## Surprising Ceramics.



# FY2025 1st Half Results

(From April 1, 2025 to September 30, 2025)

**November 4, 2025** 



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**President** 

Shigeru Kobayashi

# **Agenda**



- Summary of Financial 1st Half Results for FY2025
- Forecast for FY2025 (Ending March 31, 2026)
- Business Restructuring Expenses/ Business Portfolio Transformation
- Forecast for Each Business Segment
- Improving Enterprise Value
- R&D/Capital Expenditures & Depreciation Costs
- Capital Policy/Dividend
- Summary of Cash Flow
- Promoting ESG Management

# Summary of Financial 1st Half Results for FY2025



	FY2024	Forecasts	FY2025	YOY Change
(Bln. Yen)	1st half	In April	1st half	FX Impact Growth ratio
Net Sales	298.4	310.0	326.2	-3.8 +9%
Operating Income	39.7	33.0	48.7	-2.9 +23%
Ordinary Income	38.4	29.5	46.7	+22%
Net income Attributable to Owners of the Parent	25.9	19.0	23.9	-8%
Exchange USD	152 yen	(135 yen)	147 yen	-6 yen
Rate EUR	165 yen	(155 yen)	168 yen	+2 yen

Sales, Operating Income and Ordinary Income have reached a record-high.

Net Income decreased due to an extraordinary loss related to the discontinuation of manufacturing and sales activities of NAS batteries.

Environment	Sales increased due to	last-minute demand	in anticipation of tariff hikes.
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■ Digital Society Although there has been a setback in plans to build new cutting-edge foundries, the demand for

semiconductors used in AI applications continues. Sales and operating income increased due to

concentrated inventory increase of certain customers in the first half.

■ Energy & Industry Domestic and overseas demand for insulators remained strong.

The Company resolved to discontinue the manufacturing and sales of NAS batteries, recognizing

approximately 11.7 billion yen as an extraordinary loss.

## **Forecasts for FY2025**



	(Bln. Yen)	FY2024	Forecasts In April	FY2025	YOY Change FX Impact Growth ratio
Net S	ales	619.5	630.0	650.0	-6.5 +5%
Operating	Income	81.2	75.0	85.0	-3.3 +5%
Ordinary	Income	78.2	70.0	82.0	+5%
Net income At Owners of t		54.9	55.0	55.0	Assumed exchange +0% rates in 2nd half
Exchange	USD	152 yen	(135 yen)	146 yen	145 yen -7 yen
Rate	EUR	164 yen	(155 yen)	169 yen	170 yen +5 yen

Sales and Operating income are expected to reach a record-high.

The forecast for net income remains unchanged from the forecasts in April, reflecting both the recognition of an extraordinary loss associated with the discontinuation of the manufacturing and sales activities of the NAS batteries,

and the gain on sales from the reduction of strategic shareholdings.

The market mainly around U.S. is expected to slow down in the second half of the fiscal year.

Due to the impact of the strong yen, sales are expected to remain flat compared to the previous fiscal year,

and operating income expected to decline.

■ Digital Society Regarding products for semiconductor manufacturing equipment, although the inventory increase of certain customers for

components for semiconductor production equipment is expected to taper off in the second half,

sales and operating income will increase due to the demand for semiconductors used in AI applications continues.

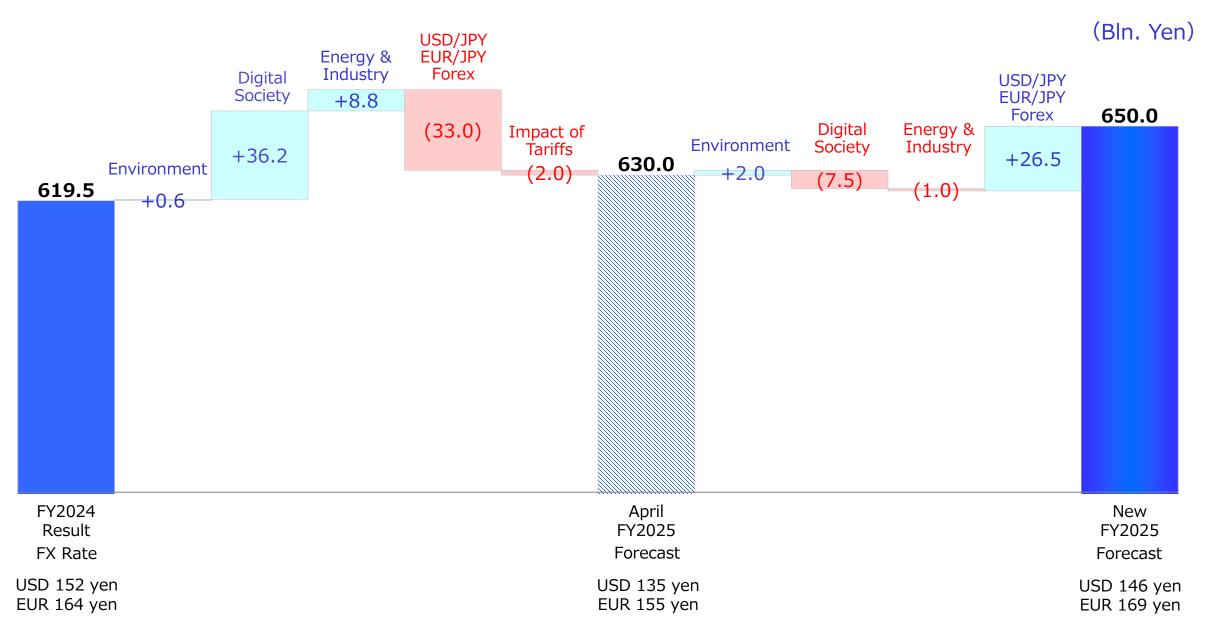
Segment sales and operating income are also expected to exceed those of the previous fiscal year.

■ Energy & Industry Expected to recognize approximately 18 billion yen as an extraordinary loss associated with the discontinuation of the

manufacturing and sales activities of the NAS batteries.

