Publication of Integrated Report 2023

Through this annual Integrated Report, Nippon Electric Glass has sought to communicate with its stakeholders and continuously improve its information disclosure. Integrated Report 2023 aims to provide easy-to-understand financial and non-financial information in areas such as value creation processes, key strategies, and ESG, with a focus on our EGP2028 Medium-term Business Plan.

The purpose of this report is to convey activities for raising corporate value with the goal of being the world’s leading manufacturer of special glass, in the process strengthening dialogue with all of our stakeholders.

Editorial Policy

- Organizations covered
  The Nippon Electric Glass Group’s 10 companies in Japan and 14 companies outside Japan are covered in this report. In cases where the coverage area of the data differs, we have indicated the appropriate coverage areas respectively. Note that Electric Glass Fiber NL, B.V. commenced bankruptcy proceedings on September 26, 2023 and has since been excluded from NEG’s consolidated data.

- Period of reporting
  Fiscal 2023 (January 2023 to December 2023). Some qualitative information regarding fiscal 2024 has also been included in this report.

- Publication, next scheduled publication
  Issued in May 2024. Next scheduled issue in May 2025.

- Editorial guidelines
  IFRS International Integrated Reporting Framework, GRI Standards, and others. The GRI Content Index can be found at https://www.neg.co.jp/en/csr/.

- Disclosure policy
  The Group Code of Conduct stipulates that our Group will disclose necessary corporate information in a timely and appropriate manner to enhance communication with concerned parties. Following this policy, we will continue to disclose important information related to our Group’s activities to all stakeholders, including shareholders and investors, in a timely and appropriate manner.

- Caution concerning forward-looking statements
  Statements in this Integrated Report with respect to our Group’s plans, outlooks, strategies, and other statements that are not historical facts, are forward-looking statements involving risks and uncertainties. Please be aware that actual results may differ significantly from these statements due to various factors.

ESG Databook

For stakeholders who are particularly interested in learning about our ESG-related investment, we have compiled the ESG-related information from the Integrated Report 2023, the NEG website, and from elsewhere into our ESG Databook 2023. Visit https://www.neg.co.jp/en/csr/ to download the ESG Databook 2023.
At Nippon Electric Glass, our corporate philosophy is a reflection of our founding mission, a statement of our devotion to creating products infused with the very best of human civilization for the betterment of society.

We strive to build a brighter future for the world by uncovering the unlimited possibilities of glass for more advanced creative manufacturing.

Firmly rooted in the traditions of our founding mission, the NEG corporate philosophy plots a path for our quest for sustainable growth. Thanks to material design, melting, forming, and processing technologies, glass can be infused with different properties for a broad range of functions. We are dedicated to unlocking glass’s potential to make life better and more comfortable for people and communities the world over.

Our corporate philosophy

Our vision

The world’s leading manufacturer of special glass

Our goal is to become the world’s leading manufacturer of special glass, with the best talent, the best technology, and the best creative manufacturing ability.

At the same time, we strive to run our company in a way that inspires pride among our workers and enables us to make a genuine contribution to the community.

The way we see it, creative manufacturing is achieved through state-of-the-art technological development, the highest quality standards, efficient production, and a steady supply of products, all underpinned by a fundamental dedication to environmental sustainability.

Our values

Customer first
Everything is based on accurate understanding and complete satisfaction of customers’ requirements.

Get the job done
We are dedicated to completing every task properly.

Broad minds and open communication
We think beyond existing norms and encourage frank communication among all departments and generations.

Our corporate philosophy

High ethical standards
We are bound to act ethically and in good faith in all situations.

Consideration for the environment
We are constantly aware of the need to be considerate of the environment, and strive to reduce our footprint.

G L A S S F O R F U T U R E
History of Transformations and Advances

Technological Advances

- 1951: Automated production of glass tubing using the Danner process
- 1974: All-electric melting furnaces with no fuel-derived CO₂ emissions brought online
- 1999: Stacked production of glass fibers in Malaysia
- 2002: Thermoelectric power generation in a glass factory
- 2003: Introduction of cutting-edge environmental equipment
- 2008: Roll-to-roll process achieved for ultra-thin (55 μm) sheet glass
- 2010: Developed reprocessing of dust collected from furnace exhaust using a glass-ceramic technology
- 2011: Developed reprocessing of dust collected from furnace exhaust using a glass-ceramic technology
- 2016: Acquired the European composites business from U.S.-based PPG Industries
- 2017: Acquired the U.S. phosphor-glass composites business
- 2019: Developed a one-step glass melting technology
- 2022: Development of glass-fibre mat manufacturing technology

Applying technologies to expand our business as a leading special glass manufacturer

In the 1960s we set up a global production and supply system to meet global demand for CRTs, and grew into one of the world’s leading CRT glass manufacturers. As LCDs started to become prevalent in the latter half of the 1990s, we made strategic preparations to adapt to the changing market conditions.

Promoting global business as overseas markets expand

In the 1990s we set up a global production and supply system to meet global demand for CRTs, and grew into one of the world’s leading CRT glass manufacturers. As LCDs started to become prevalent in the latter half of the 1990s, we made strategic preparations to adapt to the changing market conditions.

Sustainability Transitions

- 1960: Introduced the melting furnace with electric melting process
- 1971: Established Nitogawa Plant, introduced cutting-edge environmental equipment (eco-friendly model factory)
- 1993: First oxy-fuel-lining furnaces introduced, resulting in a reduction of CO₂ emissions and improvement of heat efficiency
- 1999: Received ISO 14001 certification for all plants in Japan
- 2000: Implemented Environmental Business Plan
- 2010: Fuel conversion (combustion from heavy oil to LPG/natural gas), resulting in a reduction of CO₂ emissions
- 2015: Participated in visiting lectures sponsored by Otsu City (ongoing)
- 2019: Certified with top ranking (three stars) as a company embracing Shiga Prefecture Biodiversity Initiative (reviewed in 2022)
- 2022: Raised funds via green loan financing

The end of the CRT and changeover to LCDs

To match the rapid growth of the LCD market, in 2000 we started producing glass substitutes for LCDs using a counter-process. Year by year we worked on producing better, higher-quality substitutes to meet the demands for increasing complexity in the LCD market. Businesses also expanded in glass fiber for strengthening high-function plastics and glass tubing for pharmaceutical and medical use.

