# Financial Results for FY2024

# February 6, 2025 Nippon Electric Glass Co., Ltd.

# (Content)

- 1. Summary of Financial Results for FY2024
- 2. Business Forecasts and Dividend Forecasts of FY2025
- 3. Progress on Medium-term Business Plan EGP2028

# Financial Results for FY2024

	(Billions of JPY)		Sillions of JPY)	Main factors in the change Operation profit/loss	
	FY2023	FY2024	Change	(+) Selling price increases	
Net sales	279.9	299.2	6.9%	<ul><li>(+) Strong sales of products for semiconductors</li><li>(+) Manufacturing cost reduction in Displays business</li></ul>	
Operation profit(loss)	(10.4)	6.1	-	<ul> <li>(+) Decrease in depreciation and amortization due to business reform, etc.</li> </ul>	
Operating margin	(3.7%)	2.0%		<ul> <li>(+) In the previous fiscal year, the Company recorded valuation losses related to some raw materials.</li> <li>() Devery protocial and an entry prices and logistics costs remain kink</li> </ul>	
Non-operating income / expenses	0.9	6.2	6.7times	(-) Raw material and energy prices and logistics costs remain high <b>Non-operating income/expenses</b>	
Ordinary profit(loss)	(9.4)	12.4	-	(+) Increase of foreign exchange gains (+¥3.3 billion)	
Extraordinary income(losses)	(19.1)	11.3	-	Revaluation of receivables and payables related to borrowings by overseas subsidiaries	
Profit(loss) attributable to owners of parent	(26.1)	12.0	-	<ul> <li>Extraordinary income/loss</li> <li>(+) Gain on sale of non-current assets (+¥25.4 billion)</li> <li>the sale of the former site of Fujisawa Plant, the sale of non-</li> </ul>	
Earnings per share (JPY)	(¥282.90)	¥ 141.67	-	current asset arising from structural reform of Displays business and so on. (+) Gain on sale of investment securities (+¥6.2 billion)	
Dividends per share (JPY)	¥ 120	¥ 130	-	<ul> <li>(-) Impairment loss (-¥11.2 billion)Display business (Japan) and composite business (mainly Malaysia)</li> </ul>	

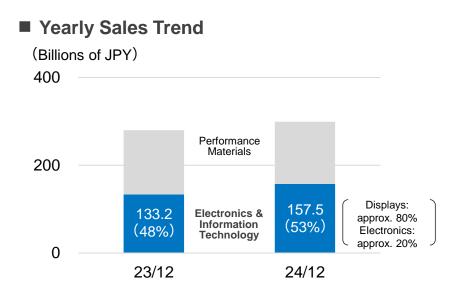


### Displays

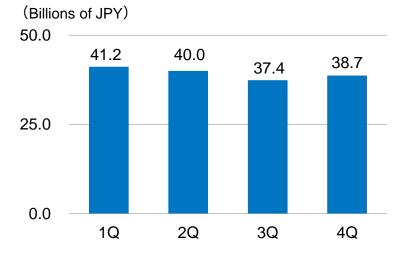
- Demand softened in 3Q, but remained strong.
- Selling price increases proceeding.
  - $\rightarrow$  Sales exceeded the previous year.

## **Electronics**

- Strong demand for products for semiconductors
- Demand for other products also continues to recover moderately
  - $\rightarrow$  Sales exceeded the previous year.







## Composites

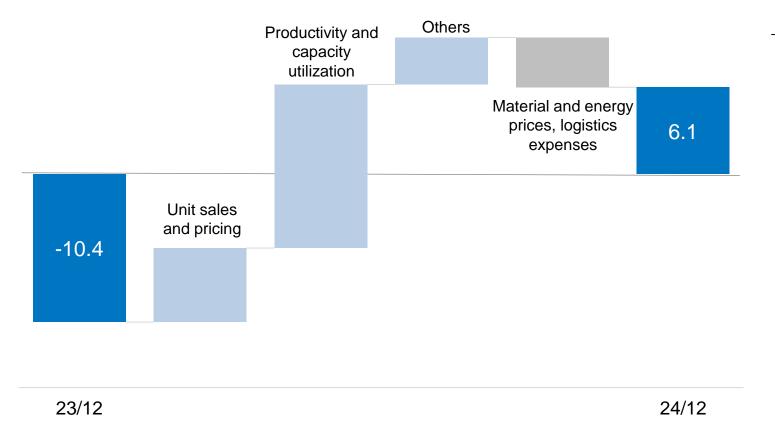
- Tough competitive environment persisted even as demand failed to recover, resulting in a slump in sales.
  - $\rightarrow$  Net sales: Below year-earlier level

## Medical Care, Heat-Resistance, Buildings

- Medical Care: Selling price hikes continued as resilient demand remained.
- Heat-Resistance: Demand remained weak.
- Buildings: Demand remained solid.
  - → Net sales: Up year on year for Medical Care and Buildings. Down year on year for Heat-Resistance



(Billions of JPY)



#### Key factors

#### Increases

- Hikes in selling prices
- Brisk sales of products for semiconductors
- Lower manufacturing costs
- Lower depreciation resulting from business structural reforms
- Valuation losses related to some raw materials recorded in FY2023

#### Decreases

 Material and energy prices and logistics expenses remaining elevated

# Business Forecasts and Dividend Forecasts of FY2025

#### FY2025

2020			(BIII	ions of JPY)
	2Q	Full year	For reference	
	(accum)		FY2024	Change
Net sales	150.0	310.0	299.2	3.6%
Operating profit	10.0	20.0	6.1	227.9%
Operating margin	6.7%	6.5%	2.0%	-
Ordinary profit	10.0	20.0	12.4	61.3%
Profit attributable to Owners of parent	10.0	15.0	12.0	25.0%
Dividend forecast (JPY/share)	70	145	130	-

#### (Billions of JPY)

#### Economic outlook and initiatives

- We expect recovery supported by expected easing of geopolitical risks and economic policies from a range of countries
- But we also expect uncertain situations to remain due to the impact from changes in U.S. policies and declining international cooperation.

Assumption	
1 USD = 145JPY	
1 EUR = 160JPY	

## **Progress in FY2024**

### Several new projects started for Dinorex UTG®

- Cover glass product for foldable smartphones
   Adopted on Motorola models in June '24; Increase in adoption models
- **②** Speaker diaphragm

Glass material that improves audio performance attracted attention.

