

FY2022

Interim Business Report for Shareholders

(From April 1 to September 30, 2022)

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Message

We would like to express our deepest gratitude for the continued support of our shareholders.

We hereby present a business report for the consolidated second quarter (cumulative) of our Group's 157th fiscal year (from April 1 to September 30, 2022).

During the six months of the fiscal year, although the Japanese economy was affected by the spread of COVID-19 and worldwide price hikes, there were signs of a gradual pick-up amid normalization of economic and social activities. Overseas, despite the pause in economic recovery mainly in China, the economy gradually recovered due to the resumption of economic activities in each country. However, the outlook still remains uncertain due to the prolonged situation in Ukraine and signs of a slowdown for demand for semiconductors, as well as heightened concerns over an economic downturn in the wake of global monetary tightening.

Under these circumstances, the NGK Group saw shipments of automotive-related products decrease in the Environment Business mainly due to restrained economic activities and a decrease in the number of trucks sold in China. In the Digital Society Business, shipments of components for semiconductor manufacturing equipment increased due to robust investment in the semiconductor industry, and shipments of electronics components increased. In the Energy & Industry Business, shipments of products, mainly industrial heating systems, increased.

As a result, net sales in the six months of the fiscal year increased 9.8% year-on-year to ¥274,688 million. As for profits, operating income decreased 15.5% year-on-year to ¥38,808 million due to the impact of rising labor costs and soaring raw material and fuel prices associated with inflation, in addition to the decline in shipments of automotive-related products. The positive effect of the depreciation of the yen was not enough to neutralize the above negative factors. Ordinary income decreased 21.3% year-on-year to ¥34,533 million due to the decrease of operating income and the impact of a loss on liquidation of a subsidiary. Half-year net income attributable to owners of the parent decreased 17.0% year-on-year to ¥26,510 million mainly due to the significant decrease in ordinary income despite the reversal of the estimated amount that had been recorded as a result of the completion of tax audits for the fiscal year ended March 2016 and thereafter.

Regarding the full-year forecasts for the financial statements, the previous forecast of net sales has remained unchanged at ¥580,000 million, an increase of 13.6% year-on-year, aided by the positive impact of the considerable depreciation of the yen from the assumed rates at the beginning of the fiscal year under review (¥120 per the U.S. Dollar and ¥130 per the Euro) amid demand for each of the products in the Environment Business and the Digital Society Business decreasing primarily due to the worsening situation in Ukraine, the slowdown in the global economy, and new regulations on exports of advanced semiconductors to China imposed by the U.S. In terms of profit, on the other hand, operating income and ordinary income are forecast to decrease 6.6% year-on-year to ¥78,000 million and 14.2% year-on-year to ¥74,000 million, respectively, with profit attributable to owners of the parent expected to be down 13.9% year-on-year to ¥61,000 million. The main reasons are an increase in raw material and fuel costs coupled with a decrease in shipments, despite the positive effect of foreign exchange rates.

With respect to the interim dividend for the fiscal year under review, the amount has been set at 33 yen per share. For the year-end dividend, 33 yen per share is planned at the moment.

Although the business environment for the second half of the fiscal year under review remains uncertain primarily due to an economic downturn by the global trend of monetary tightening and concerns over a slowdown in demand for semiconductors, we will engage in the following priority issues, which were taken up at the beginning of the fiscal year under review, thereby aiming at becoming a corporation that continues growing globally.