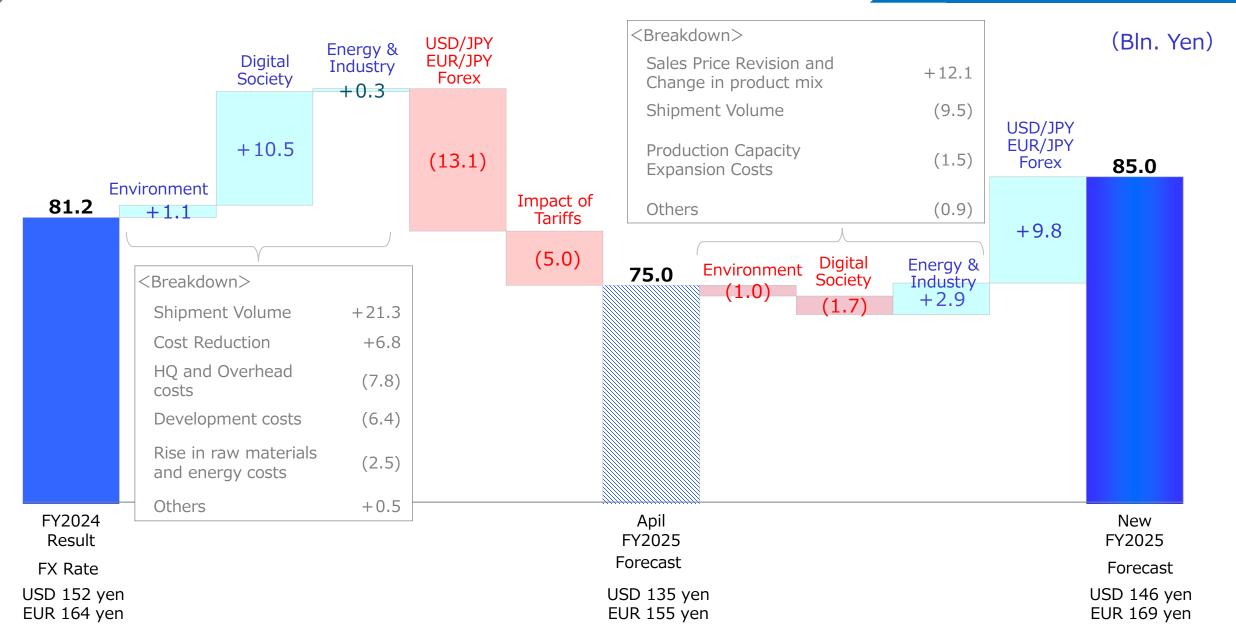
# **Sales Change Analysis for FY2025**





# **Operating income Change Analysis for FY2025**





# **Business Restructuring Expenses**



Improve enterprise value by engaging in the selection and concentration of existing businesses to enhance earning potential.

Due to optimal allocation of management resource, enhance the certainty of future improvements in performance and cash flow.

# Resolve to discontinue the manufacturing and sales activities of NAS batteries

## **Full-Year Forecast**

(Bln. Yen)

	April Announcement	FY25 Forecast	Difference
Net Sales	630.0	650.0	+20.0
Operating Income	75.0	85.0	+10.0
Ordinary Income	70.0	82.0	+12.0
Net income Attributable to Owners of the Parent	55.0	55.0	-

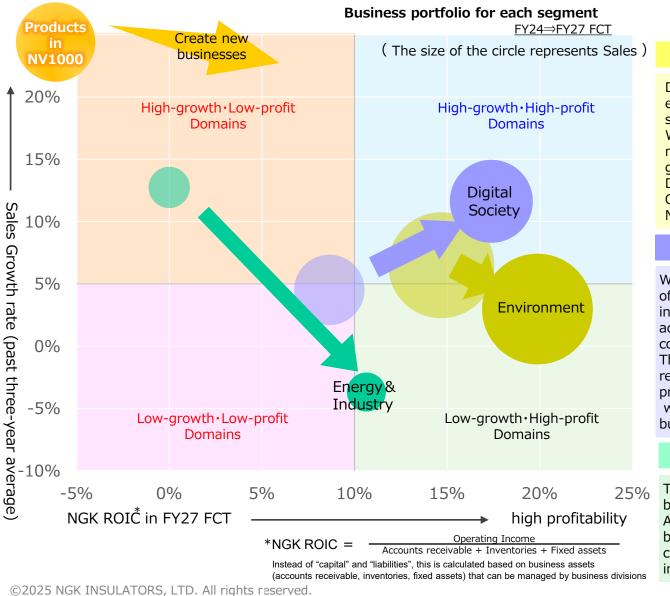
The company expect to record business restructuring expenses approximately 18 billion yen as an extraordinary loss and the gain on sales from the reduction of strategic shareholdings in the year ended March 31, 2026.



# **Business Portfolio Transformations**



By executing strategic initiatives such as business discontinuation, divestiture and organizational restructuring, the company aims to optimize the allocation of management resources and enhance corporate value.



#### **Environment**

Due to the ongoing shift toward EVs, existing automotive related products are expected to shrink in the medium term.

While aiming to maximize profits from remaining market characters are expected.

market share, the company is pursuing renewed growth by focusing on carbon-neutral fields, adopting DAC (Direct Air Capture) and

CO2 separation membranes, which are part of the NV1000 product group.

## **Digital Society**

While expanding products related to the manufacturing of semiconductors for AI, which are becoming increasingly high-performance, the company aims to achieve sustainable growth and strengthen competitiveness in Electronic Components business. Through organizational restructuring, management resources will be concentrated across the group on the production of high value-added products, with the goal of building a more robust and sustainable business foundation.

### Incomecontributing business

Growth expectations business

Automotive related \( \)

Currently in the process of acquisition procedures

Industrial Processes

Organizational restructuring

Borsig & synergy

SPE Related

Ceramic Packages

Piezoelectric Elements for HDDs

DCB and AMB

Wafers HICERAM Carrier

Discontinuation of Manufacturing and Sales Activities of NAS Batteries

Insulators

Energy Storage

## **Energy & Industry**

The Company resolved to discontinue the manufacturing and sales activities of NAS batteries and aim to optimize the allocation of management resources. As electricity consumption expands both domestically and internationally, the insulator business aims to secure stable earnings based on investments associated with the new construction and expansion of transmission lines. This business segment will focus on improving profitability.

## Forecasts for the Environment (EN) Business

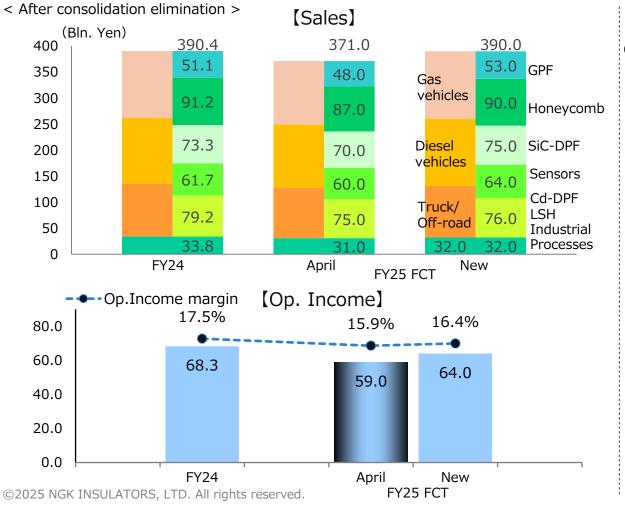


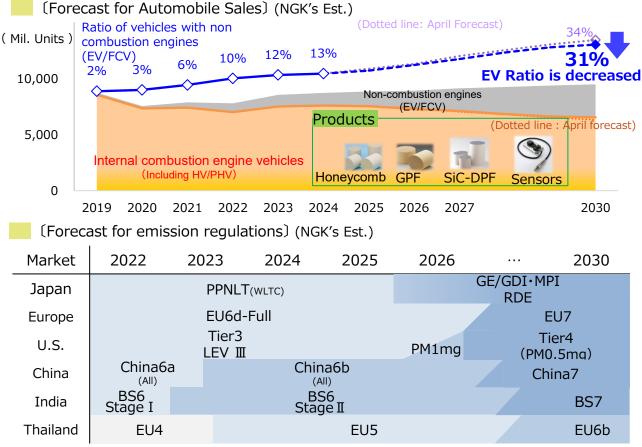
#### Automotive related

• The direct impact of U.S. tariffs is limited. Although the market slowdown in the second half, mainly in the U.S. is in line as anticipated in April, factors such as the weaker yen and slower-than-expected EVs adoption are providing tailwinds, Sales and operating income are expected to increase compared to the forecasts in April.