# Sales increased for ultra-thin cover glass for satellite solar panels

Examples of products using Dinorex UTG<sup>®</sup>



Foldable smartphones that use Dinorex UTG<sup>®</sup>

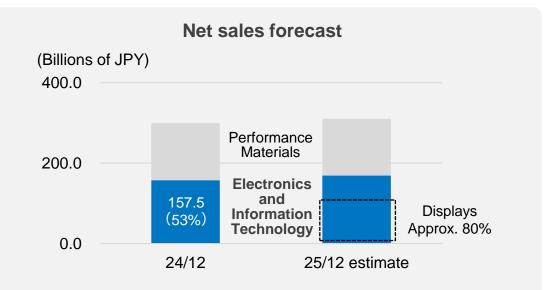


Glass diaphragms

## For the achievement of EGP2028 targets

- Switch to all-electric melting furnaces
- Expand market share of G10.5 glass substrates
- Improve productivity of high heat-resistant and low thermal compaction glass substrate
- Find more uses for ultra-thin glass

⇒ Improve earnings



## **Progress in FY2024**

# Progress made in sales expansion, commercialization, and new product development of semiconductor-related products

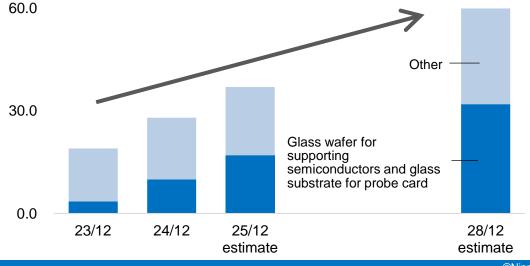
 Significant sales increases for glass wafer for supporting semiconductors

Annual sales grew to some 10 billion yen

- 2 Glass substrate for probe card (mass production and shipment begun in 4Q 2024)
- **3** Development of inorganic core substrate

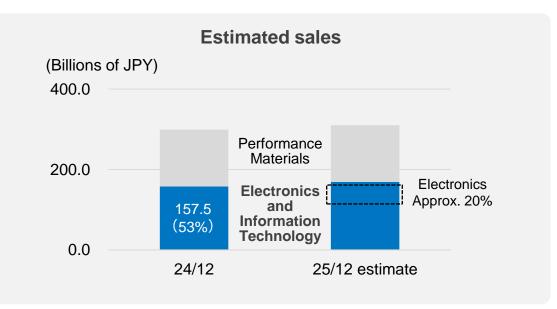
Developed jointly with Via Mechanics. Core substrate expected to be used for next-generation semiconductor packages developed; sample work underway

Historical net sales of electronics business (Billions of JPY)



## For the achievement of EGP2028 targets

- Develop and quickly commercialize new products
- Expand production capacity for semiconductorrelated products
- Improve quality of existing products and raise their production efficiency
- Expand value-added businesses, including M&A



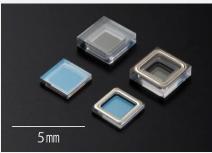


## Leverage our successful track record in the semiconductor field to strengthen development of next-generation semiconductor-related products

Inorganic core substrates Semiconductor materials process materials **Glass core substrates** GC Core<sup>™</sup> Glass wafer for supporting Semiconductor chip semiconductors Micro through-hole(via) Redistribution layer Motherboard 5 mm Inorganic core substrate Cover glass for automotive

Glass materials for LTCC Materials with a low dielectric dissipation factor suitable for components and devices in 5G communications.

Packaging materials/Cover glass



Lid with sealing material for optical device packages

image sensors

# Manufacturing

Glass substrate for probe card

<sup>(</sup>GC Core<sup>™</sup>, Glass core substrate)

### **Progress in FY2024**

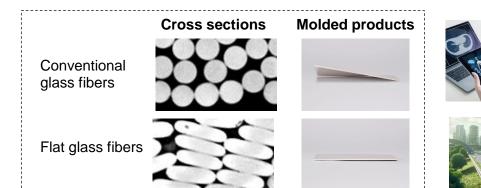
#### Efforts to improve profitability

- Developing flexible production system to meet regional demand and improving production efficiency
- Establishing manufacturing process technology that contributes to achieving carbon neutrality
- Improving quality of flat glass fiber and cutting costs
- Developing high-performance glass fibers for electronic materials

#### [Flat glass fiber]

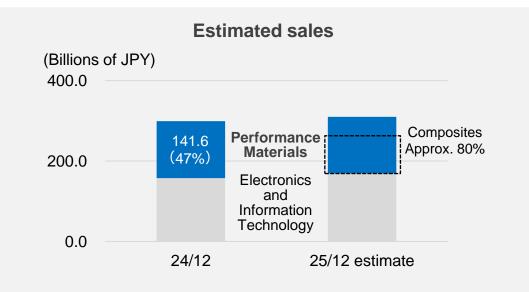
Chopped strands with elliptic cross section for reinforcement of thermoplastic resin Reduces warpage and improves dimensional stability of molded products (Application)

Automobile exterior and interior components, smartphone and electronic device casings, electrical appliances





# Continue these efforts on the left and aim to eliminate deficit by 25/12

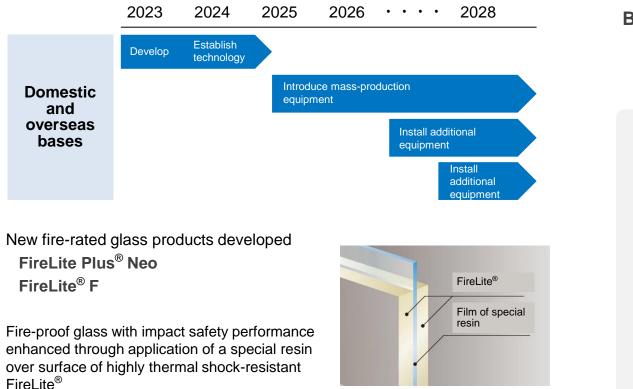


## **Progress in FY2024**

#### Efforts to improve profitability

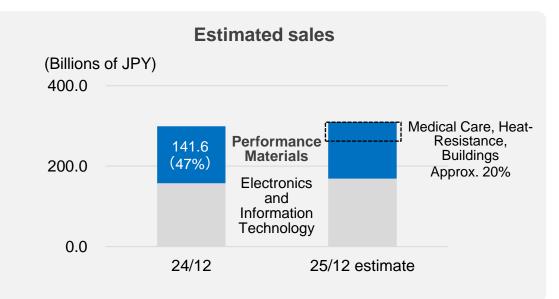
Establishing technology to mass-produce glass tubing for pharmaceutical and medical use, using all-electric melting technology

(Plan to introduce all-electric melting technology in business of glass tubing for pharmaceutical and medical use)