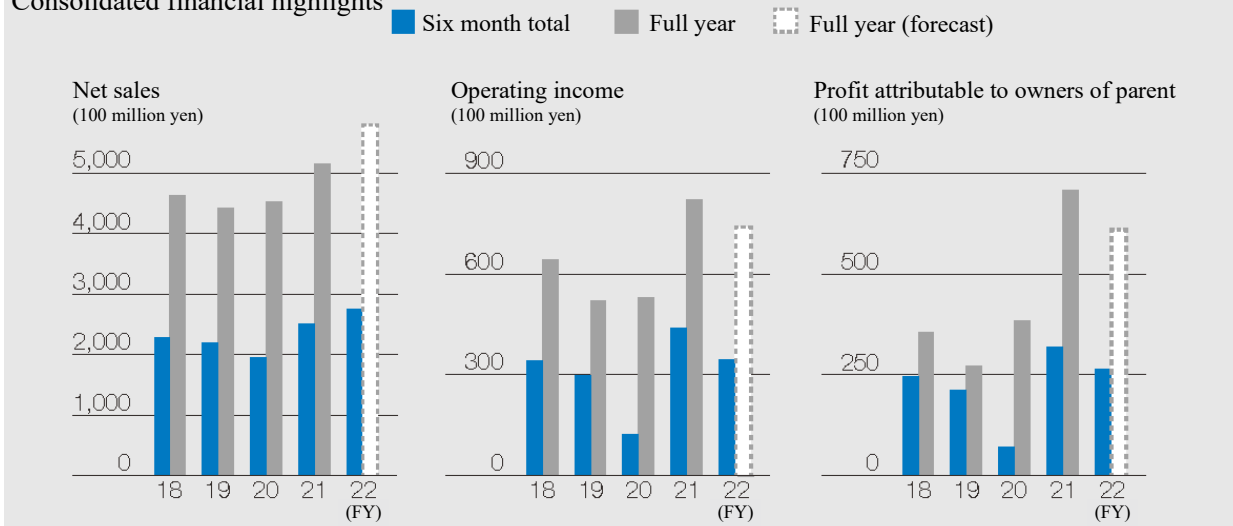
- 1) Advancement of ESG management
- 2) Initiatives for Improving Earning Capacity of Existing Businesses and Creating New Businesses

The NGK Group will strive to further strengthen its management foundation through these initiatives and offer products that outperform the expectations of society by leveraging its unique ceramic technology, and thereby continue growing for a sustainable future. We sincerely appreciate continued guidance and support from our shareholders.

December 2022

President
Shigeru Kobayashi

Consolidated financial highlights



Topics

Launched Trial Project for Decarbonization and Economic Circulation System

The Company, in cooperation with Ena City, Gifu Prefecture; Ricoh Company, Ltd. (Headquartered in Tokyo) and IHI Corporation (Headquartered in Tokyo), started a trial project for a decarbonization and economic circulation system in October 2022. The system converts the environmental value gained by Ena City through the generation and sales of electricity from the renewable energy of the new regional power producer and supplier Ena Electric Power Co., Ltd. (headquartered in Gifu Prefecture) into economically compensable value (credits) and makes use of those credits. The credits generated are used within Ena City, and a scheme has been developed to generate inflows of funds from outside the city. The system will help to turn Ena City into a zero-carbon city by revitalizing the local economy and running the cycle of further expanding the adoption of renewable energy.

Business Overview by Segment

		FY2022-1H (100 million yen)	FY2021-1H (100 million yen)	Year-on-year change
Environment Business Net sales increased 3.8% year-on-year to ¥153,106 million. Despite the increase in net sales aided by the positive effect of the depreciation of the yen, profit decreased mainly due to the demand decline partly caused by lockdowns in China and the impact of surging in raw material and fuel costs. Operating income decreased 28.7% year-on-year to ¥26,214 million.	Net sales	1,531	1,476	+4%
	Operating income	262	368	-29%
Digital Society Business Net sales increased 23.2% year-on-year to ¥88,168 million. Demand for components for semiconductor manufacturing equipment grew on the back of robust investment in foundries. In electronics devices, demand for electronics components, mainly ceramic packages, rose. Operating income increased 36.6% year-on-year to ¥13,671 million.	Net sales	882	715	+23%
	Operating income	137	100	+37%
Energy & Industry Business Net sales increased 7.4% year-on-year to ¥34,595 million. Although sales of insulators increased thanks to the positive effect of the depreciation of the yen, profit decreased primarily due to surging raw material and fuel prices, resulting in an operating loss of ¥1,089 million (operating loss of ¥864 million in the same period of the previous year).	Net sales	346	322	+7%
	Operating income	(11)	(9)	-

(Note) Net sales stated above are before elimination of intersegment transactions.