## Industrial Processes

• In addition to capturing strong demand for equipment for pharmaceutical water, improved sales prices and lower fixed costs are contributing to an increase in sales and income compared to the April forecast.





There is no change in the assumption that the EV ratio will gradually increase. The company will maximize the profit in remaining market share to release new products with more advanced functions in response to the strengthening of emissions regulations in various countries.

## Forecasts for the Digital Society (DS) Business



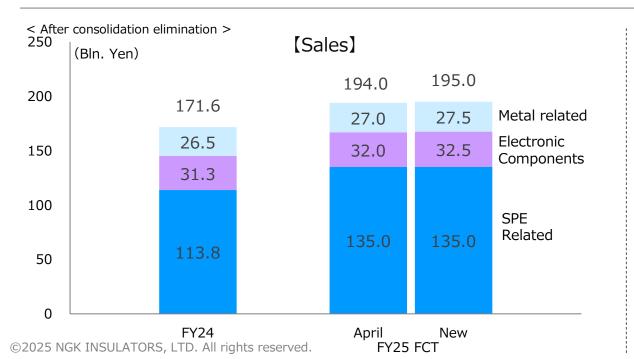
- SPE Related (Components for semiconductor production equipment)
  - Although the market for semiconductor manufacturing equipment is expected to recover only slightly, income is expected to increase compared to the April forecast due to inventory increase of certain customers in the first half of the year.

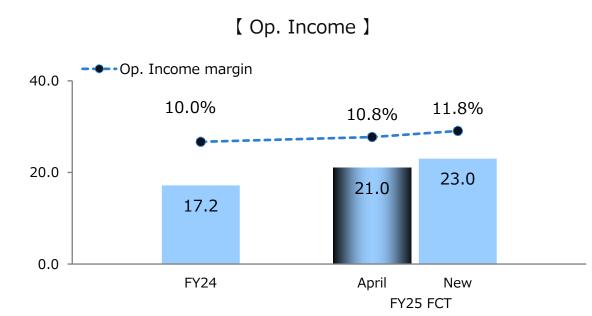
## Electronic Components

- Demand for piezoelectric elements for HDDs is stable due to steady investment in data centers.
- For ceramic packages for crystals, sales are expected to increase as the market is expected to recover gradually in the second half of the year, but income is expected to decrease compared to the April forecast due to rising raw material prices and other related factors.
- The financial deficit for DCB and AMB substrates for power semiconductor modules, commercialized in recent years, is expected to continue as projected in April .

## Metal Related

• Demand is trending mainly for industrial machinery and automobiles. Sales are expected to increase compared to the April forecast.

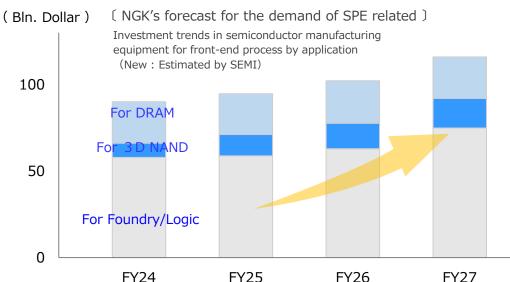




# The future perspective for the DS Business

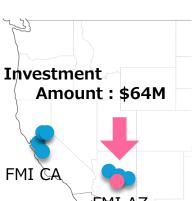


# ■ The future perspective for Components for Semiconductor Production Equipment (SPE)



The market is expected to further expand on the back of growth in servers for AI and AI-embedded devices, as well as the localization of semiconductor production to be promoted by each country.

## <Capital investment for capacity expansion at the Arizona site>



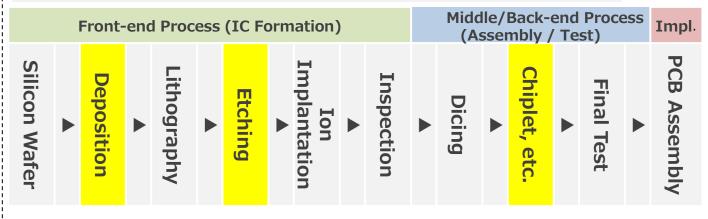
In Arizona, major semiconductor manufacturers are driving investments, and our U.S. subsidiary, FM Industries (FMI), which supplies internal components for equipment used in deposition processes (CVD, ALD) and etching, by leveraging high-precision ceramic-to-metal bonding technologies, advanced surface coating techniques, and modularization, will also strengthen production capabilities at manufacturing sites.

Aluminum (Al) Components Thermal Spray Components

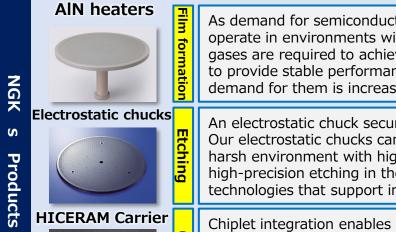
Products



## NGK's product groups used in the manufacturing of semiconductors



Our product groups support the manufacturing of semiconductors for AI, which are becoming increasingly high-performance (miniaturization and high integration).



As demand for semiconductors for AI expands, heaters that can operate in environments with high voltages and highly corrosive gases are required to achieve miniaturization. Our heaters are able to provide stable performance, even in harsh environments, and demand for them is increasing as the AI market expands.

An electrostatic chuck secures a wafer using electrostatic force. Our electrostatic chucks can maintain a stable holding force even in harsh environment with high-power plasma, enabling high-precision etching in the miniaturization and integration technologies that support increasing memory capacity.

Chiplet integration enables high-density, high-performance designs of the computing units and memory required for AI semiconductors. Our HICERAM Carrier is warp-resistant, light-transmitting, and chemical-resistant, making it possible to package many chiplet assemblies at once.

## Organizational Restructuring of Electronics Components Business



To achieve sustainable growth and enhance the competitiveness of the Electronics Components Business, including the ceramic package segment, we will concentrate management resources on the production of high-value-added products that require highly precise processes, thereby building a stronger and more sustainable business foundation.

## **Organizational Restructuring**

To improve efficiency, we will reallocate the functions of the subsidiary (NGKED), which is responsible for all aspects of the ceramic package segment—from development to manufacturing to sales—into the most optimal structure within the Group.

