plant and equipment	(40,257)	(35,22)
Proceeds from sale of property, plant and equipment	3,168	(33,22)
Purchase of intangible assets  Proceeds from sales and redemption of investment securities	(2,896) 3,954	(2,20) 1,84
·		
Net increase in time deposits Other	(7,319)	(6,81
	(914)	(56)
Net cash used in investing activities	(52,006)	(46,29
Cash flows from financing activities	4 500	(40.04)
Net increase (decrease) in short-term borrowings	4,523	(12,01)
Proceeds from long-term borrowings	20,125	5,00
Repayments of long-term borrowings	(32,812)	(22,00)
Proceeds from issuance of bonds	5,000	10,00
Purchase of treasury shares	(9,635)	(9,70)
Dividends paid	(20,572)	(15,67)
Other	(1,197)	(85)
Net cash used in financing activities	(34,568)	(45,26
Effect of exchange rate changes on cash and cash equivalents	2,560	5,54
Net increase in cash and cash equivalents	13,935	8,82
Cash and cash equivalents at beginning of period	154,855	146,03
Increase in cash and cash equivalents resulting from change in scope of consolidation	73	-
Cash and cash equivalents at end of period	168,863	154,85



## (5) Notes to Consolidated Financial Statements

## (Note on the Assumption as a Going Concern)

Not applicable

## (Significant Items Underlying the Preparation of Consolidated Financial Statements)

Accounting standards

Accounting standards for significant allowances

- 1) Provision for NAS battery safety measures In response to the fire involving NGK-manufactured NAS® batteries that occurred in September 2011, the Company reserved an allowance as "Provision for NAS battery safety measures" to cover anticipated future expenses on safety measures necessary to expand the NAS battery business.
- Provision for product warranties
   The Company and some consolidated subsidiaries estimate and accrue the costs of warranty repair for products sold in reserve for future expenses.

## (Changing in Accounting Policy)

(Application of accounting standards for fair value measurement)

The Company has adopted the "Implementation Guidance on Accounting Standard for Fair Value Measurement" (ASBJ Guidance No. 31, June 17, 2021. Hereinafter referred to as the "Implementation Guidance") from the beginning of the first quarter consolidated accounting period. In accordance with the transitional treatment prescribed in Paragraph 27-2 of the Implementation Guidance, the Company will apply the new accounting policies described by the Implementation Guidance in the future. There is no impact on the consolidated financial statements.

(Application of US Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 842, "Leases")

The Company's consolidated subsidiaries in the US that apply U.S. GAAP have adopted ASC Topic 842, "Leases" since the fiscal year under review. In principle, this requires lessees to recognize all leases on their balance sheet as assets and liabilities. There are no significant changes in lessors' accounting treatment.

To apply the above accounting standards, the Company has adopted the method of recognizing the cumulative effects, caused by the application of the accounting standards, on the date of adoption, which is permitted as a transitional measure. The effects on the consolidated financial statements are immaterial.

## (Additional Information)

(Regarding filing action for the revocation of correction based on transfer pricing taxation)

In June 2017, the Company received correction based on transfer pricing taxation from the Nagoya Regional Taxation Bureau regarding the transactions between the Company and its subsidiary in Poland from the fiscal year ended March 31, 2011 through the fiscal year ended March 31, 2015 and the Company paid an additional tax of approximately 8.5 billion yen including local taxes. A request for re-examination was submitted to the Nagoya National Tax Tribunal in July 2018 requesting for cancellation of the correction, and the Company received a written verdict that partially rescinded the correction in July 2019. However, it only provided refund of approximately 0.4 billion yen of corporate taxes and local taxes, etc. at this stage. Because the Company took the position that the entire amount should be rescinded, the Company filed an action with the Tokyo District Court for the revocation of the correction in December 2019.

Subsequently, in October 2022, the Company received a notice of correction (the "Revision of the Correction") from the Nagoya



Regional Taxation bureau stating that the amount of the correction would be reduced. As a result, during the fiscal year, the Company recorded the refund of approximately 7.7 billion yen as income taxes-refund and interest on such refund as non-operating income. In addition, the Company withdrew the revocation of correction, comprehensively considering that the significant amount of the back taxes paid will be refunded due to the Revision of the Correction.