(Note) Since the beginning of the fiscal year ending March 31, 2023, the reportable segments, which were the “Energy Infrastructure Business,” “Ceramics Business,” “Electronics Business” and “Process Technology Business”, have been changed to the “Environment Business,” the “Digital Society Business,” and the “Energy & Industry Business.” Year-on-year figures for each segment were calculated after adjusting the figures for the same of the previous year to the revised segment classification.

Condensed Financial Statements (Consolidate) for the Second Quarter

Consolidated Balance Sheets for the Six Months (as of September 30, 2022)

(Million yen)

Assets		Liabilities	
Account	Account	Account	Account
Current assets	550,999	Current liabilities	136,130
Cash and deposits	144,666	Notes and accounts payable-trade	43,785
Notes and accounts receivable-trade, and contract assets	123,828	Short-term borrowings	10,252
Securities	43,987	Current portion of long-term borrowings (Payment planned within one year)	21,481
Inventories	220,313	Income taxes payable	9,664
Other	18,354	Provision for NAS battery safety measures	887
Allowance for doubtful accounts	(150)	Other	50,059
Non-current assets	464,325	Non-current liabilities	239,275
Property, plant and equipment	383,399	Bonds payable	35,000
Buildings and structures, net	129,319	Long-term borrowings	173,952
Machinery and vehicles, net	180,257	Retirement benefit liability	22,198
Other, net	73,822	Other	8,124
Intangible assets	6,337	Total liabilities	375,406
Investments and other assets	74,589	Net assets	
Investment securities	58,901	Shareholders' equity	561,843
Other	16,011	Share capital	69,955
Allowance for doubtful accounts	(323)	Capital surplus	70,305
Total assets	1,015,325	Retained earnings	432,503
		Treasury shares	(10,920)
		Accumulated other comprehensive income	71,186
		Valuation difference on available-for-sale securities	16,845
		Deferred losses on hedges	(618)
		Foreign currency translation adjustment	55,285
		Remeasurements of defined benefit plans	(326)
		Share acquisition rights	918
		Non-controlling interests	5,970
		Total net assets	639,918
		Total liabilities and net assets	1,015,325

(Amounts of less than 1 million yen omitted.)

Consolidated Statement of Income for the Six Months (from April 1 to September 30, 2022)

(Million yen)

Account	Amount
Net sales	274,688
Cost of sales	193,231
Gross profit	81,456
Selling, general and administrative expenses	42,648
Operating income	38,808
Non-operating income	2,052
Non-operating expenses	6,327
Ordinary income	34,533
Extraordinary income	1,069
Extraordinary losses	1,015
Income before income taxes	34,587
Income taxes - current	10,587
Income taxes - deferred	1,564
Net income	26,535
Net income attributable to non-controlling interests	25
Net income attributable to owners of the parent	26,510

(Amounts of less than 1 million yen omitted)

Stock Information (As of September 30, 2022)

Major shareholders

Shareholder name	Number of shares held (1,000 shares)	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	56,498	18.12
Custody Bank of Japan, Ltd. (Trust Account)	25,542	8.19
Meiji Yasuda Life Insurance Company	21,695	6.95
The Dai-ichi Life Insurance Company, Limited	21,457	6.88
MUFG Bank, Ltd.	7,204	2.31
National Mutual Insurance Federation of Agricultural Cooperatives	7,029	2.25
Aioi Nissay Dowa Insurance Co., Ltd.	4,387	1.40
STATE STREET BANK WEST CLIENT TREATY 505234	4,031	1.29
JP MORGAN CHASE BANK 385781	3,401	1.09
The Aichi Bank, Ltd.	3,108	0.99

(Notes)

1. We hold 5,558,646 treasury shares but they are excluded from the major shareholders listed above.
2. The shareholding ratio above is calculated based on the number of shares after deducting the number of treasury shares (5,558,646 shares) from the total number of shares issued and rounded down to the second decimal place.