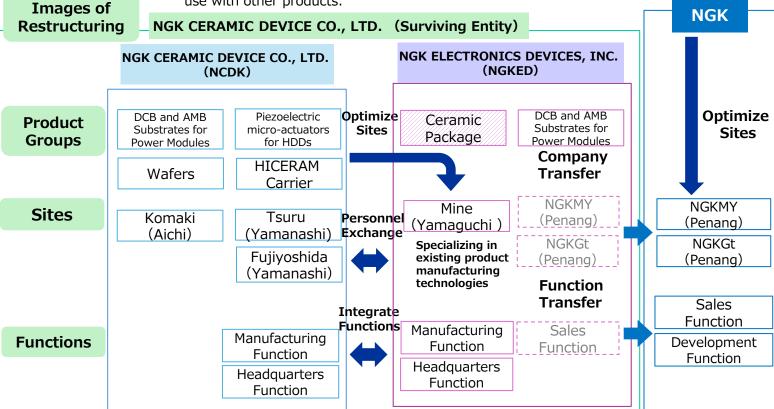
- NGK will be responsible for sales (Absorption-Type Company Split).
- ·All operations expect sales will be consolidated with an existing contract manufacturing subsidiary(NCDK). (Absorption-Type Merger).
- The Malaysian sub-subsidiary will be reorganized as a direct subsidiary under NGK.

## **Expected synergy**

- The Merger of NGKED and NCDK will enable the sharing of manufacturing know-how and equipment between the two companies, flexible personnel allocation, and reduction of indirect costs, thereby enhancing the Group's overall profitability through a manufacturing-specialized subsidiary.
- By assigning sales responsibility to NGK, the company will be able to strengthen its sales capabilities and respond swiftly to market changes.

• The Malaysian subsidiary, positioned as a low-cost base, will also be available for use with other products.

# NGKMY (Penang) NGKGt ( Penang ) Fujiyoshida Tsuru Komaki NCDK NGKED (Mine)



NGKMY - NGK ELECTRONICS DEVICES(M) SDN.BHD.
NGKGt - NGK GLOBETRONICS TECHNOLOGY SDN.BHD.
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# Forecasts for the Energy & Industry Business

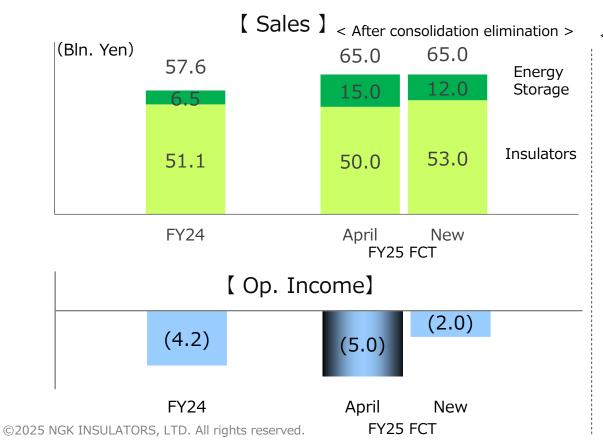


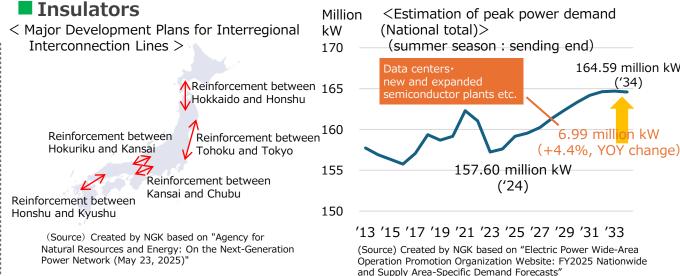
## Insulators

• Domestic and overseas, investment in new and expanded power transmission networks to meet growing demand for AI and data centers remains strong. During the period under review, sales and income increased due to strong demand.

## Energy Storage

• Due to optimal allocation of management resource, the company decided to discontinue the manufacturing and sales activities of NAS batteries.





Furthermore, new construction and expansion of data centers and semiconductor plants are also anticipated, and power demand is increasing.

To facilitate the large-scale integration of renewable energy and strengthen power system resilience, reinforcement of interregional interconnection line is underway.

Demand for our power transmission and distribution products is expected to remain stable

# **Discontinuation of Manufacturing and Sales Activities of NAS Batteries**



At the Board of Directors meeting held on October 31, 2025, it has resolved to discontinue the manufacturing and sales activities of NAS batteries (sodium-sulfur batteries) under its Energy Storage Business, and to cease accepting new orders as described below.

## Backgrounds of the policy decision

- In response to the anticipated significant growth in energy storage demand, we had been in discussions with BASF to expand supply capacity and achieve cost reductions, however, these discussions were discontinued in September 2025.
- The continuous development of demand for NAS batterie's key features—long-duration and large-capacity energy storage—is expected to take time.
- The surges in material costs and intensifying competition with lithium-ion batteries.

Based on these factors, the Company has determined that stable operations and profitability will be difficult to achieve.

## Impact on Financial Results

The expenses associated with discontinuation of Manufacturing and Sales activities of NAS batteries are estimated to be approximately 18,000 million yen, which is expected to be recorded as an extraordinary losses in the fiscal year ending March 2026.

## Future outlook

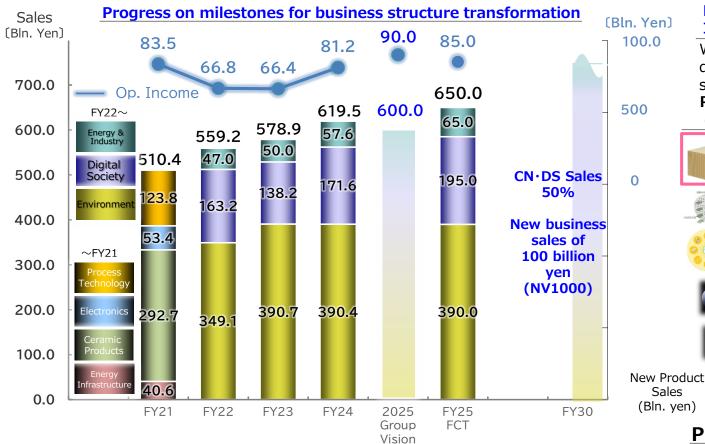
Matters to be addressed	Response policy
Response to already accepted projects	the Company will proceed with shipments and deliveries from existing inventory upon confirmation of each customer's intent.
Response to a project that is about to be ordered	The delivery can be fulfilled within existing inventory.
Manufacturing and Sales Activities of new projects	With this resolution, the matters are concluded.
After service/maintenance	Supply of maintenance parts for products that have already been delivered or are scheduled to be delivered will continue to be provided responsibly.

# Progress Toward the NGK Group Vision



## **NGK Group Vision: Road to 2050**

Envisioning the future society of 2050, we will seize the enormous trends of rapid advancement toward the realization of carbon neutrality and a digital society as an opportunity for new development and work on promoting Five Transformations: (1) Promotion of ESG management, (2) Profitability improvement, (3) Focus on R&D, (4) Focus on commercialization, and (5) DX (digital transformation). We are transforming our business structure.



Whereas net sales achieved the fiscal 2025 performance target set forth in the Group Vision, operating income failed to meet the publicized target primarily due to cost increases associated with inflation and the impact of tariffs, the failure to improve unprofitable businesses. ©2025 NGK INSULATORS, LTD. All rights reserved.