## (Consolidated Balance Sheets)

#### \*1. The breakdown of inventories is as follows:

	March 31, 2023	March 31, 2022
Finished goods and merchandise	97,744 million yen	83,308 million yen
Cost of contracts in progress	1,004	682
Work in process	22,462	22,337
Raw materials and supplies	93,210	82,008

## 2. Lawsuit filed against the Company

On July 6, 2021, a lawsuit was filed against the Company in Nagoya District court and the Company received the complaint on October 29, 2021 that P.T.Paiton Energy ("Paiton"), its insurance companies and their reinsurer companies ("the plaintiffs") filed a claim against the Company for compensation for damages of US\$151,392,337.48 (¥16,828,772,234) and the amount of the relevant delay charges. Thereafter, the plaintiffs issued petition for amendment of claim on January 11, 2022, the amount of the claim increased by US\$41.36 (¥4,796) to US\$151,392,378.84 (¥16,828,777,030) and the relevant delay changes.

In January 2018, a fire incident allegedly occurred in a transformer ("Transformer") installed in a thermal power plant ("Power Plant") in Indonesia operated by Paiton. In connection with this accident, the plaintiffs filed a claim against the Company for damages and relevant delay charges based on alleged product liability and torts.

The Company is a distributor of the bushing (manufactured in 2010) incorporated in the Transformer. The Company delivered the bushing to a third-party transformer manufacturer that incorporated the same into the Transformer. The Transformer was then delivered to the Power Plant through a plant engineering manufacturer.

The Company believes that it is not liable for the incident described above. Therefore, the Company will take necessary actions in response to the claim to demonstrate the quality of the bushings and the adequacy of the Company's operations.

The Company will make timely disclosures in relation to this lawsuit upon the occurrence of any incident that may have a material impact on the Company's financial results.

The number in yen terms for the damage compensation in the text is the amount stated in the complaint and is converted into yen at a different exchange rate from that used by the Company to prepare the consolidated financial statements.



## (Consolidated Statement of Income)

## \*1. The major items and their amounts of selling, general and administrative expenses are as follows:

	Fiscal Year Ended	Fiscal Year Ended
	March 31, 2023	March 31, 2022
Salaries, wages, and bonuses	23,737 million yen	21,543 million yen
Freight-out	12,970	13,305
Research and development expenses	12,511	10,458
Retirement benefit expenses	1,475	1,429

#### \*2. Interest on refund of income taxes and income taxes-refund

Year ended March 31, 2023 (From April 1, 2022 to March 31, 2023)

In December 2019, the Company filed an appeal with the Tokyo District Court contesting a transfer pricing correction (the "Correction") made in June 2017 by the Nagoya Regional Taxation Bureau in relation to transactions the Company conducted with its Polish subsidiary from the fiscal year ended March 31, 2011, to the fiscal year ended March 31, 2015. In October 2022, the Company received a notice of correction from the Nagoya Regional Taxation Bureau stating to reduce the amount of the Correction. Accordingly, the Company recorded the income taxes-refund relating corporate, local and other taxes already paid in the past of ¥7,661 million and the relating interest on refund of income taxes of ¥550 million as non-operating income.

## \*3. Impairment loss

Year ended March 31, 2023 (From April 1, 2022 to March 31, 2023)

The Company recognized impairment loss as follows:

Groups	Asset category	Location	Millions of yen
Automotive ceramics for exhaust gas purification	Machinery, equipment and vehicles, Construction in progress	China	6,133
Insulators *	Buildings and structures, Machinery, equipment and vehicles	Japan	2,616

<sup>\*</sup> This is due to the termination of manufacturing and sales of insulator products manufactured in the Chita Site.

The Company performs asset grouping in accordance with business segments adopted for the purpose of internal management, and idle assets, etc. are grouped individually by property unit.

The Company recognized impairment loss mainly in the assets of the business segment and idle assets which deteriorated in profitability as extraordinary losses, and the carrying amounts of the relevant assets were written down to the memorandum value or so. The Company recognized impairment loss as ¥1,255 million in buildings and structures, ¥3,769 million in machinery, equipment and vehicles, ¥4,234 million in construction in progress and ¥692 million in other.

#### \*4. Loss on business of subsidiary

Year ended March 31, 2023 (From April 1, 2022 to March 31, 2023)

This loss stems from the decision made in March 2023 to discontinue production at NGK CERAMICS SOUTH AFRICA (PTY) LTD., a consolidated subsidiary, after the Company concluded that it would be difficult for the subsidiary to make profit if it continued production as demand for automotive ceramics for exhaust gas purification was expected to decline in South Africa.

#### \*5. Income taxes for prior periods

Year ended March 31, 2023 (From April 1, 2022 to March 31, 2023)



In June 2017, as the Company received a notice of reassessment based on transfer pricing taxation regarding transactions between the Company and its Polish subsidiary, the Company had recorded the estimated tax for each consolidated fiscal year from the fiscal year ended March 2016 as income taxes payable. However, as a result of the completion of tax audits for the fiscal year ended March 2016 and thereafter, the Company reversed the estimated amount that had been recorded.