Building a new axis for growth to become the world’s leading manufacturer of special glass

We launched a new axis for growth to become the world’s leading manufacturer of special glass. We set up a global production and supply system to meet global demand for CRTs, and grew into one of the world’s leading CRT glass manufacturers. As LCDs started to become prevalent in the latter half of the 1990s, we made strategic preparations to adapt to the changing market conditions.

- 2000: Production of LCD substrate glass by applying the overflow process
- 2008: Roll-to-roll process achieved for ultra-thin (55 μm) sheet glass
- 2019: Establishment of an innovative manufacturing process in LCD glass
- 2019: Developed a one-step glass melting technology
- 2020: Developed a one-step glass melting technology
- 2023: Developed a one-step glass melting technology

Financial and Corporate Information

- Net sales in 2000: 200 billion yen
- Net sales in 2010: 100 billion yen
- Net sales in 2019: 100 billion yen
- Net sales in 2022: 10 billion yen
- Net sales in 2023: 10 billion yen
Strengthening our unique technologies

Creating new value with technology

Over the years, we have developed a wide range of glass technologies including material design and evaluation, melting, forming, and processing. These technologies are brought together in our production facilities, which are the foundation for the development of new applied technologies. It is through these technologies that we can create unique, high-function glass products.

Core technologies

Value Creation Strategies

Meeting market needs for new products through collaboration between R&D and production departments

With a foundation of core technologies in areas such as basic research, design and development of materials and processes, and property evaluation, we combine technologies such as compounding and coating to further improve the function of glass as we develop and commercialize products.

Value Creation Story

Clean technologies

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms

Creative value creation

Creating new value with glass that takes a variety of forms and functions

Glass is an exceptional material that takes a variety of forms and functions based on how the chemical elements are combined or formulated. The texture and luster are its best attributes. Glass from our production line takes many forms and shapes and is used in a wide variety of fields.

Variety of forms
Utilizing six resources of capital for our business operations, we provide value to society through our innovative products. We will continue our efforts to realize sustainable societies.
In each process of the value chain, we strive to increase the positive effects of our business activities and minimize the negative effects. We will continue to work hand-in-hand with our stakeholders in order to raise corporate value, solve society’s problems, and achieve the SDGs.

### Value Chain

- **Increase**
  - Glass tubing for pharmaceutical and medical use
  - Radiation-shielding glass for patient diagnosis
  - UV-transmitting glass for medical use
  - Antibacterial glass
  - Glass fiber for plastics reinforcement to reduce the weight of automobiles
  - Glass fiber for plastics reinforcement for wind turbine blades
  - Glass substrates for FPDs, G-Leaf™ ultra-thin glass
  - Lamion™ lightweight composite material
  - Lumiphous™ phosphor-glass composite
  - Glass fiber for reinforcement in construction
  - Development and sales of glass for optical communication and electronic devices
  - Glass for the semiconductor fabrication process
  - FireLite™ fire-rated glass for fireproof public facilities
  - Glass fiber for reinforcement in construction

- **Reusing**
  - Recycling water and raw materials
  - Capture and reuse of exhaust gas
  - Extending the life of facilities
  - Global warming mitigation measures (e.g., reduction of CO₂ emissions)
  - Environmental education

- **Minimize**
  - Using resources effectively
  - Recycling water and raw materials
  - Reduction of environmentally harmful substances
  - Avoiding use of conflict minerals
  - Forbidding of child labor
  - Compliance with the U.K.’s Modern Slavery Act
  - Human rights due diligence
  - Basic procurement policy

- **Support**
  - Donations to local communities
  - Support for the socially vulnerable
  - Improving health and productivity management
  - Endowment courses at University of Shiga Prefecture and Kyoto University
  - Science education for schools (send NEG employees to teach)
  - Support for the Biwako Floating School
  - Support for the socially vulnerable
  - Endowment courses at University of Shiga Prefecture and Kyoto University

- **Hiring and training of the disabled**
- **Self-development programs**
- **Hiring and training of the disabled**
- **Self-development programs**

- **Supporting local forestry association activities**
- **Removal of invasive fish species in Lake Biwa**
- **Forest conservation around factories**

- **Addressing human rights risks**
  - Committee on Human Rights Issues
  - Shiga Prefecture Human Rights Issues Liaison Committee (corporate board member)
  - Compliance with the U.K.’s Modern Slavery Act
  - Compliance with Japan’s Equal Employment Opportunity Act

- **Supporting local forestry association activities**
- **Removal of invasive fish species in Lake Biwa**
- **Forest conservation around factories**

- **Endowment courses at University of Shiga Prefecture and Kyoto University**
- **Science education for schools (send NEG employees to teach)**
- **Support for the Biwako Floating School**
- **Factory tours**
- **Health and safety activities**
- **Donations to local communities**
- **Support for the socially vulnerable**

- **Endowment courses at University of Shiga Prefecture and Kyoto University**
- **Science education for schools (send NEG employees to teach)**
- **Support for the Biwako Floating School**
- **Factory tours**
- **Health and safety activities**
- **Donations to local communities**
- **Support for the socially vulnerable**

- **Using resources effectively**
- **Recycling water and raw materials**
- **Reduction of environmentally harmful substances**
- **Avoiding use of conflict minerals**
- **Forbidding of child labor**
- Compliance with the U.K.’s Modern Slavery Act
- Human rights due diligence
- Basic procurement policy

- **Richard in procurement**
- **Recycling packaging**
- **Modal shift in shipping**
- **Joint shipping with customers**
- **Modal shift in shipping**
- **Joint shipping with customers**
- **Modal shift in shipping**
- **Joint shipping with customers**
- **Modal shift in shipping**
- **Joint shipping with customers**

### About Nippon Electric Glass

- **Value Creation Story**
  - Value Creation Strategies
  - The Foundation of Value Creation (ESG)

- **Financial and Corporate Information**
Nippon Electric Glass makes special glass products that provide a range of solutions through the limitless possibilities of glass. These possibilities support society wherever you look, whether it’s in the electronic devices all around us, or in automobiles, offices, hospitals, or infrastructure.