## **NGK Group Vision Targets for FY2025**

Sales	600 billion yen		
Op. Income	90 billion yen		
Net income	60 billion yen		
Capital Policy	ROE 10%, Dividend Payout Ratio 30%		
EPS	200yen		

#### NV1000

## In FY2030, the target is new business sales of 100 billion yen

We aim to achieve commercialization from the demonstration and development phases of an item with expected sales of 200 billion yen, and strive for the achievement of NV1000

Products in the commercialization and demonstration phase: About 100 billion yen

Capture CO<sub>2</sub> contained in the atmosphere directly **Honeycomb Structure Sorbent Material for DAC(Direct Air Capture)** 

Refer to the next section Elemental

technology

research phase

Development

Phase

Demonstration

Phase

Commercialization

phase

CO<sub>2</sub> separation, crude oil production, etc.

**Sub-nano Ceramic Membrane** 

Contributing to the stable management of renewable energy **Green energy business** 

NV1000

Contribute to stabilized communication **Next-generation bonded wafer** Support for package in semiconductor

manufacturing **HICERAM Carrier** 

Accelerate development to increase the possibility of achieving NV1000

25/3 126/3 **'31/3** 

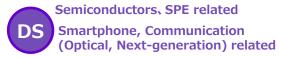
## Products in the development phase: About 100 billion yen



24/3

Sales

(Bln. yen)



Technological Development and Business Transformation that **Contributes to Carbon Neutrality (CN)** 

NGK INSULATORS

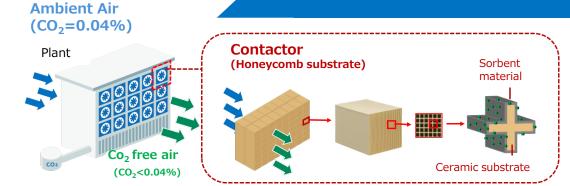
■ Development of honeycomb for direct air capture (DAC)

## Apply the technology cultivated through Automotive Ceramics

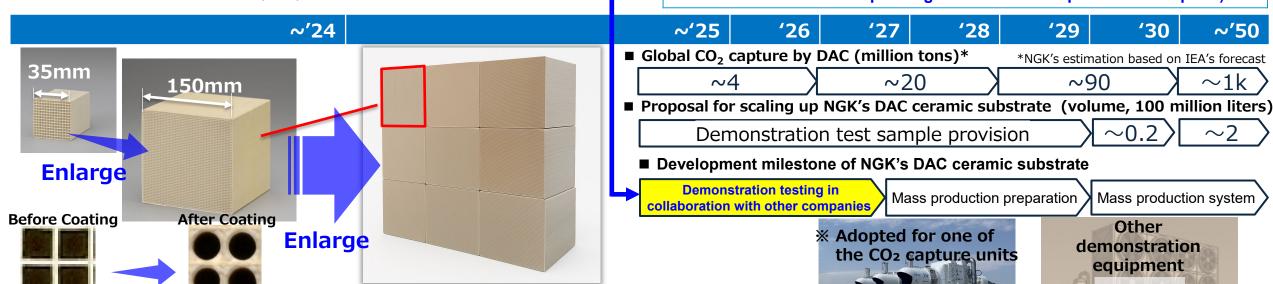
- Efficiently absorbs and captures low-concentration CO2 (approximately 0.04%) in the atmosphere
- The honeycomb characteristics (see right) contribute to reduced capture costs, an issue facing DAC

## Mass production system expected to be established around 2030

- Provision of samples to over 30 domestic and international DAC-related companies
- Delivery of samples for DAC demonstration equipment to several companies and start of demonstration (new)



Features of Honeycombs	Expected effects
Low airflow resistance	Reduced fan power consumption
High surface area	Improved CO₂ absorption efficiency (= Reduced fan operating time → Reduced power consumption)



Adoption of NGK's DAC ceramic substrate for DAC demonstration equipment at Expo

2025 Osaka, Kansai, Japan→

Other demonstration equipment Coming soon This image was generated using A

Mass production system

 $\sim 0.2$ 

**'30** 

~90

~'50

 $\sim 1 \mathrm{k}$ 

# **Improving Enterprise Value**



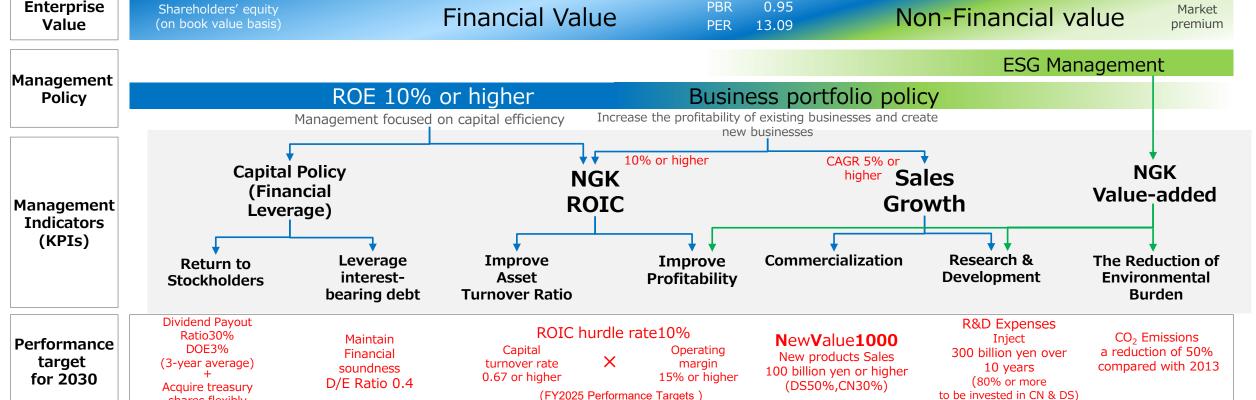
- Enhance capital profitability via corporate management that is conscious of the formula, Equity spread = ROE − Cost of shareholders' equity.
- Ensure growth potential through advancing business portfolio management, and investment in intellectual capital (R&D, etc.) and human capital for growth.
- Upgrade non-financial value primarily via an effort to reduce environmental footprint and respect human rights.

Estimation of the NGK's Capital Cost

After-tax
Debt Cost
Capital Cost
D/E Ratio
WACC
Pre-tax WACC

7.8%(CAPM)
0.32
6.2%
8.9%(Hurdle rate)