## (Segment Information, etc.)

## [Segment Information]

1. Overview of reportable business segments

The Company's reportable business segments are components of the Company about which separate financial information is available that is evaluated regularly by the Company's management in deciding how to allocate resources and in assessing performance.

The Company develops and conducts its operations under three business segments: Environment Business, Digital Society Business, and Energy & Industry Business, while planning a comprehensive strategy for domestic and overseas markets. Consequently, the Company defines those three business segments as its reportable business segments.

Business segment	Main products
Environment	Automotive ceramics for exhaust gas purification and sensors
Digital Society	Components for semiconductor manufacturing equipment, electronics components, beryllium copper products, and molds
Energy & Industry	NAS® (sodium-sulfur) batteries, Insulators, hardware for insulator assemblies, current limiting arching horn, bushing shells, fuse cut-outs, APM, line arrester, corrosion-resistant ceramic apparatuses, for chemical industries, gas analyzer, industrial heating systems, refractory products and radioactive waste treatment systems

Effective from the current fiscal year, the reportable segments, which were the Energy Infrastructure Business, Ceramics Business, Electronics Business, and Process Technology Business, were changed to the Environment Business, Digital Society Business, and Energy & Industry Business due to the organizational change.

Year-on-year figures for reportable business segments were calculated after adjusting the figures for the same period of the previous fiscal year to the revised segment classification.

2. Methods of calculating sales, income or loss, assets, liabilities, and other items by business segment The accounting methods applied to the reported business segments are the same as those of consolidated financial statements. Business segment income is based on operating income. Intersegment sales is based on market prices.



3. Sales, income or loss, assets, liabilities, and other items by business segment Year ended March 31, 2023 (From April 1, 2022 to March 31, 2023)

(Millions of yen)

	Business segment					· · · · · · · · · · · · · · · · · · ·	
	Environment	Digital Society	Energy & Industry	Total	Adjustment	Consolidated	
Net Sales							
Sales to customers	320,783	163,164	75,292	559,240	_	559,240	
Intersegment sales	4	28	2,476	2,508	(2,508)	_	
Total sales	320,787	163,192	77,768	561,749	(2,508)	559,240	
Operating income	50,728	17,557	(1,536)	66,749	11	66,761	
Total assets	478,675	199,077	92,741	770,494	258,673	1,029,168	
Other							
Depreciation	37,238	13,665	2,825	53,729	_	53,729	
Impairment loss	6,285	_	3,332	9,617	334	9,952	
Capital expenditures	18,358	16,234	1,973	36,566	7,127	43,694	

- (Notes) 1. The adjustment of ¥11 million to operating income comprises of intersegment transactions.
  - 2. Corporate assets within total assets that are included in adjustment are ¥265,525 million, consisting mainly of surplus funds managed by the Company (cash and securities), long-term investment funds (investment securities) and assets related to administrative divisions.
  - 3. Adjustment of capital expenditures is an increase at head office divisions.

Year ended March 31, 2022 (From April 1, 2021 to March 31, 2022)

	Business segment						
	Environment	Digital Society	Energy & Industry	Total	Adjustment	Consolidated	
Net Sales							
Sales to customers	292,670	150,311	67,457	510,439	_	510,439	
Intersegment sales	17	3	2,429	2,451	(2,451)	_	
Total sales	292,688	150,314	69,887	512,890	(2,451)	510,439	
Operating income	65,060	19,865	(1,406)	83,520	7	83,527	
Total assets	475,050	184,577	94,106	753,734	229,099	982,833	
Other							
Depreciation	34,717	11,805	2,748	49,270	_	49,270	
Impairment loss	1,034	_	125	1,159	_	1,159	
Capital expenditures	20,066	11,530	2,059	33,655	4,474	38,130	

- (Notes) 1. The adjustment of ¥7 million to operating income comprises of intersegment transactions.
  - Corporate assets within total assets that are included in adjustment are ¥235,964 million, consisting mainly
    of surplus funds managed by the Company (cash and securities), long-term investment funds (investment
    securities) and assets related to administrative divisions.
  - 3. Adjustment of capital expenditures is an increase at head office divisions.



## [Related information]

Year ended March 31, 2023 (From April 1, 2022 to March 31, 2023)

Information about geographical areas

Net Sales (Millions of yen)

Sales to Japan		N	orth Americ	a	Europe		Asia			Others	Total	
customers		Total	USA	Others	Total	Germany	Others	Total	China	Others		
	129,586	136,357	128,285	8,071	125,793	50,445	75,347	156,520	82,428	74,091	10,982	559,240

(Note) Net sales are attributed to countries based on the location of the customers.