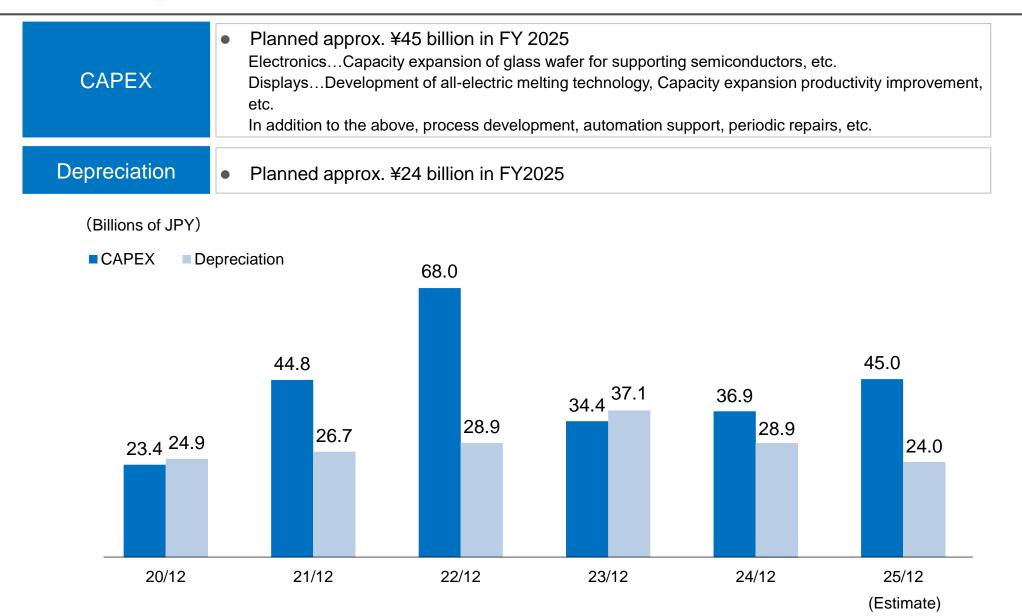


### For the achievement of EGP2028 targets

Medical Care:Use all-electric melting technology to<br/>improve productivity, quality, and energy<br/>efficiencyHeat-Resistance:Expand sales of high value-added products<br/>that leverage our unique printing technology<br/>Expand sales of new FireLite® fire-proof<br/>glass products



FireLite Plus<sup>®</sup> Neo



# Progress on Medium-term Business Plan EGP2028



# **"STRONG GROWTH"**

We work to realize sustainable growth and corporate value enhancement by fortifying the revenue base of existing businesses and aggressively allocating resources to growth areas

#### **Business strategies**

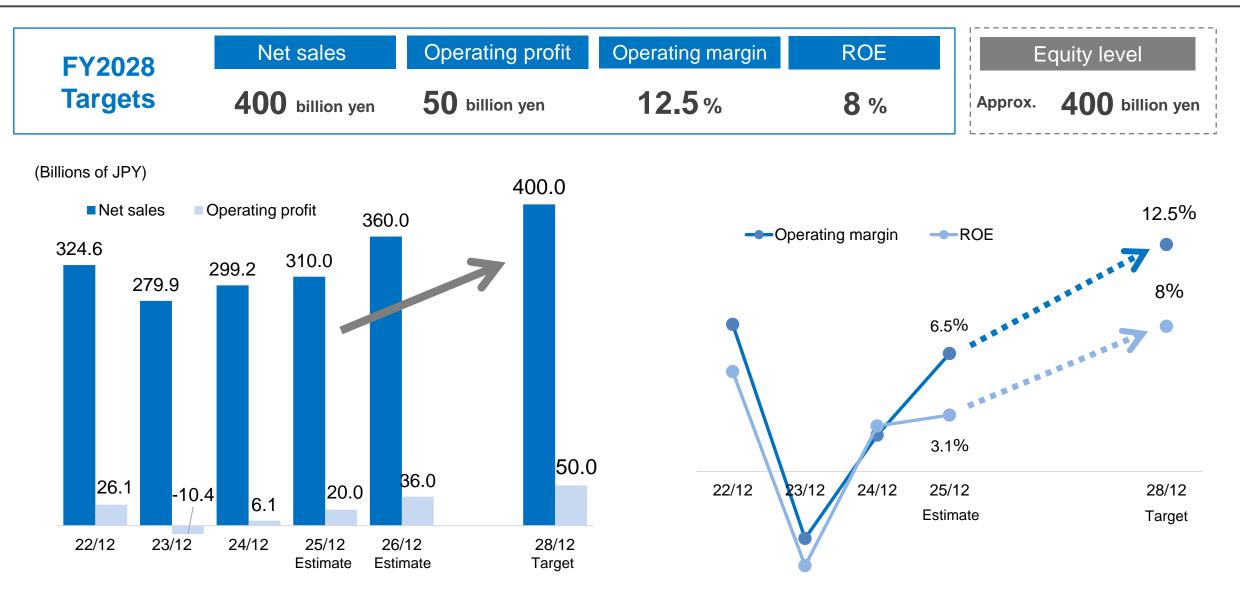
- Reinforcement of existing businesses (fortification of revenue base by increasing competitiveness)
- Expansion of strategic businesses (enhancement of resource allocation to growth areas)
- ③ Procurement risks management

#### **Financial strategies**

- ① Reduction of cross-shareholdings
- ② Asset reduction
- ③ Balance sheet management and enhancement of shareholder returns

#### Sustainability strategies

- ① Promotion of carbon neutrality
- ② Human resource strategy
- ③ Supply chain management





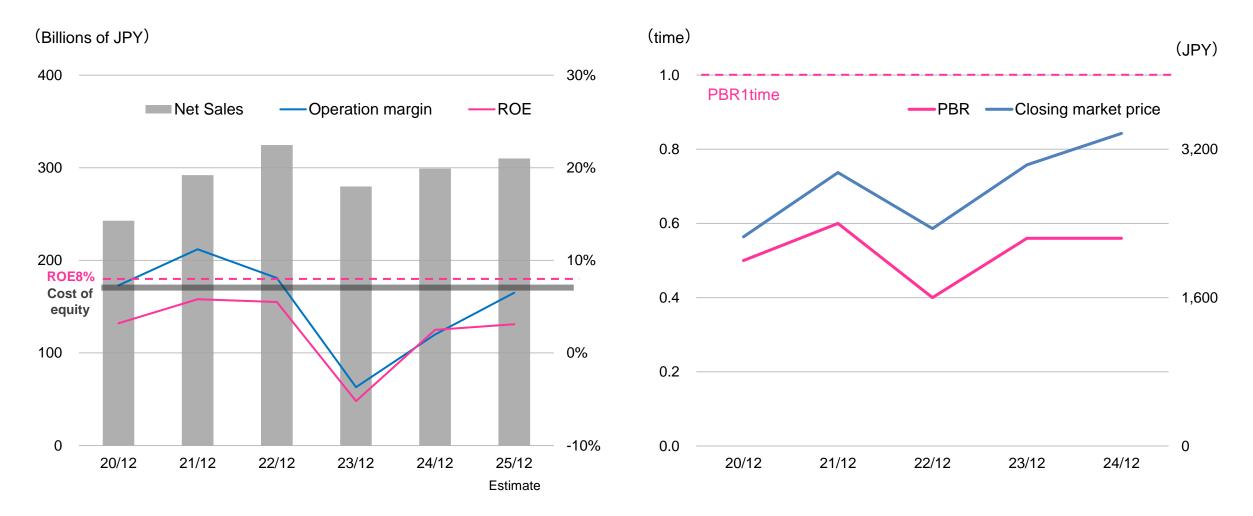
We will work on EGP2028 initiatives to increase corporate value and PBR.

