

FY2023
Interim Business Report for Shareholders
(From April 1 to September 30, 2023)

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Message

With sincere gratitude for your continued support, we hereby present the NGK Group Business Report for the first six months of FY2023 / 158th term (from April 1, 2023, to September 30, 2023).

During the first six months of FY2023, the Japanese economy saw economic and social activities normalizing following the reclassification of COVID-19 into a Class 5 disease, showing a mild recovery in improved employment and income environments. Overseas, with China's recovery stalled by its sluggish real estate market and consumer spending picking up primarily in the United States, the economy made a modest recovery. However, outlook remains uncertain regarding an economic slowdown in the wake of the global trend of extended monetary tightening, developments in the Chinese economy, and so on.

Under these circumstances, the Environment Business of the Group saw an increase in shipments of automotive-related products mainly for the Chinese market, as the number of automobiles produced rebounded amid an easing supply shortage of semiconductors and as emission controls were tightened. In the Digital Society Business, lacklustre investments in semiconductors and data centers caused drops in shipments of products for semiconductor manufacturing equipment and electronic components. In the Energy & Industry Business, shipments of insulators increased mainly for the U.S. market.

As a result, net sales for the first six months of FY2023 increased 3.0% year-on-year to 282,884 million yen. In terms of income, operating income fell 16.3% year-on-year to 32,485 million yen as affected by soaring labor costs associated with inflation in addition to a decline in volumes of products for semiconductor manufacturing equipment, etc., despite the positive effect of an increase in volumes of automotive-related products. Ordinary income decreased 16.2% to 28,940 million yen, while net income attributable to owners of the parent fell 31.4% to 18,181 million yen for reasons of lower ordinary income and the recognition of income taxes for prior fiscal years during the same period of the previous year.

In terms of forecasting the FY2023 full-year results, a downturn in investments in semiconductors and data centers has been protracted, and demand for the Digital Society Business products is declining. Meanwhile, the Japanese yen has significantly weakened compared with the exchange rates estimated at the beginning of the period (1 USD=130 yen and 1 EUR=140 yen), and strong demand is seen in the Environment Business. Thus, our forecasts on a full-year basis are: net sales will increase 2.8% year-on-year to 575 billion yen, operating income will decrease 7.1% to 62 billion yen, and ordinary income will fall 12.0% to 58 billion yen, with net income attributable to owners of the parent down 29.2% to 39 billion yen.

For the period under review, we will pay an interim dividend of 25 yen per share. The year-end dividend is expected to be 25 yen per share at this point.

Our business environment for the second half of FY2023 should continue to be uncertain due to an economic slowdown triggered by the global trend of extended monetary tightening, concerns about sluggish semiconductor investments, and so on. Nevertheless, we will aim to become a company that continues to grow globally, by addressing the following key issues set at the beginning of the fiscal year:

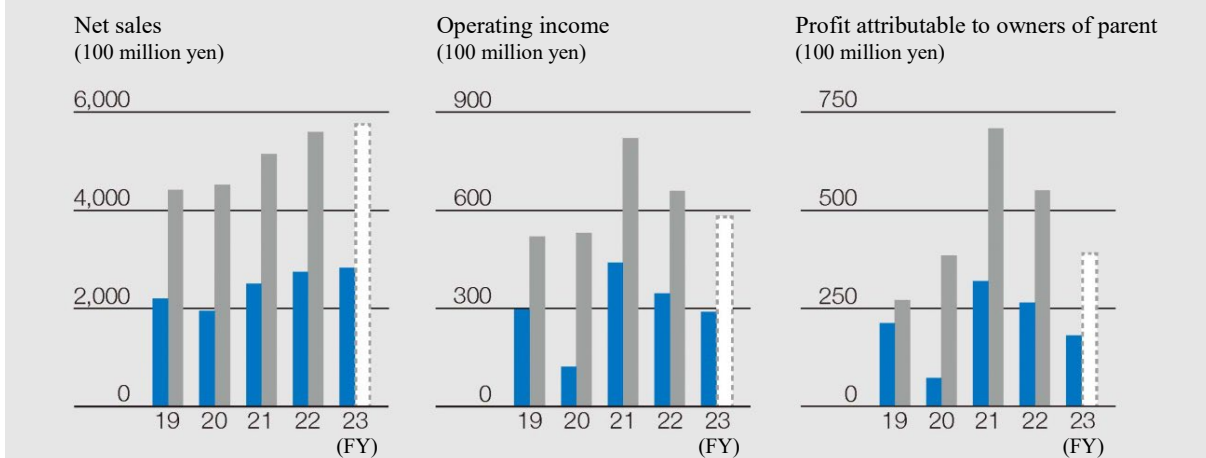
- 1) Advancement of ESG management
- 2) Initiatives for Improving Earning Capacity of Existing Businesses and Creating New Businesses

Through these initiatives, the NGK Group will work to further reinforce its management base, offer products that exceed society's expectations by using its unique ceramic technology, and continue to grow for a sustainable future. We would deeply appreciate your continued support.