### Making our lives convenient and comfortable
Glass supports our lifestyles in many ways: as heat-resistant glass that resists sudden heat changes in home appliances and housing materials, and as glass fiber in roofs and flooring.

#### Supporting advancements in medical care
Glass contributes to advancements and greater safety in the medical field. It’s used in glass tubing for pharmaceutical and medical use, and radiation-shielding glass protects medical personnel from radiation exposure.

#### Providing safety and security for society
We provide ground-breaking products, such as fire-rated glass for preventing or lessening damage from disasters, and glass fiber for reinforcing concrete.

#### Providing new value in image technologies
Image devices are becoming increasingly diverse in mobile and other fields. Our technological strength is behind advancements in displays that are becoming larger and higher resolution, and flexible.

#### Helping spread renewable energy
NEG contributes to the spread of renewable energy, for example, with glass fiber that strengthens wind turbine blades for wind power generation, and ultra-thin glass used to cover solar cells on artificial satellites.

#### Contributing to automotive advancements
NEG’s high-performance glass products provide solutions in the automotive sector, where improving the environmental performance of automobiles and developing driving assistance systems are key challenges.

#### Supporting semiconductor production indispensable to industry
Whatever kind of electronic device—computers, home appliances, automobiles—they’re used in, semiconductor products are crucial to making our lives comfortable. Supporting the semiconductor field is our range of high-performance glass products.

#### Key devices behind ICT
Change in the ICT field is fast and revolutionary. With its superb properties, glass plays a vital role in the parts for optical and electronic devices that support advanced ICT.
Financial and Non-financial Highlights

**Financial Highlights (Consolidated)**

**Net Sales, Ratio of Overseas Net Sales**

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Sales (Billion yen)</th>
<th>Ratio of overseas net sales (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>257.1</td>
<td>85.5</td>
</tr>
<tr>
<td>2020</td>
<td>263.8</td>
<td>86.4</td>
</tr>
<tr>
<td>2021</td>
<td>282.9</td>
<td>86.8</td>
</tr>
<tr>
<td>2022</td>
<td>307.0</td>
<td>85.2</td>
</tr>
</tbody>
</table>

**Cash Flows**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash flows from operations (Billion yen)</th>
<th>Cash flows from investments (Billion yen)</th>
<th>Free cash flows (Billion yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>21.6</td>
<td>-2.0</td>
<td>-11.1</td>
</tr>
<tr>
<td>2020</td>
<td>21.0</td>
<td>-2.2</td>
<td>-12.9</td>
</tr>
<tr>
<td>2021</td>
<td>21.8</td>
<td>-2.5</td>
<td>-12.8</td>
</tr>
<tr>
<td>2022</td>
<td>20.8</td>
<td>-2.3</td>
<td>-12.5</td>
</tr>
<tr>
<td>2023</td>
<td>20.5</td>
<td>-2.2</td>
<td>-12.3</td>
</tr>
</tbody>
</table>

**Operating Profit, Operating Profit Ratio**

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating profit (Billion yen)</th>
<th>Operating profit ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>124.4</td>
<td>54.6</td>
</tr>
<tr>
<td>2020</td>
<td>136.2</td>
<td>50.5</td>
</tr>
<tr>
<td>2021</td>
<td>146.7</td>
<td>51.3</td>
</tr>
<tr>
<td>2022</td>
<td>143.2</td>
<td>50.0</td>
</tr>
<tr>
<td>2023</td>
<td>144.7</td>
<td>51.2</td>
</tr>
</tbody>
</table>

**Net Assets, Liabilities**

<table>
<thead>
<tr>
<th>Year</th>
<th>Net assets (Billion yen)</th>
<th>Liabilities (Billion yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>477.1</td>
<td>187.6</td>
</tr>
<tr>
<td>2020</td>
<td>490.1</td>
<td>198.3</td>
</tr>
<tr>
<td>2021</td>
<td>518.9</td>
<td>213.7</td>
</tr>
<tr>
<td>2022</td>
<td>528.8</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>509.1</td>
<td></td>
</tr>
</tbody>
</table>

**Non-financial Highlights**

**Percentage of Women (employees, managers, recruits) (NEG)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of female employees (%)</th>
<th>Percentage of female managers (%)</th>
<th>Percentage of female employees in managerial positions (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>13.0</td>
<td>16.6</td>
<td>25.5</td>
</tr>
<tr>
<td>2020</td>
<td>13.5</td>
<td>16.8</td>
<td>23.0</td>
</tr>
<tr>
<td>2021</td>
<td>13.6</td>
<td>16.8</td>
<td>21.1</td>
</tr>
<tr>
<td>2022</td>
<td>13.7</td>
<td>16.8</td>
<td>20.8</td>
</tr>
<tr>
<td>2023</td>
<td>13.8</td>
<td>16.8</td>
<td>20.8</td>
</tr>
</tbody>
</table>

**Percentage of Employees with Disabilities (NEG and consolidated subsidiaries in Japan)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of employees with disabilities (%)</th>
<th>Statutory employment rate in Japan (%)</th>
<th>National average (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>4.1</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>2020</td>
<td>4.1</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>2021</td>
<td>4.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>2022</td>
<td>4.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>2023</td>
<td>4.1</td>
<td>2.3</td>
<td>2.3</td>
</tr>
</tbody>
</table>