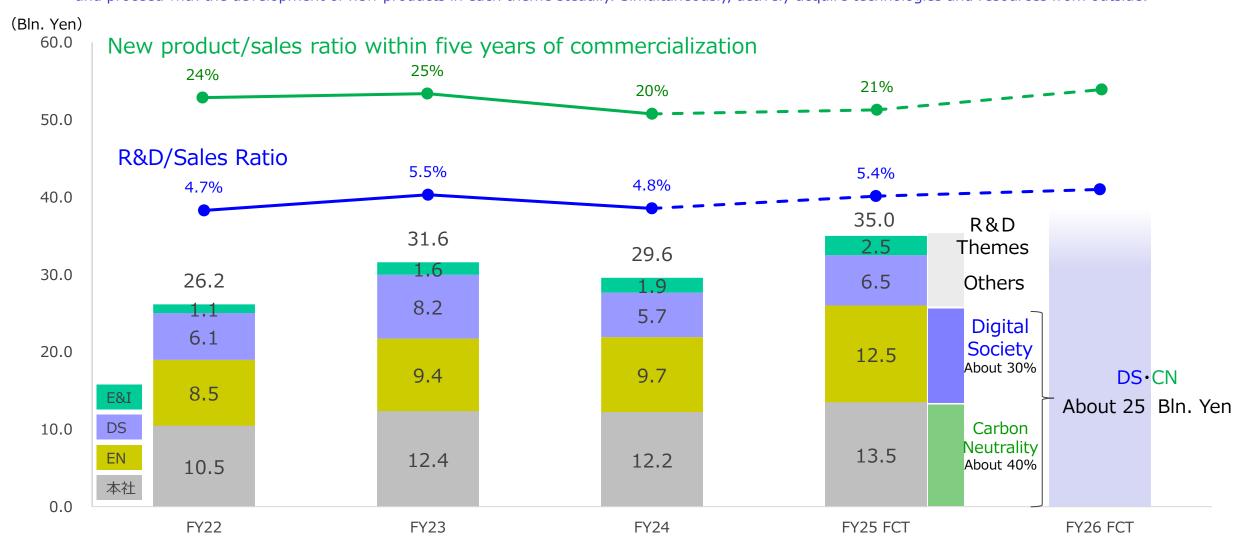


shares flexibly

# **R&D Input**



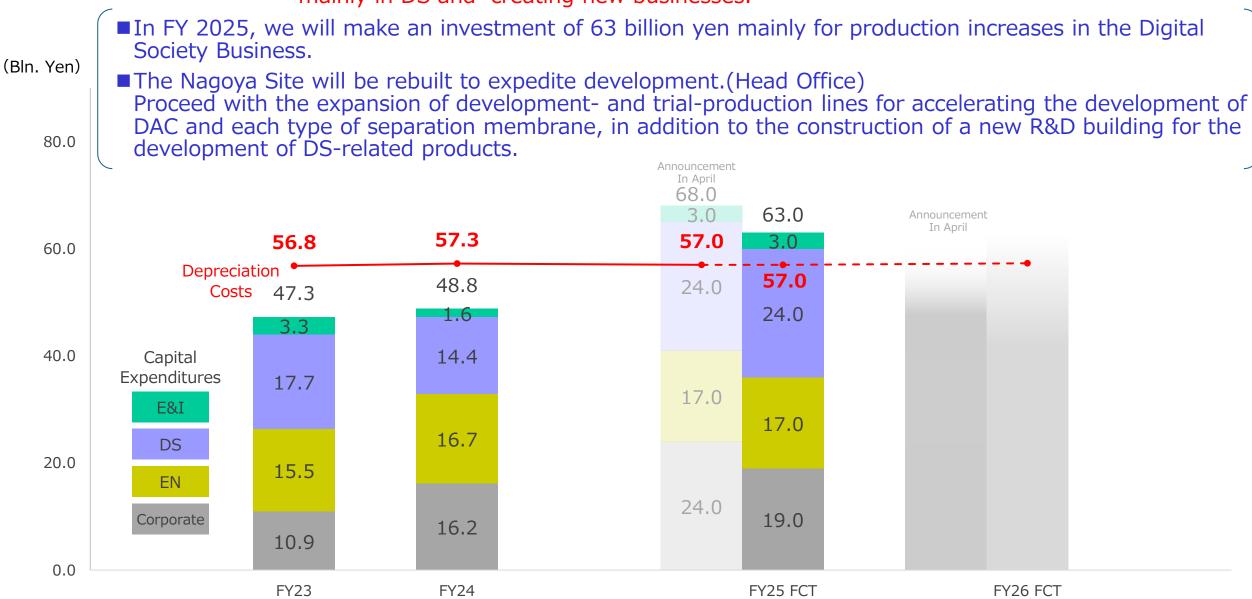
- In order to achieve NV1000, we expect to continue record high R&D spending, especially on CN and DS.
- Integrate membrane-related development activities into EN. Speed up development, centered on DAC and membrane, with the aim of shifting the business to the CN field.
- Continuing enhance our own technologies, the Corporate NV Creation, the Corporate R&D and the Corporate Manufacturing Engineering coordinate and proceed with the development of new products in each theme steadily. Simultaneously, actively acquire technologies and resources from outside.



# **Capital Expenditures & Depreciation Costs**



Invest funds for expanding sales and income of existing business mainly in DS and creating new businesses.



# **Capital Policy**



1.0%

0.32

6.2%

**7.8%**(CAPM)

8.9%(Hurdle rate)

**Estimation of the NGK's Capital Cost** 

After-tax Debt Cost

Capital Cost

Pre-tax WACC

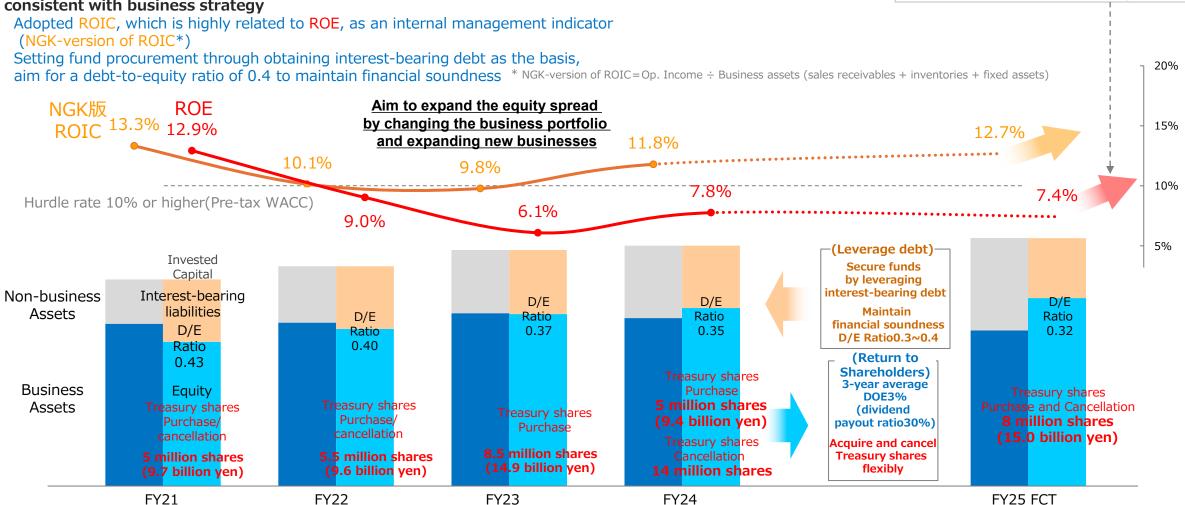
D/E Ratio

**WACC** 

- Ensure profitability exceeding capital costs and financial soundness at the same time.