December 2023

President
Shigeru Kobayashi

Consolidated financial highlights ■ Six month total ■ Full year □ Full year (forecast)



Topics

NGK Exhibited at CEATEC 2023

NGK participated in CEATEC 2023 Exhibition, which took place at Makuhari Messe (Chiba City, Chiba) from October 17 to 20, 2023, and had a total of around 90,000 visitors.

Under the theme of “a clean and smart future society made by ceramic technology,” the exhibit featured products that contribute to the realization of a carbon neutral and digital society by harnessing NGK’s unique ceramic technology, such as ceramic substrates for direct air capture (DAC) to absorb CO₂ from the atmosphere, power sources for standalone IoT devices “EnerCera,” and hybrid bonded wafers for high-performance optical devices, showcasing our products to visitors to our booth.

Business Overview by Segment

		FY2023-1H (100 million yen)	FY2022-Q2 (100 million yen)	Year-on-year change
Environment Business Net sales increased 17.5% year-on-year to 179,849 million yen. A short supply of components such as semiconductors subsided, followed by a recovery in auto production. Demand for our products also increased due to a rising number of truck sales in China and other factors. Operating income increased 23.0% to 32,246 million yen.	Net sales	1,798	1,531	+17%
	Operating income	322	262	+23%
Digital Society Business Net sales decreased 25.0% year-on-year to 66,083 million yen. Reduced semiconductor investments led to falling demand. Demand for piezoelectric elements for hard disk drives (HDD) also fell as a result of reduced data center investments. Operating income saw a 94.6% drop to 735 million yen.	Net sales	661	882	-25%
	Operating income	7	137	-95%
Energy & Industry Business Net sales increased 9.9% year-on-year to 38,014 million yen. Shipments of insulators increased mainly for the U.S. market. In addition to sale price revisions, robust demand from the U.S. was seen. Demand for firing furnaces for positive-electrode materials for lithium-ion batteries also increased. Operating losses of 506 million yen were recorded (operating losses were 1,089 million yen for the same period last year).	Net sales	380	346	+10%
	Operating income	(5)	(11)	-

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

Condensed Financial Statements (Consolidated) for the Second Quarter

Consolidated Balance Sheets for Six Months (as of September 30, 2023)

(Million yen)

Assets		Liabilities	
Account	Amount	Account	Amount
Current assets	608,466	Current liabilities	161,190
Cash and deposits	189,101	Notes and accounts payable-trade	46,527
Notes and accounts receivable-trade, and contract assets	127,237	Short-term borrowings	11,300
Securities	41,216	Current portion of long-term borrowings (Payment planned within one year)	36,757
Inventories	229,746	Income taxes payable	7,645
Other	21,323	Other	58,959
Allowance for doubtful accounts	(159)	Non-current liabilities	234,690
Non-current assets	474,519	Bonds payable	40,000
Property, plant and equipment	378,665	Long-term borrowings	160,192
Buildings and structures, net	130,124	Retirement benefit liability	20,922
Machinery and vehicles, net	175,188	Other	13,574
Other, net	73,353	Total liabilities	395,880
Intangible assets	6,622	Net assets	
Investments and other assets	89,231	Shareholders' equity	578,765
Investment securities	63,980	Share capital	70,064
Other	25,558	Capital surplus	70,390
Allowance for doubtful accounts	(307)	Retained earnings	448,603
Total assets	1,082,986	Treasury shares	(10,293)
		Accumulated other comprehensive income	100,851
		Valuation difference on available-for-sale securities	21,476
		Deferred gains on hedges	19
		Foreign currency translation adjustment	74,276
		Remeasurements of defined benefit plans	5,078
		Share acquisition rights	878
		Non-controlling interests	6,611
		Total net assets	687,105
		Total liabilities and net assets	1,082,986

(Amounts of less than 1 million yen omitted.)

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

(Millions of yen)

Account	Amount
Net sales	282,884
Cost of sales	207,958
Gross profit	74,926
Selling, general and administrative expenses	42,440
Operating income	32,485
Non-operating income	1,989
Non-operating expenses	5,534
Ordinary income	28,940
Extraordinary income	443
Extraordinary losses	1,501
Income before income taxes	27,883
Income taxes - current	8,976
Income taxes - deferred	790
Net income	18,116
Net losses attributable to non-controlling interests	(65)
Net income attributable to owners of the parent	18,181

(Amounts of less than 1 million yen omitted.)