**Industrial Accident Frequency Rate (NEG)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate (injury rate per million yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>1.3</td>
</tr>
<tr>
<td>2020</td>
<td>1.3</td>
</tr>
<tr>
<td>2021</td>
<td>1.3</td>
</tr>
<tr>
<td>2022</td>
<td>1.3</td>
</tr>
<tr>
<td>2023</td>
<td>1.3</td>
</tr>
</tbody>
</table>

**CO₂ Emissions Intensity (to consolidated sales)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Emissions intensity (t-CO₂/million yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>0.9</td>
</tr>
<tr>
<td>2020</td>
<td>0.9</td>
</tr>
<tr>
<td>2021</td>
<td>0.9</td>
</tr>
<tr>
<td>2022</td>
<td>0.9</td>
</tr>
<tr>
<td>2023</td>
<td>0.9</td>
</tr>
</tbody>
</table>

**About Nippon Electric Glass**

Value Creation Story
Value Creation Strategies
The Foundation of Value Creation (ESG)
Financial and Corporate Information
Message from the President

New EGP2028 medium-term business plan for continuous growth and increased corporate value

If I had to sum up fiscal 2023 in one word, it would be “turbulent.” Raw material and fuel prices remained high due to supply chain disruptions caused by Russia’s invasion of Ukraine, and these high prices, in turn, drove up the cost of everything else. Given this state of affairs, shipments of related NEG products declined due to lackluster demand, lowering capacity utilization rates and, with the rapid depreciation of the yen, leading to a significant increase in manufacturing costs. At the beginning of the fiscal year, we predicted a gradual recovery in market conditions starting around summer. However, the timing of recovery ended up being later than anticipated, and the full-year results were unprecedented, with negative operating profit, ordinary profit, and net income.

I will now discuss the situation for each of our businesses. First is the electronics and information technology segment. In the displays business, we pursued aggressive capital investment in China, a key market, from 2021 to 2022, when business was strong due to special demand during the COVID-19 pandemic. However, preemption of demand following the pandemic resulted in adjustments that saw supply and demand change completely, and both shipments and capacity utilization fell significantly. This was compounded by soaring raw material and fuel prices, which significantly drove up manufacturing costs, resulting in slumping business performance. The electronics business was also sluggish overall; however, shipments of semiconductor-related products expanded more than expected, which is a positive sign for the future. In the performance materials segment, medical care and heat resistance-related demand was sluggish, but, because we were able to expand sales of fire-rated glass, the buildings business experienced an increase in sales. For the composites business, factors such as the time required to eliminate excess inventory in the supply chain due to a lack of recovery in key automotive-related demand prolonged the difficult situation.

Given all of this, we implemented drastic structural reforms in our two main businesses, displays and composites, in order to effect a fundamental recovery in business performance. First, in the displays business, demand in the Korean market has shrunk due to a market shift to China, resulting in a rapid deterioration in profitability at our Korean subsidiaries. Thus, we closed down our processing company Nippon Electric Glass (Korea) Co., Ltd. and our melting/forming company Electric Glass (Korea) Co., Ltd. in the first half of fiscal 2023. In the composites business, we closed Electric Glass Fiber NL, B.V., a subsidiary in the Netherlands, in the second half of fiscal 2023, due to continued unprofitability caused by soaring energy prices, labor costs, and sluggish demand. Each of these closures was a tough decision that involved significant impairment losses and caused concern for all of our stakeholders. However, they were decisions made following thorough discussion about the production system for the NEG Group as a whole and getting us on the path to profitability.

Reflecting on the past year, if there is one thing that was left behind, it is development. When I assumed the position of president last year, I stated that I was resolved to promote development. All of our past presidents have had experience in our core businesses of displays and composites, but, as for myself, my primary involvement since joining NEG has been in electronics departments handling the development of glass applications. I recognize that the mission I have been tasked with is nothing less than the creation of a third and fourth business pillar alongside our existing core businesses. However, development assumes that the existing businesses are solid. In fiscal 2023, because two of our main businesses were unstable, we were focused on their recovery and on reviewing our production system, including overseas production bases. Moving forward, I want to visit development sites as much as possible to interact with the younger engineers while providing active support for their work.

President
Akira Kishimoto

New EGP2028 medium-term business plan for continuous growth and increased corporate value

Reflecting on fiscal 2023—
Rebuilding core businesses and undertaking bold structural reforms

If I had to sum up fiscal 2023 in one word, it would be “turbulent.” Raw material and fuel prices remained high due to supply chain disruptions caused by Russia’s invasion of Ukraine, and these high prices, in turn, drove up the cost of everything else. Given this state of affairs, shipments of related NEG products declined due to lackluster demand, lowering capacity utilization rates and, with the rapid depreciation of the yen, leading to a significant increase in manufacturing costs. At the beginning of the fiscal year, we predicted a gradual recovery in market conditions starting around summer. However, the timing of recovery ended up being later than anticipated, and the full-year results were unprecedented, with negative operating profit, ordinary profit, and net income.

I will now discuss the situation for each of our businesses. First is the electronics and information technology segment. In the displays business, we pursued aggressive capital investment in China, a key market, from 2021 to 2022, when business was strong due to special demand during the COVID-19 pandemic. However, preemption of demand following the pandemic resulted in adjustments that saw supply and demand change completely, and both shipments and capacity utilization fell significantly. This was compounded by soaring raw material and fuel prices, which significantly drove up manufacturing costs, resulting in slumping business performance. The electronics business was also sluggish overall; however, shipments of semiconductor-related products expanded more than expected, which is a positive sign for the future. In the performance materials segment, medical care and heat resistance-related demand was sluggish, but, because we were able to expand sales of fire-rated glass, the buildings business experienced an increase in sales. For the composites business, factors such as the time required to eliminate excess inventory in the supply chain due to a lack of recovery in key automotive-related demand prolonged the difficult situation.