  Focus on capital efficiency with ROE as a management indicator and utilization of interest-bearing debt
- Proactive shareholder returns from a medium- to long-term perspective

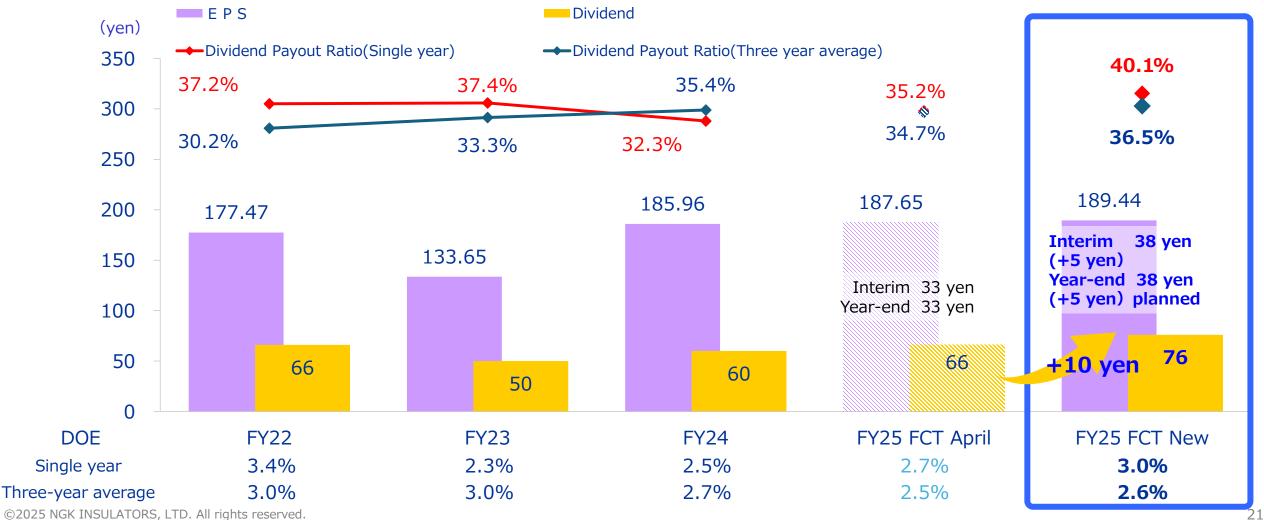
  Pay dividends while targeting a three-year average payout ratio of 30% and a three-year average DOE of 3%, and acquire and cancel treasury shares in a flexible manner.
- Keep the income rate, assets turnover and financial leverage at healthy levels consistent with business strategy



## Dividend

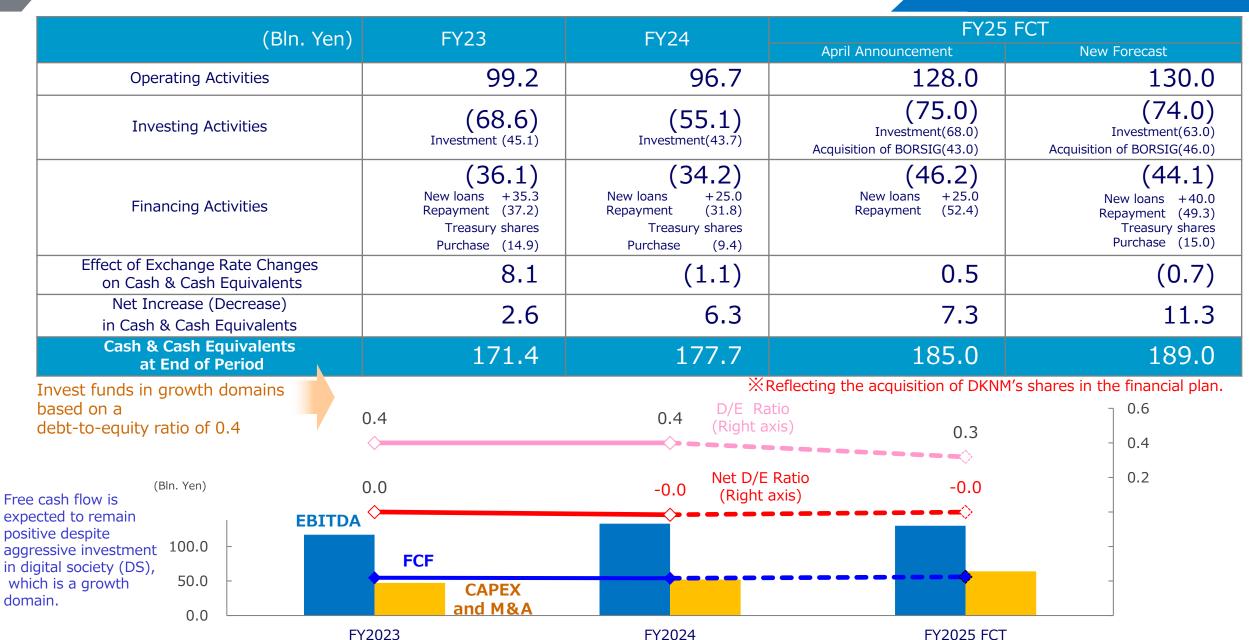


The business situation remains strong, thanks to, among other things, the efforts being made to improve sales prices in response to negative impacts, such as US tariff policies. Furthermore, due to the impact of the weak yen, we expect that full-year operating income will exceed both the previous fiscal year's results and our earlier forecast. In addition, management decisions regarding unprofitable businesses are expected to lead to steady improvements in future business performance and cash flow. Further, taking into consideration the cash outlook, the management resources required for future growth, and our dividend policy (aiming for an average annual dividend payout ratio of 30% and a three-year average DOE of 3%), we plan to increase the annual dividend to 76 yen for the fiscal year ending March 2026.



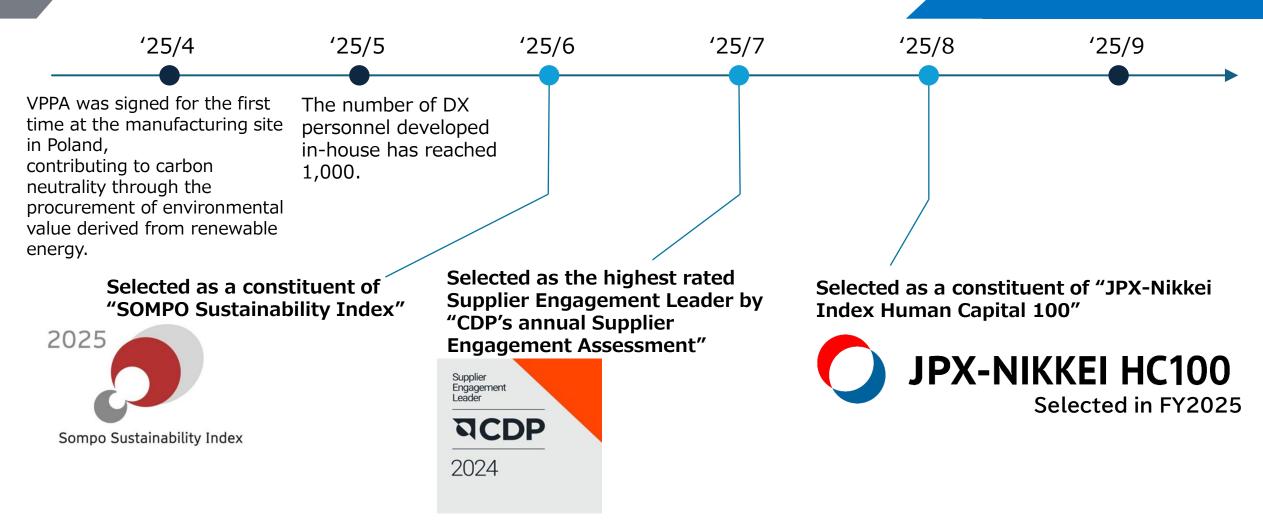
# **Summary of Cash Flow**





## **Initiatives for Non-financial value in FY2025**





The NGK Group will continue to strive toward realizing a sustainable society as a company leverages its proprietary ceramic technologies to drive the future of energy, protect the global environment, and contribute to industrial development. At the same time, we will position human capital at the core of our management, aiming to achieve both employee growth and sustainable value creation for the company.