# $PBR = ROE \times PER$

	Expand profits	Increase profits by strengthening existing businesses, expanding strategic businesses, and managing procurement risks
ROE	Improve asset efficiency	Reduce cross-shareholdings and noncore assets resulting from the processes of EGP2028, business reforms, etc. to maximize asset efficiency
	Enhance balance sheet management and shareholder returns	Enhance balance sheet management and shareholder returns, taking into consideration financial stability and capital efficiency $\rightarrow$ <b>Conduct share repurchases, expand dividends on an ongoing basis</b> (target: 3% DOE)
	Sustainability initiatives	Lay the groundwork for sustainable growth and corporate value improvement through initiatives for carbon neutral promotion, personnel strategies and supply chain management
PER	Strengthen corporate governance	Work to strengthen management foundation to drive business and sustainability strategies
	Enhance information disclosure and reinforce investor relations	Put effort into enhancing information disclosure and increasing communication opportunities to promote understanding

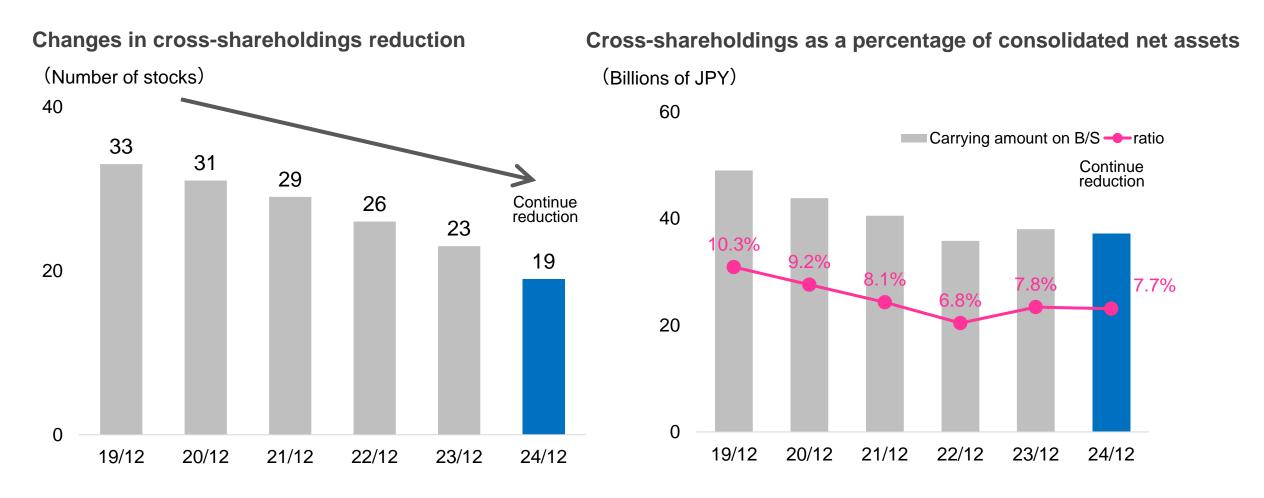


## EGP2028 initiatives aim to increase ROE by 8% and PBR.





- Verify appropriateness of holding the shares from the perspective of increasing corporate value
- All shares of four stocks and some of one stock sold in FY2024



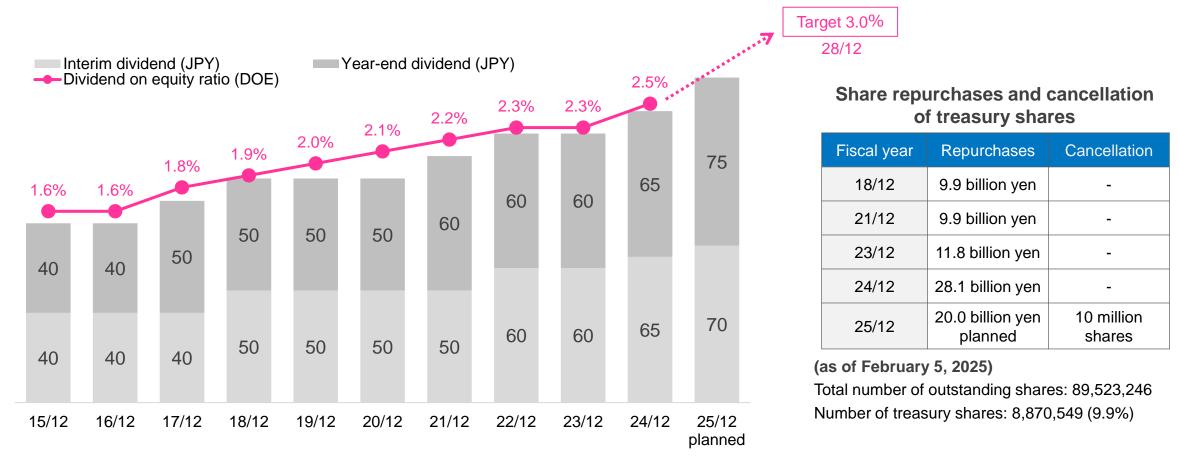
We will dispose of any non-core assets arising in the course of EGP2028, structural reform of businesses, etc., as appropriate in order to increase asset efficiency.

#### Key measures taken in FY2024

Gains on sale of non-curren	t assets: 49.0 billion yen	* Tallied based on consolidated statement of cash flows
Former site of Fujisawa Plant sold	• •	ed in 2015 as part of a business-restructuring necessary environmental measures.
Sale of non-current assets as part of structural reforms of Displays business	announced in May 2023	quidation of a South Korean operation that was 4; liquidation expected to be finalized by end-
Other	Disposal of non-core assets result	ted through processes of business reforms, etc.
Other: 9.1 billion yen		* Tallied based amounts recorded on balance sheet
Reduction in cross-shareholdings	All shares of four stocks and some	e of the shares of a stock sold

## Financial Strategy: Shareholder returns

- Dividend: For fiscal 2025, annual payout of 145 yen per share (70 yen interim; 75 yen year-end) planned
- Share repurchases: Repurchases totaling 20 billion yen planned (announced February 5, 2025) \* November 2023 ~ total of about 60 billion yen
- Cancellation of Treasury Shares: 10 million shares implemented as of January 31, 2025.



In order to enhance corporate value, we will consider the balance between investment in growth and shareholder returns and allocate them.