Given all of this, we implemented drastic structural reforms in our two main businesses, displays and composites, in order to effect a fundamental recovery in business performance. First, in the displays business, demand in the Korean market has shrunk due to a market shift to China, resulting in a rapid deterioration in profitability at our Korean subsidiaries. Thus, we closed down our processing company Nippon Electric Glass (Korea) Co., Ltd. and our melting/forming company Electric Glass (Korea) Co., Ltd. in the first half of fiscal 2023. In the composites business, we closed Electric Glass Fiber NL, B.V., a subsidiary in the Netherlands, in the second half of fiscal 2023, due to continued unprofitability caused by soaring energy prices, labor costs, and sluggish demand. Each of these closures was a tough decision that involved significant impairment losses and caused concern for all of our stakeholders. However, they were decisions made following thorough discussion about the production system for the NEG Group as a whole and getting us on the path to profitability.

Reflecting on the past year, if there is one thing that was left behind, it is development. When I assumed the position of president last year, I stated that I was resolved to promote development. All of our past presidents have had experience in our core businesses of displays and composites, but, as for myself, my primary involvement since joining NEG has been in electronics departments handling the development of glass applications. I recognize that the mission I have been tasked with is nothing less than the creation of a third and fourth business pillar alongside our existing core businesses. However, development assumes that the existing businesses are solid. In fiscal 2023, because two of our main businesses were unstable, we were focused on their recovery and on reviewing our production system, including overseas production bases. Moving forward, I want to visit development sites as much as possible to interact with the younger engineers while providing active support for development work.

President
Akira Kishimoto
Message from the President

Fiscal 2024 outlook and new medium-term business plan EGP2028

Thanks to the structural reforms begun last year, as well as the progress made in improving productivity company-wide, we are finally in a position to generate profits. Based on this, we have set as our performance targets for fiscal 2024 net sales of 310 billion yen, operating profit of 16 billion yen, and an operating profit ratio of 5.2%.

In terms of business-specific outlook, the displays business has emerged from a year-and-a-half slump and things are finally starting to look up. Our production lines are currently operating at full capacity, and we expect the market to continue to steadily recover. The electronics business as a whole is beginning to show signs of recovery, and we expect the composites business, we think this is a source of great concern for our stakeholders. As I said at the beginning, fiscal 2023 is the first year that we have recorded an operating loss since we went public, and this is a source of great concern for our stakeholders. Although the business environment remains unpredictable, we will overcome the adversities that we are facing, and through the steady implementation of EGP2028, we will endeavor to put our slogan “Strong growth” into practice. In fiscal 2024, the start of EGP2028, we will pursue development as part of an even greater effort to establish our next business pillars. I ask for your continued support.

Build up our track record via newly developed, promising products

With regard to newly developed products, we plan to commercialize our all-solid-state sodium-ion (Na) secondary batteries within fiscal 2024 and to achieve sales of 10 billion yen within the period set for EGP2028. Conventional lithium-ion secondary batteries utilize a liquid electrolyte, causing their performance to drop significantly in environments where the temperature drops below 0°C. But our all-solid-state sodium-ion secondary batteries have an extremely broad operating range of –40°C to +200°C and will not catch fire, even when subjected to deformation. We are pursuing development with a view to use in electronic equipment, stationary use in connection with solar power generation and, in the future, use within the automotive industry. Our first objective is to build a track record in fields where we can capitalize on the batteries’ distinctive advantages of excellent safety and stability, a broad operating temperature range, and a high degree of design freedom. In addition, we are actively exploring new fields, such as far-infrared transmitting glass that can be used in sensing devices for self-driving cars and ultra-thin cover glasses for satellites and solar panels, which will contribute to the longevity and weight reduction of satellites.

Continued advancement of environmental and human resource measures

One of the sustainability strategies that we are pursuing as part of EGP2028 is carbon neutrality, with the most important pillar of this strategy being transition from gas-fired furnaces to all-electric melting furnaces. All-electric melting furnaces heat molten glass through the direct application of electricity, making them extremely energy efficient as well as giving them the advantage of being environmentally friendly due to the fact that they do not emit CO2 from combustion. We are timing our transition to all-electric melting furnaces to coincide with our regular maintenance and repair schedules. In conjunction with other measures, our goal is to achieve a 36% reduction in CO2 emissions by 2030 compared to 2018 and, by 2050, to achieve carbon neutrality.

Our human resource strategy is also a crucial component of our sustainability strategy. Manufacturing and development, both ultimately come down to people. No matter how advanced AI becomes, I believe that human resources are what is most important, and we are increasing our investment in human capital. We provide new employees with thorough group training and on-site training over a period of approximately one year. We also focus on work-related training—such as global human resource training, skills training, and D&I/data science training—that supports each individual’s career development. At the same time, we are striving for workplace diversity by, for example, actively recruiting mid-career personnel, furthering the participation of women, and creating systems that enable diverse work styles.

Furthermore, we are committed to the cultivation of a highly engaged organization that is attractive to workers. We believe that an open corporate culture marked by mutual support, opinion sharing, and free and honest discussion is the foundation for realizing competitiveness. It is my responsibility to ensure we are a robustly vital company with a shared sense of values where each employee is motivated to make use of their talents to contribute to it.