# Sales by Product (Annual)



(Bln. Yen)

<after consolidation="" elimination=""></after>	FY2022	FY2023	FY2024	FY2025 FCT
Honeycomb filters	81.3	90.1	91.2	90.0
GPF	36.8	49.8	51.1	53.0
Cd-DPF·LSH	84.3	85.5	79.2	76.0
SiC-DPF	59.7	71.9	73.3	75.0
Sensors	58.7	64.6	61.7	64.0
Industrial Processes *	28.3	28.8	33.8	32.0
Environment Business	349.1	390.7	390.4	390.0
SPE related	107.0	86.5	113.8	135.0
Electronics components	28.6	26.1	31.3	32.5
Metal related	27.6	25.6	26.5	27.5
Digital Society Business	163.2	138.2	171.6	195.0
Energy Storage	2.7	2.1	6.5	12.0
Insulators	44.2	47.9	51.1	53.0
Energy & Industry Business	47.0	50.0	57.6	65.0
Total	559.2	578.9	619.5	650.0

\*\*The Industrial Processes, which belonged to the E&I business, has been transferred to the EN business from the FY2024. Consequently, the performance for the FY2022 and the FY2023 has been reclassified under the same segment categories.

# Sales by Product (Semi Annual)

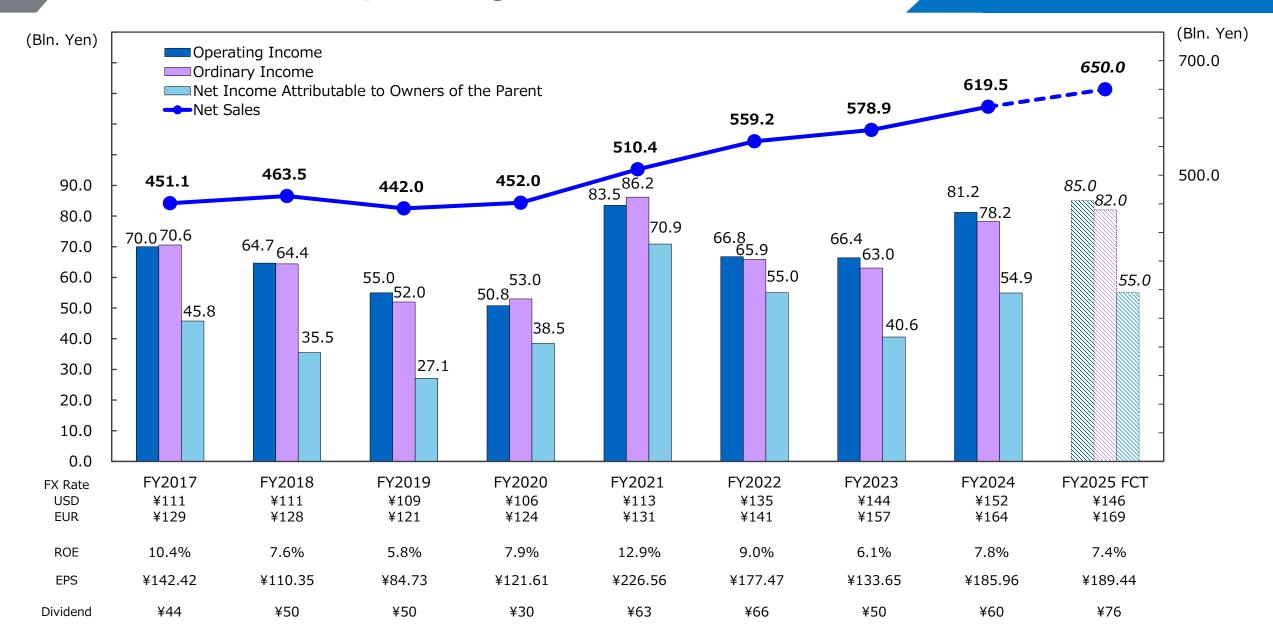


(Bln. Yen)

	FY2024 FY2025 FCT		25 FCT	
<after consolidation="" elimination=""></after>	1H	2H	1H	2H
Honeycomb filters	45.6	45.7	46.6	43.4
GPF	25.0	26.1	27.0	26.0
Cd-DPF·LSH	41.1	38.2	37.3	38.7
SiC-DPF	36.8	36.5	38.1	36.9
Sensors	30.2	31.5	32.9	31.1
Industrial Processes	13.7	20.0	14.7	17.3
Environment Business	192.3	198.0	196.6	193.4
SPE related	50.6	63.3	69.7	65.3
Electronics components	15.7	15.6	15.0	17.5
Metal related	12.9	13.6	13.1	14.4
Digital Society Business	79.1	92.4	97.8	97.2
Energy Storage	2.4	4.1	6.7	5.3
Insulators	24.4	26.6	25.1	27.9
Energy & Industry Business	26.9	30.7	31.8	33.2
Total	298.4	321.2	326.2	323.8

# **Consolidated Operating Results**





## Surprising Ceramics.



Corporate Name to Change from April 2026

NGK INSULATORS to become





# Accelerate business structure transformation initiatives to achieve the NGK Group Vision.

The Company resolved to change its trade name(company name) at a meeting of the Board of Directors held on January 31,2025.

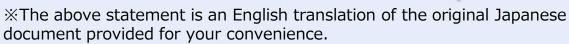
# New Company Name NGK Corporation Planned date of change April 1, 2026

- ▶ The NGK Group Vision presents the Company's ideal vision for what the Company wants to be as "A company to contribute to carbon neutrality and digital society with our unique ceramic technologies." In order to realize this vision, the Company will change its company name with the intention to accelerate its business structure transformation initiatives.
- The Company will unify its name in both Japanese and English as "NGK" and work to further enhance its brand recognition in Japan and overseas.

## Surprising Ceramics.

# NGK INSULATORS

The purpose of this brief is information disclosure for better understanding of NGK Group's policies, projections and financial condition. This brief does not solicit buying and selling of NGK's shares. The figures included in this brief, including the business performance targets and figures, are all projected data based on the information currently available to the NGK Group, and are subject to variable factors such as economic conditions, competitive environments and future demands. Accordingly, please be advised that the actual results of business performance may differ substantially from the projections described here.



In the event of any discrepancy between this translation and the Japanese original, the original is presumed to be correct.

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