Stock information

Total number of shares authorized

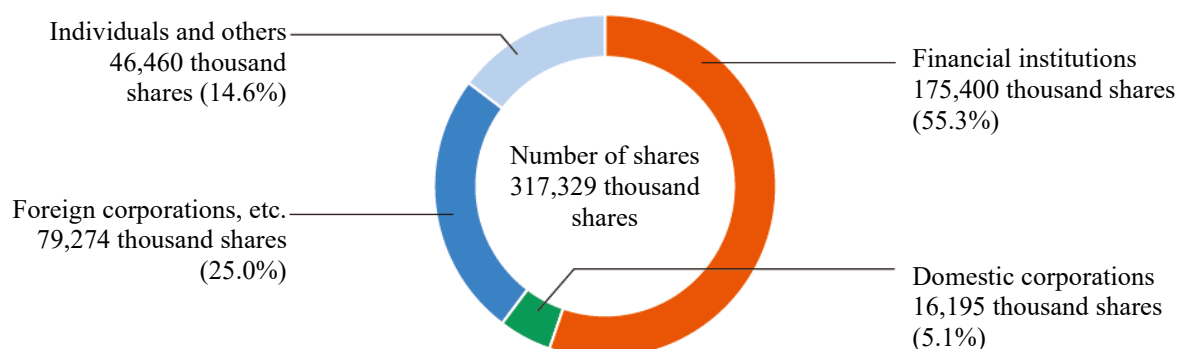
735,030,000

Total number of shares issued

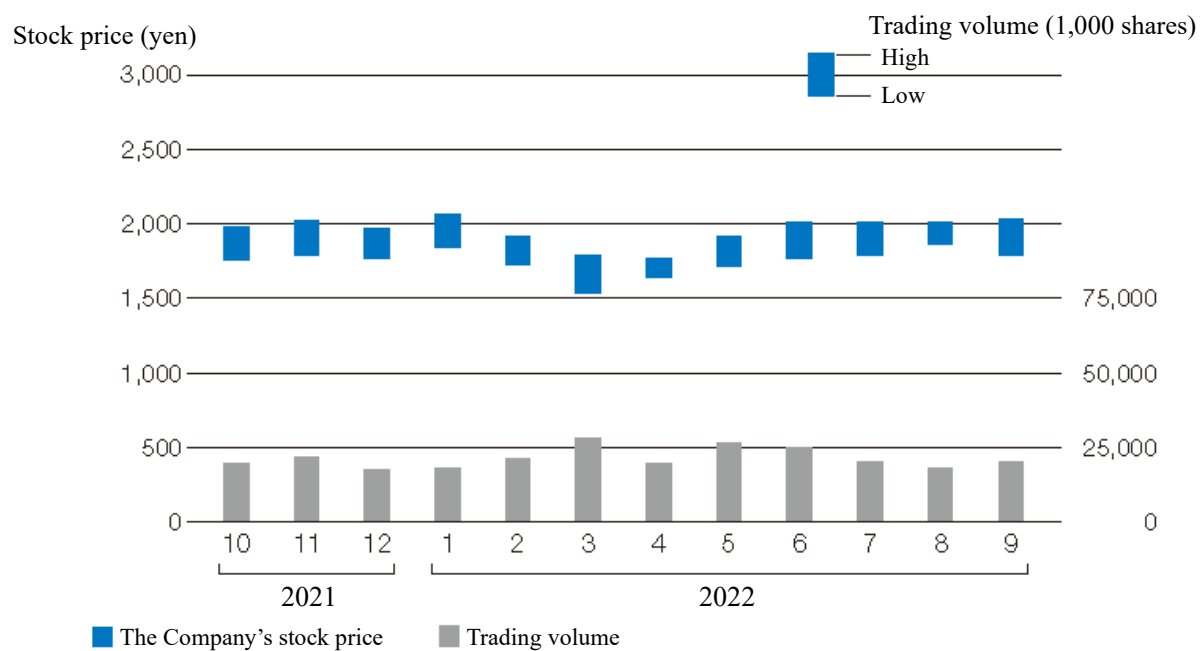
317,329,996

Number of shareholders

49,010



Stock price



Company Information (As of September 30, 2022)

Company profile

Way of writing company name	日本ガイシ株式会社 (Japanese)	
Registered trade name	日本碍子株式会社 (Japanese) NGK INSULATORS, LTD.	
Representatives	Representative Director and Chairman Representative Director and President Representative Director and Executive Vice President Representative Director and Executive Vice President	Taku Oshima Shigeru Kobayashi Chiaki Niwa Ryohei Iwasaki
Founded	May 5, 1919	
Share capital	69,955 million yen	

Directors

* Representative Director

* Director and Chairman	Taku Oshima
* Director and President	Shigeru Kobayashi
* Director and Executive Vice President	Chiaki Niwa
* Director and Executive Vice President	Ryohei Iwasaki
Director and Senior Vice President	Tadaaki Yamada
Director and Senior Vice President	Hideaki Shindo
Director (Outside)	Hiroyuki Kamano
Director (Outside)	Emiko Hamada
Director (Outside)	Kazuo Furukawa
Statutory Auditor	Nobumitsu Saji
Statutory Auditor	Takeshi Shimazaki
Auditor (Outside)	Masayoshi Sakaguchi
Auditor (Outside)	Takashi Kimura

Executive Officers

* Concurrently serves as a director

* President	Shigeru Kobayashi
* Executive Vice President	Chiaki Niwa
* Executive Vice President	Ryohei Iwasaki
* Senior Vice President	Tadaaki Yamada
Senior Vice President	Shuheishi Ishikawa
Senior Vice President	Tsutomu Nanataki