To our stakeholders

Through dialogue with our customers, business partners, shareholders, investors, and various other stakeholders since assuming the position of president, I am keenly aware of the great expectations that exist for myself. As I said at the beginning, fiscal 2023 is the first year that we have recorded an operating loss since we went public, and this is a source of great concern for our stakeholders. Although the business environment remains unpredictable, we will overcome the adversities that we are facing, and through the steady implementation of EGP2028, we will endeavor to put our slogan “Strong growth” into practice. In fiscal 2024, the start of EGP2028, we will pursue development as part of an even greater effort to establish our next business pillars. I ask for your continued support.
Outline of the EGP2028 Medium-term Business Plan (2024–2028)

**“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.

- **Net sales**: 400 billion yen
- **Operating profit**: 50 billion yen
- **Operating margin**: 12.5%
- **ROE**: 8%
- **Equity level**: Approx. 400 billion yen

**EGP2028 Outline of corporate strategy**

**Positioning of EGP2028**

- **Basis for growth**
  - Expansion of electronic business and development of new businesses
  - Performance Materials
  - New businesses

**Business Strategy**

1. **Reinforcement of existing businesses**
   - Strengthen the business foundation (EGP2028)
   - Promote research and development (Promote research and development technology)
   - Improve business efficiency (Efficient operation of existing businesses)

2. **Expansion of strategic businesses**
   - Expansion of strategic businesses (Expansion of strategic businesses)
   - Expansion of strategic businesses (Expansion of strategic businesses)
   - Expansion of strategic businesses (Expansion of strategic businesses)

3. **Financial Strategy**

   - **B/S management and enhancement of shareholder returns**
     - Increment of retained earnings by improving competitiveness
     - Share repurchases
     - Continuous dividend expansion

   - **Sustainability Strategy**
     - Promote carbon neutrality
     - Human resource strategy
     - Supply chain management
**Value Creation Story**

**Message from the CFO**

Aiming for 8% ROE through business performance restoration and balance sheet management focused on financial stability and return on capital

Director and Senior Vice President  Mamoru Morii

---

**EGP2028 Medium-term Business Plan**

**Financial Strategy**

In the newly formulated EGP2028 Medium-term Business Plan, we have added ROE (return on equity) to our business targets for the sake of improving corporate value. When we were developing EGP2028, we began by making sure there was a common understanding among the members of the Board of Directors about the stock market's evaluation of our company and our company's cost of shareholder equity (expected rate of return). Regarding our stock market valuation, our PBR (price-to-book ratio) for the past 10 years has remained below 1x. As for the cost of shareholder equity, although there are some variations depending on calculation method and assumptions, in our case it is approximately 7%. In order to improve corporate value in the future, it will be important to achieve ROE that exceeds this cost of shareholder equity and increase capital efficiency. Of course, the higher the ROE, the better, but we have set a value of 8% based on our current business performance and the desire to firmly build up our ability to clear the cost of shareholder equity.

At the same time, we discussed what the appropriate capital structure should be. The NEG Group’s business tends to be significantly affected by changes in the economic environment because we have production bases around the world and are dependent on specific industries, such as electrical, electronic, and automotive. Given these circumstances, a certain level of equity capital is necessary to continue our operations in the glass business, an equipment industry. Our discussions incorporated outside opinions and focused not only on capital efficiency but also financial stability. These discussions served as the basis upon which the specifics of EGP2028 were formulated.

Over the five years of EGP2028, we plan to generate solid profits while reducing shareholder equity to about 400 billion yen through a reduction in assets and enhancement of shareholder returns.

**EGP2028 will generate profits but shareholder equity will be reduced to about 400 billion yen**

---

**Cash Allocation**

In order to provide shareholders with a deeper understanding, I want to make clear how we will allocate cash over the next five years.

Starting in fiscal 2024, we expect to generate solid profits over a five-year period and have an operating cash flow of 230 billion yen. In addition, we anticipate a cash inflow of 350 billion yen, including 120 billion yen of funds obtained through business reforms and asset sales. Using this capital, we plan to allocate a total of 210 billion yen to investments, including 50 billion yen in strategic investments and a total of 140 billion yen to shareholder returns. In order to increase corporate value, we intend to make efficient use of the cash generated while maintaining a balance between growth investments and shareholder returns.

<table>
<thead>
<tr>
<th>Improve corporate value via allocation that maintains a balance between growth investment and shareholder returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
</tr>
<tr>
<td>Operating cash flow</td>
</tr>
<tr>
<td>230 billion yen</td>
</tr>
<tr>
<td>Depreciation/130 billion yen</td>
</tr>
<tr>
<td>Shareholder return (Dividends, share repurchases)</td>
</tr>
<tr>
<td>120 billion yen</td>
</tr>
</tbody>
</table>

---

**Shareholder Return**

With regard to shareholder return, our basic policy is to pursue financial stability and capital efficiency-focused balance sheet management and to enhance shareholder return while securing internal reserves for future growth.

First, in order to improve capital efficiency, we plan to repurchase shares totaling 110 billion yen over approximately five years between November 2023 and the end of December 2028. We have already repurchased approximately 20 billion yen of shares between November 2023 and February 2024. Moving forward, we will carry out repurchases based on a variety of considerations, including business progress and cash obtained from structural reforms, asset reduction, and other efforts.

With regard to dividends, our previous target was DOE (dividends on equity ratio) of 2% or more, but we have raised this to 3%. While our basic policy is maintaining stable dividends, we will seek to increase dividends in light of business performance, financial status, growth investment, and other relevant factors.