Year ended March 31, 2022 (From April 1, 2021 to March 31, 2022)

Information about geographical areas

Net Sales (Millions of yen)

Sales to Japan		N	North America		Europe		Asia			Others	Total	
customers	•	Total	USA	Others	Total	Germany	Others	Total	China	Others		
	124,855	110,944	106,920	4,024	108,830	46,717	62,113	155,091	93,241	61,849	10,716	510,439

(Note) Net sales are attributed to countries based on the location of the customers.



## (Revenue Recognition)

1.Disaggregated revenue recognized from contracts with customers Year ended March 31, 2023 (From April 1, 2022 to March 31, 2023)

	Business Segment						
	Environment	Digital Society	Energy & Industry	Total			
Major geographical regions							
Japan	28,276	49,087	52,222	129,586			
North America	65,890	61,179	9,287	136,357			
Europe	121,633	3,629	530	125,793			
Asia	98,289	49,170	9,060	156,520			
Others	6,693	98	4,190	10,982			
Total	320,783	163,164	75,292	559,240			
Major product lines							
Automotive ceramics for exhaust gas purification	262,043	_	_	262,043			
Sensors	58,739	_	_	58,739			
SPE related (Components for semiconductor production equipment)	_	106,966	_	106,966			
Electronics components	_	28,562	_	28,562			
Metal related	_	27,635	_	27,635			
Energy storage	_	_	2,747	2,747			
Insulators	_	_	44,212	44,212			
Industrial processes	_	_	28,332	28,332			
Total	320,783	163,164	75,292	559,240			
Timing of revenue recognition							
Goods and services transferred at a point in time	320,783	163,164	61,621	545,569			
Goods and services transferred over time	_	_	13,670	13,670			
Total	320,783	163,164	75,292	559,240			



Year ended March 31, 2022 (From April 1, 2021 to March 31, 2022)

(Millions of yen)

	Business Segment						
	Environment	Digital Society	Energy & Industry	Total			
Major geographical regions							
Japan	27,609	46,975	50,270	124,855			
North America	51,077	54,426	5,440	110,944			
Europe	105,378	2,936	516	108,830			
Asia	100,545	45,898	8,647	155,091			
Others	8,058	74	2,582	10,716			
Total	292,670	150,311	67,457	510,439			
Major product lines							
Automotive ceramics for exhaust gas purification	228,938	_	_	228,938			
Sensors	63,732	_	_	63,732			
SPE related (Components for semiconductor production equipment)	_	96,904	_	96,904			
Electronics components	_	29,521	_	29,521			
Metal related	_	23,885	_	23,885			
Energy storage	_	_	1,314	1,314			
Insulators	_	_	39,279	39,279			
Industrial processes	_	_	26,862	26,862			
Total	292,670	150,311	67,457	510,439			
Timing of revenue recognition							
Goods and services transferred at a point in time Goods and services transferred	292,670	150,311	54,579	497,560			
over time	_	_	12,878	12,878			
Total	292,670	150,311	67,457	510,439			

## 2. Changes in reportable segments

Effective from the current fiscal year, the reportable segments, which were the Energy Infrastructure Business, Ceramics Business, Electronics Business, and Process Technology Business, were changed to the Environment Business, Digital Society Business, and Energy & Industry Business due to the organizational change.

Year-on-year figures for disaggregated revenue recognized from contracts with customers were calculated after adjusting the figures for the same period of the previous fiscal year to the revised segment classification.



## (Per Share Information)

	Fiscal Year Ended	Fiscal Year Ended
	March 31, 2023	March 31, 2022
Net assets per share	2,074.66 yen	1,871.22 yen
Net income per share	177.47 yen	226.56 yen
Diluted net income per share	177.17 yen	226.17 yen

## (Note) The basis for calculation of net income per share and diluted net income per share is as follows

	Fiscal Year Ended	Fiscal Year Ended
	March 31, 2023	March 31, 2022
Net income per share		
Net income attributable to owners of the parent (Millions of yen)	55,048	70,851
Amount not attributable to common shareholders (Millions of yen)		_
Net income on common stock (Millions of yen)	55,048	70,851
Average number of shares of common stock outstanding over the period (Thousand shares)	310,189	312,726
Diluted net income per share		
Adjustment to net income (Millions of yen)	_	_
Increase in common shares (Thousand shares)	525	541
(Stock options in the form of stock acquisition rights)	(525)	(541)
Summary of potentially dilutive shares not included in the calculation of diluted net income per share due to their anti-dilutive effect		_

## (Significant Subsequent Event)

Not applicable