■ EGP2028(FY2024-2028) Plan

Source	Allocation
CF from operations 230 billion yen Depreciation 130 billion yen	Investment(Including strategic investment) 210 billion yen
Business reform / Asset reduction <b>120</b> billion yen	Shareholder's return (Dividend/Share repurchase) 140 billion yen

[FY2024]

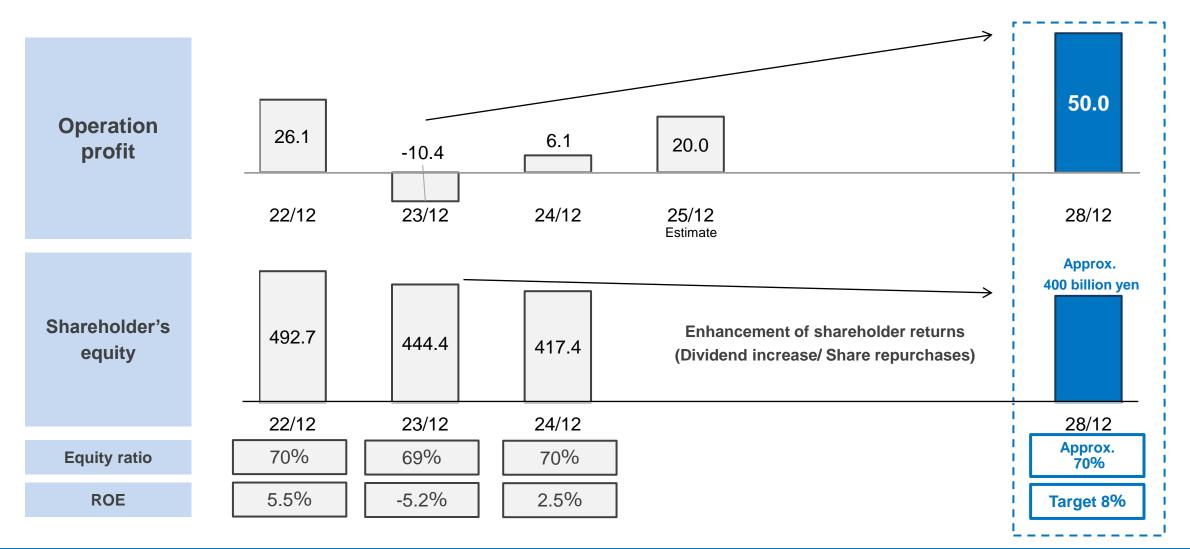
CF from operations	52.2 billion yen
(Depreciation	28.9 billion yen)
Gain on sale of non-current assets	49.0 billion yen
Gain on sale of investment securities	10.7 billion yen

CAPEX		36.9 billion yen
Share	nolder returns	39.0 billion yen
	Dividend:	10.9 billion yen
	Share repurchases:	28.1 billion yen*

\* November 2023 to December 2024: total 40.0 billion yen

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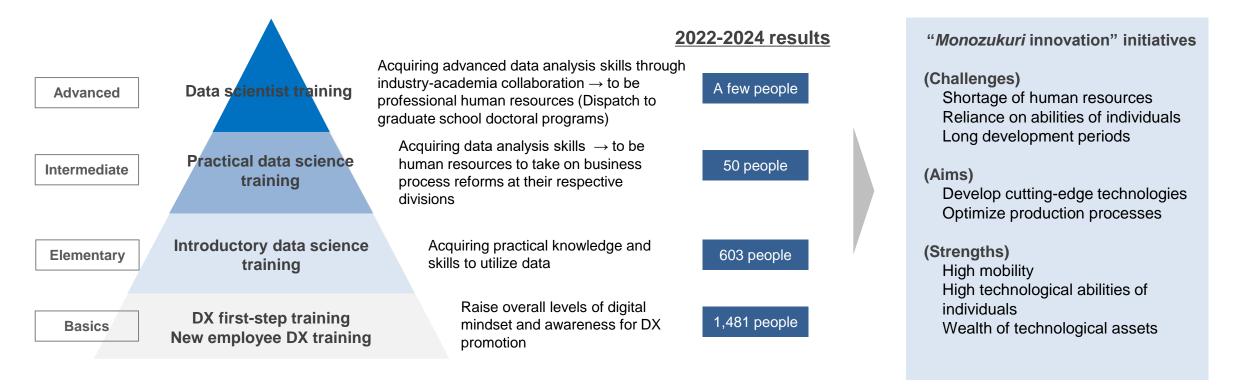
We will reduce shareholder's equity to approximately 400 billion yen while generating profit in EGP2028.





• Build solid business foundation to support achievement of EGP2028 targets

Start in 2019 for the goal of raising digital mindset of group employees and developing professional human resources  $\rightarrow$  to realize "*monozukuri* innovation"



Neg

"Cutting-edge technology development" "Optimization of manufacturing processes" Increasing competitiveness / optimizing supply chains Reducing environmental impacts and promoting carbon neutrality

#### Status of initiatives and future images

			-
Se	Level 4	Dynamic, autonomous control Multiple factories and businesses are connected, and each entity controls autonomously and dynamically based on analysis results and forecasts	
Smart factories	Level 3	Control and optimization by data Optimum decision and execution based on accumulated knowledge and know-how, as well as forecasts using models that have been developed	
S	Level 2	Analysis and forecasts using data Analyzing and learning huge amounts of information, extracting factors that contribute to the objective, modeling the business, and predicting the future	
/entional ctories	Level 1	<b>Collecting and accumulating data</b> Identifying beneficial pieces of information and making them visible, and accumulating the findings as knowledge and know-how	
Con fa	Level 0	Conventional factories Data remain to be fully utilized	

Aim to achieve Level 4 during the 2030s

- Develop processes that use virtual data
- Operation forecast, autonomous operation

→ Materials informatics

→ AI image inspection, simulation analysis, real-time data collection and operation monitoring FLAG+<sup>™</sup>

#### **Materials informatics**

Contribute to quickly developing new materials and proposing them to customers regarding glass wafer for supporting semiconductors





- We have launched an engineering business to provide carbon-neutral technology.
- Carbon neutrality throughout the entire glass industry Achieve the sale targets set out in our EGP2028

#### Advantages

- Technology and know-how about glass manufacturing we have acquired over many years
- We can provide all-in-one solutions covering anything from equipment to control systems



### Opportunities

A large, broad-based industry ... There are many glass manufacturers in the world.



Oxy-fuel Combustion (NOFC<sup>™</sup>)

High-efficiency combustion technology that uses only oxygen required for combustion

- Reduces fuel usage and CO<sub>2</sub> emissions
- Reduces waste as it does not require heat regenerator
- Compatible with hydrogen-oxygen combustion

Electric Melting Technology (NEMT<sup>™</sup>)

High efficiency melting technology that heats molten glass by passing electricity directly through it

 No waste gas omissions from combustion Furnace Control System (NFCS™)

Provides optimum melting conditions and control systems for various glass materials

 Optimum solution for energy saving and carbon neutrality

Aim for annual net sales totaling 5 billion yen by 2028



- Facilities being set up for mass production and sale by end-FY2025.
- Oxide-based batteries but adaptable to wide-ranging sizes, from compact to large; to be introduced in various markets

#### Recent situations

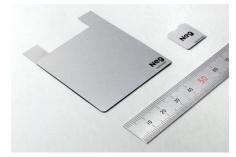
Shipment of laminate battery samples began in February 2024

High safety level attracts many inquiries.