<table>
<thead>
<tr>
<th>Shareholder return policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previously</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Dividends</td>
</tr>
<tr>
<td>Ongoing expansion of dividends: Target DOE of 3%. While maintaining stable dividends as our basic policy, we will expand dividends based on business performance, financial status, growth investment, and other relevant factors.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Shareholding shares</td>
</tr>
<tr>
<td>Non-shareholding shares</td>
</tr>
<tr>
<td>Shareholder return (Share repurchases)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Dividends</td>
</tr>
<tr>
<td>DOE of 2% or more</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Repurchasing share</td>
</tr>
</tbody>
</table>

---

**To Our Stakeholders**

By steadily carrying out the strategies of EGP2028 to achieve our business targets, we will raise corporate value and shareholder value. We will also strive to provide our stakeholders with proper information in a timely manner. In these and other initiatives, we appreciate your understanding and support, and we ask that you look at NEG’s growth from a medium-to-long-term perspective. We look forward to your ongoing participation in our partnership.
Business Structure of Nippon Electric Glass

### Displays Business
- **Glass substrates**
  - Glass for LCDs
  - Glass for OLED displays
  - G-Leaf™ ultra-thin glass
- **Glass for chemical strengthening**
  - Dinorex™ glass for chemical strengthening
  - Dinorex UTG™ ultra-thin glass

### Electronics Business
- **Glass wafer for supporting semiconductors**
- **Glass substrate for probe cards**
- **LTCC products**
- **Functional glass powder**
- **Glass for optoelectronics**

### Composites Business
- **Chopped strands for functional plastics reinforcement**
- **Wet chopped strands for building materials**
- **Paving for plastics reinforcement**
- **Chopped-strand mats for automobiles**
- **Alkali-resistant glass fiber for cement reinforcement**

### Medical Care, Heat Resistance, and Buildings Business
- **Medical care**
  - Glass tubing for pharmaceutical and medical use
  - LX Premium radiation-shielding glass
- **Heat resistance**
  - Neoceram super heat-resistant glass-ceramics
  - StellaShine™ super heat-resistant glass-ceramics for cooking appliance top plates
- **Buildings**
  - FlexLar™ fire-rated glass
  - Glass blocks
  - Neocarbon™ glass-ceramic building materials
- **Others**
  - Glass for lighting
  - Glass making machinery

### Businesses and Products
- **Sales percentage**: Just over 80% of Electronics and Information Technology
- **Main customers**: Display panel manufacturers, semiconductor manufacturers
- **Sales regions**: China accounts for around 60%. The remaining regions are South Korea, Taiwan, and elsewhere.
- **Features**: Large, thin glass produced using the overflow process makes possible beautiful, high-definition images on large displays.

### Markets
- **Sales percentage**: Just under 20% of Electronics and Information Technology
- **Main customers**: Resin manufacturers, compound manufacturers, civil engineering and construction companies
- **Sales percentage by market**: Semiconductors: 30%; automobiles: just under 30%; home appliances and others: just over 30%
- **Sales regions**: Just over 50% in Japan, just over 40% overseas (mainly in Asia)
- **Features**: A wide variety of glass types with excellent properties and produced via high-precision processing supports the miniaturization of electronic components and ensures their high performance and reliability. We also supply processed products that offer greater ease of use.

### Features
- **Sales percentage**: Approximately 80% of Performance Materials
- **Main customers**: Electronic component manufacturers
- **Sales percentage by market**: Semiconductors: just over 50%; energy: just under 10%; housing equipment: 10%; others (e.g., electronic equipment): 30%
- **Sales regions**: Just over 30% in Asia, just under 40% in North and South America, just over 30% in Europe
- **Features**: Binding agents applied to the surface of the glass fiber firmly bond the resin raw material with the glass fiber and add functions such as strength, rigidity, and heat resistance to expand the scope of use of resin.

### Medical Care business
- **Glass tubing for pharmaceutical and medical use**, which accounts for more than 80% of the medical care business, imparts high chemical durability to pharmaceutical containers, enabling stable transportation and storage of pharmaceuticals.

### Heat resistance business
- **Glass-ceramics with excellent thermal shock resistance enhance the design and functionality of gas and IH cookers**.

### Buildings business
- **Glass building materials with a variety of functions, shapes, and colors enable safe and well-designed buildings**.
Growth rate

The Foundation of Value Creation Strategies

Value Creation Story

Aiming to further improve our competitiveness by expanding our innovative manufacturing process to all facilities and by strengthening our business foundation in major markets

Our Strengths

Glass for displays

We have the second largest market share in the world for glass used for displays in LCD and OLED TVs, PCs, smartphones, in-vehicle displays and wearable devices, among others. The main type is 0.8 to 0.9 mm in thickness and approximately 2,300 by 2,500 mm (6.5 generation) in size.

G-Leaf™ Ultra-thin glass

This glass is so thin as 0.7 mm (200 µm) and can be bent like film. By taking advantage of its flexibility and lightness, this product is being put into practical use in electronic devices.

Dinorex™ glass for chemical strengthening

This product is used as cover glass for smartphones, tablets, in-vehicle displays, and other applications. It protects screens from scratches and impact. We also manufacture Dinorex UTG™ ultra-thin glass that can be used for foldable devices.

Review of the EGP2026 Medium-term Business Plan

With the display market shifting to China, we have been rebuilding our manufacturing and sales structure in order to strengthen our business base there. In China, we have set up processing, quality assurance, and sales bases in those regions where our customers are located. We have also established an integrated production system in Xiamen for 10.5-generation size glass, which handles all steps from melting and forming through to processing. In South Korea, the performance of our melting/forming technology using the overflow forming process to manufacture large, high-quality glass will improve productivity, reduce energy consumption, and reduce CO2 emissions. This way, we intend to enhance our competitiveness in terms of cost and quality, as well as to contribute to achieving carbon neutrality.

Business Environment

Rising raw material and fuel prices due to Russia’s invasion of Ukraine are causing global inflation and slowing down the economies of various countries. As a result, the display market has been faced with a difficult situation since the second half of fiscal 2022. Demand for glass temporarily recovered in the first half of fiscal 2023, but production adjustments by panel manufacturers increased again in the third quarter. We expect to see a recovery in demand in the display market in fiscal 2024. Over the medium to long term, moderate growth is expected due to demand for larger displays and display replacement.

EGP2028 Medium-term Business Plan

During the five years of EGP2028, our most important task is to become more competitive than ever to increase our position in the market. To this end, we will pursue further expansion of our innovative manufacturing process to all facilities to improve quality, cost, and environmental responsiveness. Over the medium to long term, moderate market growth is expected due to demand for larger displays and display replacement. In particular, we will expand production and sales of 10.5-generation size glass in the Chinese market, which is our main market, and increase our market share.