Stock Information (As of September 30, 2023)

Major shareholders

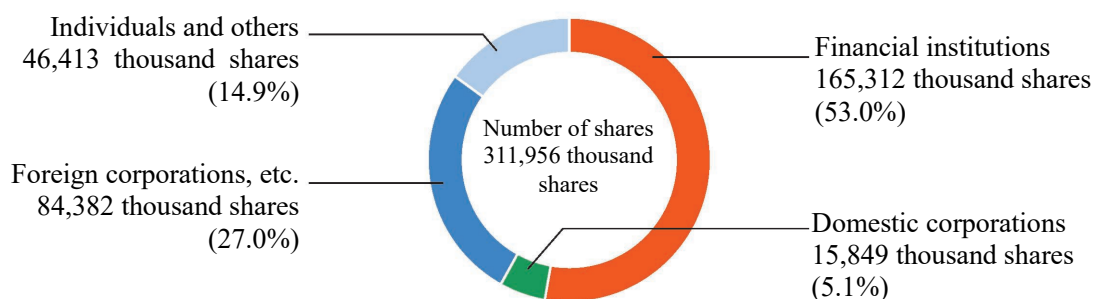
Shareholder name	Number of shares held (1,000 shares)	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	51,293	16.73
Meiji Yasuda Life Insurance Company	21,695	7.08
The Dai-ichi Life Insurance Company, Limited	21,457	7.00
Custody Bank of Japan, Ltd. (Trust Account)	18,260	5.95
MUFG Bank, Ltd.	7,204	2.35
National Mutual Insurance Federation of Agricultural Cooperatives	7,029	2.29
STATE STREET BANK WEST CLIENT-TREATY 505234	4,437	1.44
Aioi Nissay Dowa Insurance Co., Ltd.	4,387	1.43
Goldman Sachs Group, Inc., BNYM	4,365	1.42
JP MORGAN CHASE BANK 385781	3,397	1.10

(Notes)

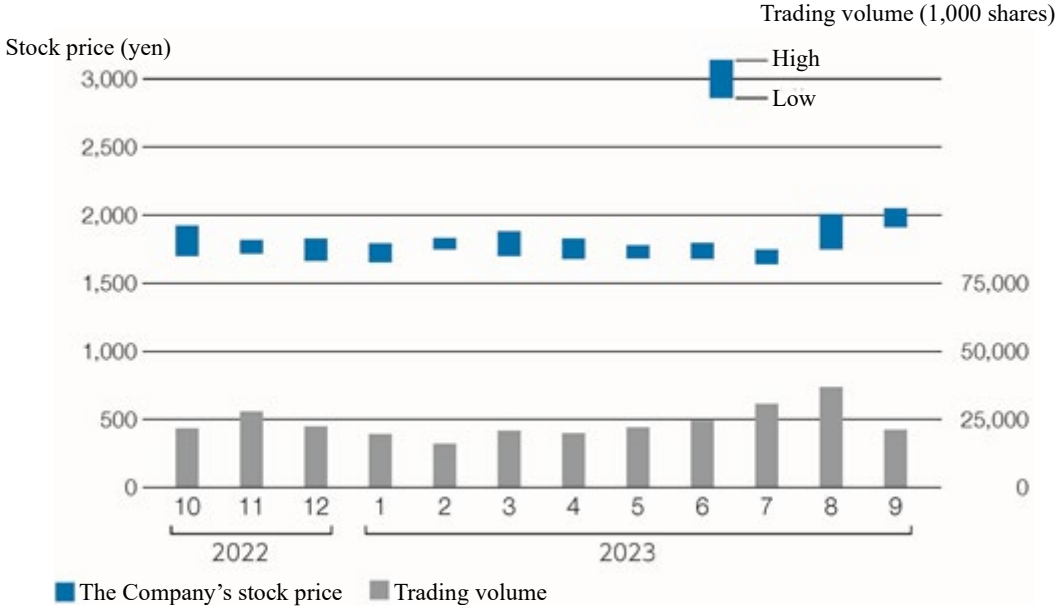
1. We hold 5,538,241 treasury shares but they are excluded from the major shareholders listed above.
2. The shareholding ratio above is calculated based on the number of shares after deducting the number of treasury shares (5,538,241 shares) from the total number of shares issued and rounded down to the second decimal place.

Stock information

Total number of shares authorized	735,030,000
Total number of shares issued	311,956,996
Number of shareholders	52,332



Stock price



Company Information (As of September 30, 2023)

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	70,064 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	Naoya Yagi
Auditor (Outside)	Masayoshi Sakaguchi
Auditor (Outside)	Takashi Kimura

Executive Officers

* Concurrently serving 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
Vice President	Masato Nozaki
Vice President	Yasuyoshi Imai
Vice President	Hiroki Fujita

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 #29 Stock Transfer Agency Dept., 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 any other unavoidable circumstances, it will be released in the <i>Nihon Keizai Shimbun</i> and the <i>Chunichi Shimbun</i> , which is published in Nagoya City.