(Samples began to be sold.)

Facilities being set up for mass production and launch by end-2025

Heat-resistant product samples began in August 2024 Unmatched wide operating temperature range (-40°C to 200°C) Many new types of needs  $\rightarrow$  focus effort on finding new uses



NEG's heat-resistant all-solid-state batteries

#### Examples of expected applications



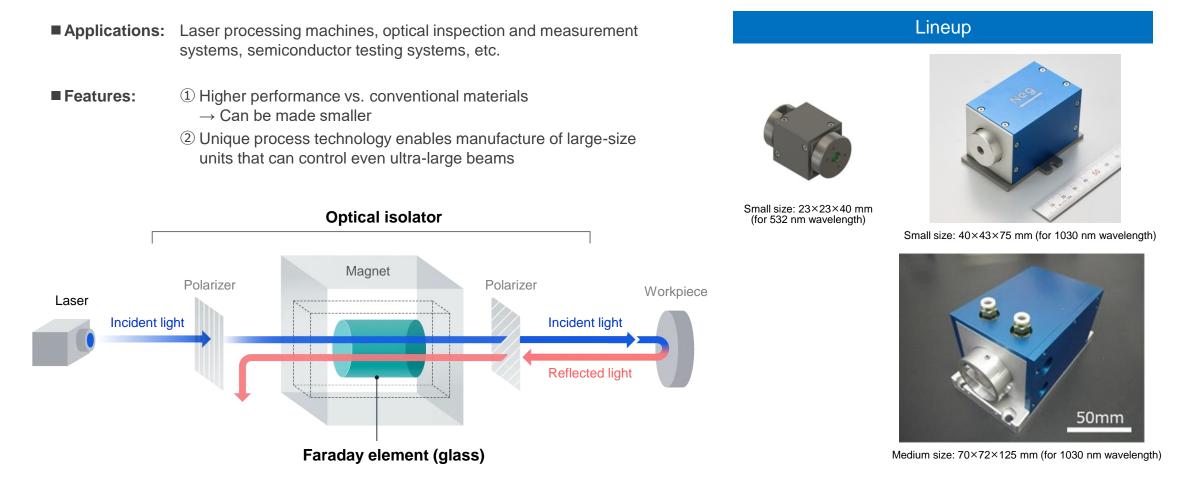
Wireless technology for devices used at extremely high temperatures over 100°C

Batteries for electronic equipment, mobility applications, and stationary use that require high levels of safety and battery design flexibility

In addition to the above, use in harsh conditions, such as space (vacuum  $\times$  low temperature), marine (high pressure  $\times$  low temperature), and medical (high temperature) environments, as well as in energy harvesting systems that use light, heat (temperature differences), and vibration as energy sources

## Business Strategy: Optical Isolator for High Power Lasers

 There are now more fields that require high-precision and high-power laser technology, including automotive, aerospace, and medical.



### Development of large, high-power lasers

- Advanced medicine
- Space debris removal
- Laser nuclear fusion, etc.

Development efforts underway at institutions in many countries, including Osaka University's Institute of Laser Engineering

■ Challenge: Large isolator required to prevent damage to laser equipment from reflected returning light

⇒ We developed a large glass faraday element and working with relevant entities to test it.

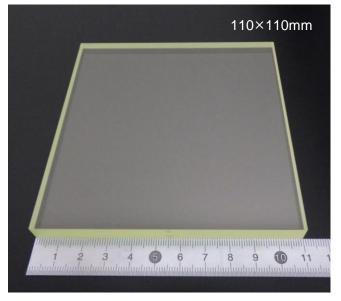
Comparison with other materials:

	Other materials <sup>*1</sup>	Faraday element made of NEG's glass
Faraday effect*2	0	0
High power tolerance	0	$\bigcirc$
Adaptability to large sizes	×	Ø

\*1. Terbium, gallium, and garnet crystals

\*2. The phenomenon in which the polarization plane of light passing through a magnetic field rotates

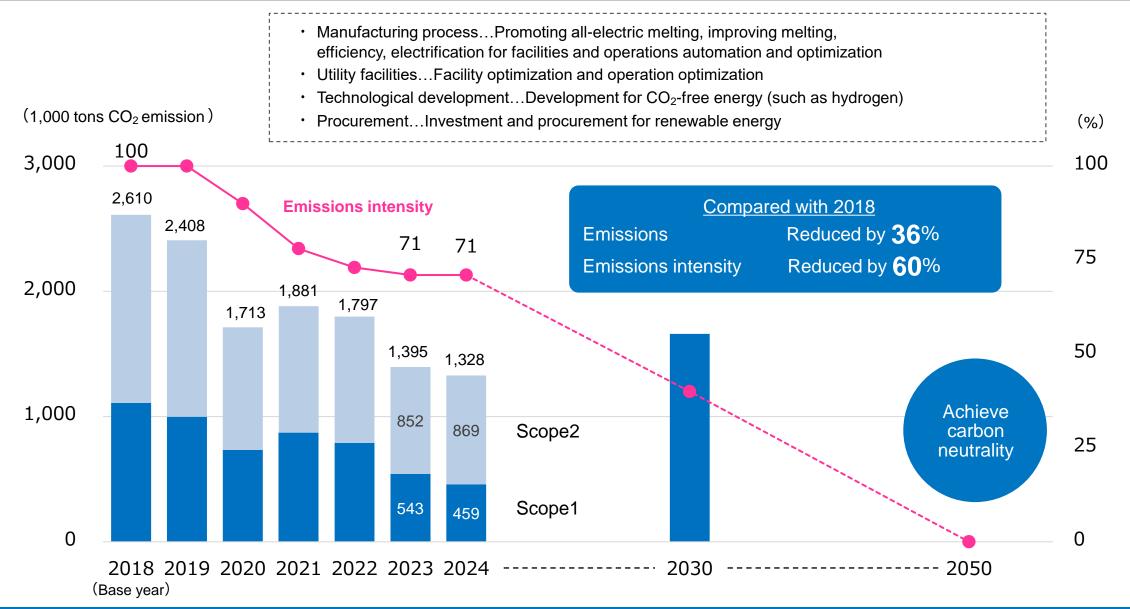
A large glass faraday element being developed



Joint research with Osaka University Institute of Laser Engineering, National Institute for Fusion Science, Kyoto University Institute for Chemical Research, and Faculty of Engineering of Kyoto University's Graduate School of Engineering

# CO<sub>2</sub> Emissions Reduction Targets





## Continue to strengthen governance to achieve EGP2028

#### Summary Reduction in the number of directors Increased representation of outside directors (majority of Board of Directors)

- ⇒ Strengthening management monitoring and execution-ofduties functions
  - \* After the General Meeting of Shareholders in March 2025