Senior Vice President	Hiroto Matsuda
* Senior Vice President	Hideaki Shindo
Senior Vice President	Jun Mori
Senior Vice President	Hiroshi Kurachi
Senior Vice President	Masanobu Inoue
Senior Vice President	Hiroharu Kato
Senior Vice President	Atsushi Miyajima
Senior Vice President	Hiroyuki Shinohara
Vice President	Iwao Ohwada
Vice President	Tatsumi Ichioka
Vice President	Ryo Ishihara
Vice President	Mayumi Inagaki
Vice President	Hirofumi Sakamoto
Vice President	Hideki Shimizu
Vice President	Kazushi Tada
Vice President	Ryugo Takeda
Vice President	David Miller
Vice President	Takao Onishi
Vice President	Takashi Yoshino
Vice President	Motoo Noritake
Vice President	Yoshihide Natsume

Shareholder's memo

Business year	From April 1 of each year to March 31 of the following year
Annual shareholders' meeting	June
Record date for distribution of surplus	(Year-end) March 31 (Interim) September 30
Shareholder registry administrator Account management institution for special accounts	Mitsubishi UFJ Trust and Banking Corporation
Contact information	137-8081 Shin-Tokyo Post Office, PO Box No. 29 Stock Transfer Agency Department, Mitsubishi UFJ Trust and Banking Corporation Phone: 0120-232-711 (toll free) (9:00–17:00 weekdays)
Method of public notice	Public notices will be posted on our company website (https://www.ngk.co.jp/ir/koukoku). If an electronic public notice cannot be posted due to an accident or other unavoidable reason, it will be released in the <i>Nihon Keizai Shimbun</i> and the <i>Chunichi Shimbun</i> published in the city of Nagoya.