#### Composition of Board of Directors and Board of Corporate Auditors

Independence: 4 Independent Outside Directors (57%) Diversity: 2 Female Directors (29%)

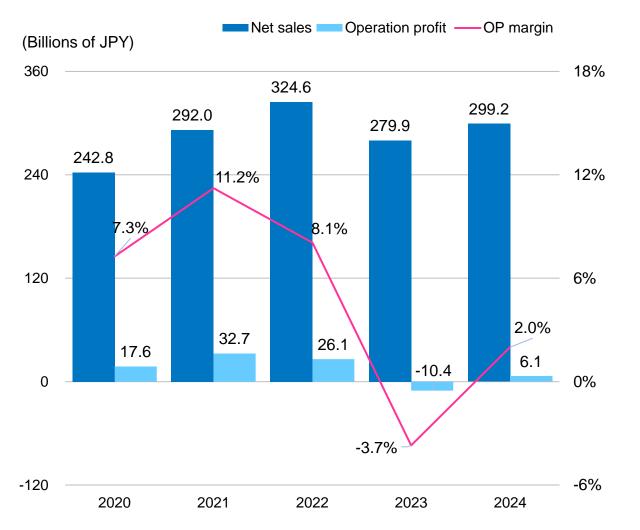
[Board of Directors]	222	+ 22	22
	Internal (male)	Independent Ir outside (female)	ndependent outside (male)
[Board of Corporate Auditors]	22	+ 22	
	Full-time (male)	Independent outside (male)	

#### 2001 Executive officer system introduced (Start of reduction in number of directors) 2003 Term of office for directors shortened from two year to one year 2012 Takeover defense measures abolished 2016 Start of evaluation of Board of Directors effectiveness 2019 Strengthen medium- and long-term incentives for directors and increase ratio of outside directors (1/3 of Board of Directors) 2020 Nomination and Remuneration Advisory Committee established 2023 Non-Japanese executive officer appointed, Corporate advisor system abolished and CSR Committee established 2024 Increase in the number of outside directors (female) 2025 Reduction in the number of directors Increase ratio of outside directors (majority of Board of Directors)

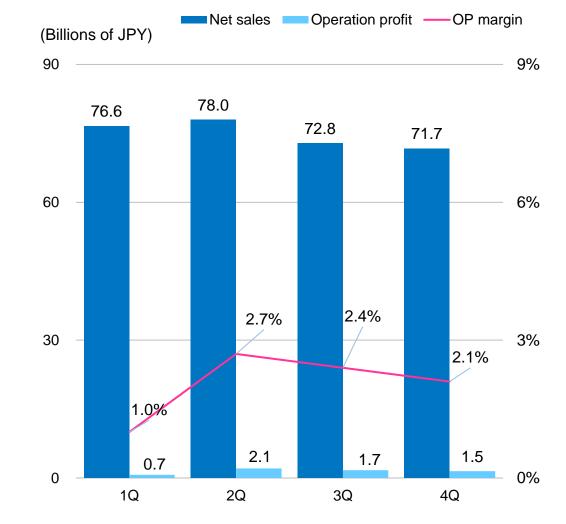
Journey towards stronger corporate governance

# **Reference Material**

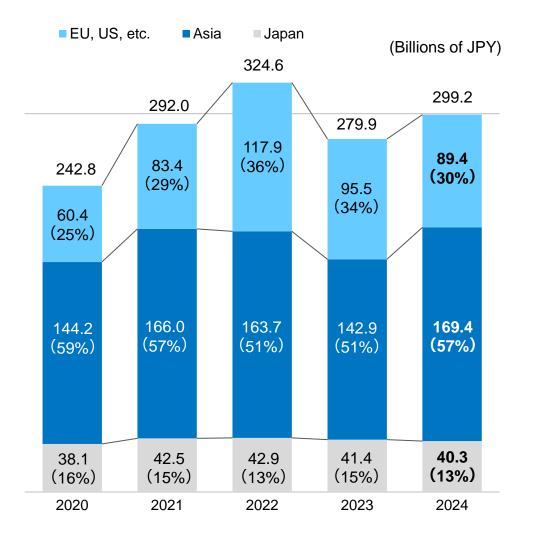




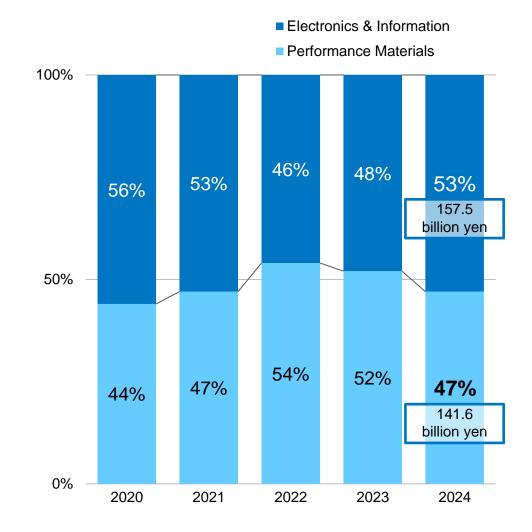
■ Quarterly trend for FY2024



Trend of sales by region

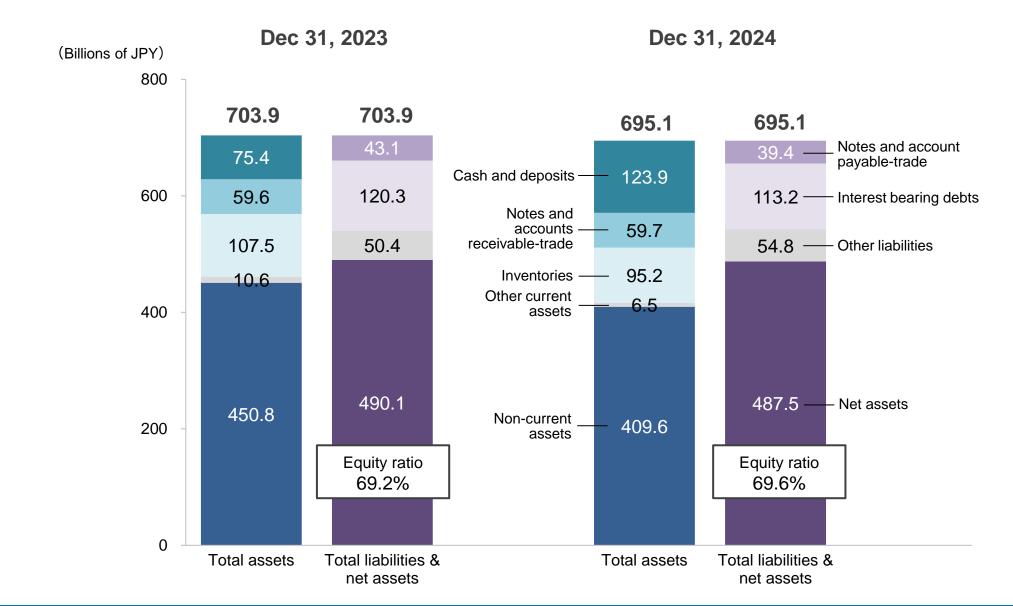


#### ■ Trend of sales by business



# Consolidated Balance Sheet

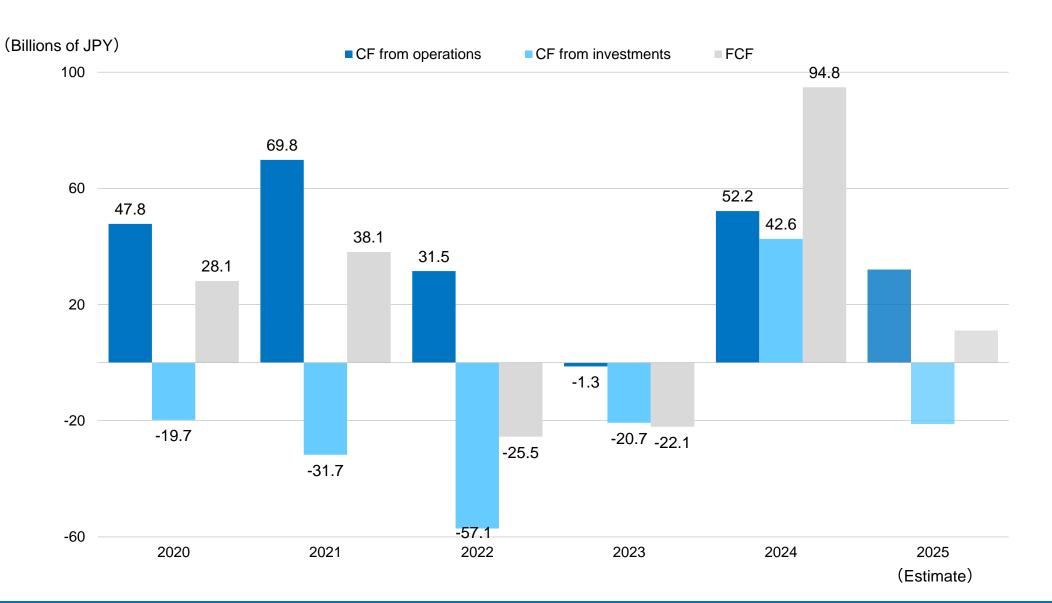
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**Cash Flows** 

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For the period of EGP2028		
Approach	<ul> <li>Our basic policy is to maintain a long-term and stable return of profit to shareholders that is not significantly affected by fluctuations in earnings.</li> <li>We will work to enhance shareholder returns while managing our balance sheet in consideration of financial stability and capital efficiency and securing earnings to prepare for future growth.</li> </ul>	
Dividend	<ul> <li>Continuous expansion of dividend: Toward a target DOE of 3%: Based on stable dividend, enhance dividends based on performance, financial condition, growth investment, etc.</li> </ul>	
Share Buyback	<ul> <li>Plan to carry out share repurchased of 100 billion yen in total over the five- year period from November 2023 to December 2028 in order to improve capital efficiency.</li> </ul>	

# Skill Matrix Updated

### Re-aligning board members' skills to be better prepared to realize EGP 2028

	Position in the company	Indepen- dent	Gender	Nomination and remuneration advisory committee	Major knowledge, experience, and capabilities						
Name					Corporate management and business strategy	Finance and accounting	Legal and compliance	R&D, process development and quality	Sales and marketing	Global	Sustainability
Motoharu Matsumoto	Chairman of the board (Representative)		Male	Ο	0	Ο	Ο		0	0	Ο
Akira Kishimoto	President (Representative)		Male	0	0		0	0	0	0	Ο
Mamoru Morii	Director		Male		0	0	0		0	0	0
Reiko Urade	Director	0	Female	0				0			0
Hiroyuki Ito	Director	0	Male	0	0		0				
Yoshio Ito	Director	0	Male	© Chairperson	0			Ο	0	0	
Nahomi Aoto	Director	0	Female	0				Ο		0	
Yoshihisa Hayashi	Corporate auditor		Male				0				0
Toshiharu Narita	Corporate auditor		Male					Ο			Ο
Yukihiro Yagura	Corporate auditor	0	Male			0	0				
Hiroji Indoh	Corporate auditor	0	Male				0				

\*Position in the company and Nomination and remuneration advisory committee are listed after the shareholder's meeting (To be appointed by the Board of Directors following the conclusion of the General Meeting of Shareholders).

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# **Corporate Information**

Main Business							
Electronics & Information Technology							
Displays	Glass for LCDs Glass for OLED Displays Specialty Glass for Chemical Strengthening Dinorex <sup>®</sup>						
Electronics	Glass for Semiconductor Process LTCC Products Functional Powdered Glass Sheet Glass for Image Sensors Glass Tube for Small Electronic Products Glass for Optoelectronics Phosphor-Glass Composites Lumiphous <sup>™</sup>						
Performance Mater	ials						
Composites	Chopped Strands for Function Plastic Reinforcement Wet Chopped Strands for Building Materials Roving for Plastics Reinforcement Chopped-Strand Mats for Automobiles Alkali-Resistant Glass Fiber for Cement Reinforcement WizARG <sup>™</sup>						
Medical Care	Glass Tubing for Pharmaceutical and Medical Use Radiation-Shielding Glass LX premium						
Heat-Resistance	Super Heat-Resistant Glass-Ceramics Neoceram Super Heat-Resistant Glass-Ceramics for Cooking Appliance Top Plates StellaShine <sup>®</sup>						
Buildings	Fire Rated Glass Firelite <sup>®</sup> Glass Blocks Ceramic Building Materials Neoparies <sup>®</sup>						
Others	Glass for Lighting Use Glass Making Machinery						

### Corporate Information

Name:	Nippon Electric Glass Co.,Ltd.				
Head Office:	7-1, Seiran 2-chome, Otsu, Shiga 520-8639, Japan				
Founded:	Dec 1, 1949				
Representative	Motoharu Matsumoto, Chairman of the Board Akira Kishimoto, President				
Capital:	32.1 billion JPY				
Employees:	5,498 (Group total as of Dec. 31, 2024)				
Business:	Production and sales of special glass products, and manufacture and sales of glass making machinery				
Plants:	Otsu, Shiga-Takatsuki, Notogawa, Precision Glass Center				
Sales Office:	Osaka and Tokyo				
Consolidated Companies	10 in Japan 14 overseas (Malaysia, Korea, China, Taiwan, Europe, US)				

# Note regarding earnings forecasts

- The forward-looking statements, including earnings forecasts, contained in these materials are based on certain assumptions deemed to be reasonable by the Company at the present moment and include risks and contingencies.
- Actual business results may differ substantially from the earnings forecasts due to a number of factors.



# **Nippon Electric Glass**