Meanwhile, by leveraging the superiority of our overflow technology, we will pursue product development for applications not only in the display field but also semiconductors, automobiles, energy, the environment, and more.

Our Strategies

- Enhance quality and reduce environmental impact by expanding our innovative manufacturing process to all facilities
- Increase production and sales in the Chinese market, focusing on 10.5-generation size glass, and expand market share
- Expand applications for ultra-thin glass and glass for chemical strengthening
- Promote the development of new products other than displays by applying our overflow forming technology to various other glass materials

Business Overview

Display Business

Electronics and Information Technology

Senior Vice-President
Group General Manager,
Display Glass Group
Takuo Horiuchi
Pursuing further business expansion through development and stronger marketing of high-value-added products in growth markets

**Business Environment**

The rise of technological innovation for devices in the home appliance, automotive, and semiconductor sectors is fast and the product cycle is therefore shorter than it is for other businesses. In fiscal 2023, demand in the semiconductor-related market as a whole declined, but the cutting-edge package and AI-related markets grew significantly and are expected to grow further in the future. Recovery of demand in the home appliance and automobile markets has been slow, but moderate growth is expected over the medium to long term. With regard to glass for optoelectronics, factors such as declining infrastructure investment in China and concerns about a weakening economy in Europe and the U.S. contributed to stagnation in the communications-related market. However, with the growing adoption of AI, the market for data center applications showed signs of improvement in the second half of the year. In the medium to long term, the amount of data processed worldwide is expected to continue increasing, and, thus, the market is expected to continue to expand. Furthermore, with demand for micro-optical components increasing in sectors outside of optical communications, growth is expected in the future.

**Our Strengths**

- Highly competitive due to an integrated development system: We have put in place an integrated system that encompasses everything from materials design to production and process development. This allows us to develop and commercialize products with superior properties faster than our competitors. We especially capitalize on this strength in the semiconductor-related market, where each customer requires customized product development with short delivery times.

- Flexible production system and quality assurance system that can accommodate small-lot, high-mix production: Our production system and quality assurance system can handle glass melting and forming, processing, incorporating high added value (including coating and compounding), and analysis. As a result, we are highly regarded by our customers for our quality and stable supply. We also specialize in low-volume, high-mix production and have established a flexible production system.

- Strong, trust-based relationships and robust brand power, which have allowed us to secure high market share: We have built direct sales channels with our customers and incorporate their needs and issues into product development. By providing optimized products with short delivery times, we have been able to earn the trust of our customers.

**Strategies**

- Use active investment in growth sectors to build a supply system
- Continue to find new customers through stronger marketing in mainly Europe and North America
- Strengthen development of products for next-generation semiconductor packages (e.g., glass core substrates)

**Value Creation (ESG)**

Masahiro Kobayashi
Senior Vice President
Group General Manager
Electronic Products Group

We have glass wafers for supporting semiconductors and LTCC (low temperature co-fired ceramics) products, both of which are used in cutting-edge semiconductor processes, and glass powder used in various electronic components for purposes such as sealing, coating, and insulation. Our extensive product range also includes cover glass for image sensors and Lamiphi™ phosphor-glass composite used in light-emitting devices. Glass for optoelectronics is also used in data centers and optical communication networks, making it an indispensable product in an advanced information society.

**EGP2028 Medium-term Business Plan**

We actively invest in products for the growth sectors of semiconductors, automobiles, and home appliances and will strengthen our supply system. In particular, demand for semiconductor-related products, such as glass wafers for supporting semiconductors, is increasing, and we will make sure to capture the strong demand for these products.

At the same time, we will pursue further business expansion through stronger marketing, mainly in Europe and North America. With regard to product development, we will strengthen development of products for next-generation semiconductor packages (e.g., glass core substrates), as well as undertake initiatives such as joint development and building alliances with other companies. By combining our own technologies with those of other companies, we will develop innovative products that meet market needs.

**Electronics Business Net Sales**

(Billion yen)

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
<th>Triple sales compared to fiscal 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2028</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Review of the EGP2026 Medium-term Business Plan

We were able to move forward with rapid product development and a ramped-up production system for glass wafers for supporting semiconductors, which are a growth product. In addition, customer evaluation of glass substrates for probe cards used in semiconductor testing has made significant progress, and we are close to commercialization. In our manufacturing process, we undertake active investment in automation, which has helped to reduce costs and increase capacity. Thus far, our sales have been concentrated primarily in Asia, with market share expansion in Europe and North America proving to be a challenge. In order to find new customers in Europe and North America, we have sought to strengthen our marketing functions, such as by establishing sales teams in Europe. This has provided a certain degree of success, like improved awareness and an increase in inquiries.

- Products for Use in the Semiconductor Sector

- Glass wafer for supporting semiconductors
- Glass substrate for probe cards

Glass substrate for use as a jig in cutting-edge semiconductor processes. Both high performance and high strength are essential.

Substrate used in electrical testing apparatus for semiconductor chips formed on silicon wafers.
Business Environment

In fiscal 2023, markets were sluggish, mainly for high-performance resin for automobile parts, due to disruptions in logistics caused by the pandemic and the Russian invasion of Ukraine. Although there were signs of recovery in the Japanese market, demand in the European and American markets was stagnant due to inflation and an economic downturn. In the medium to long term, the global trend toward carbon neutrality will drive efforts to lighten parts for greater fuel efficiency and energy savings and to develop parts for EVs. We believe this will increase demand for glass fiber for automobile parts applications. With regard to housing applications, such as rafting and flooring, we predict continued, stable demand in Europe and North America.

Our Strengths

With a four-base global production and supply system (Japan, Malaysia, the U.S., Europe), we are able to rapidly develop and supply our products and services. In addition, we have earned praise and gained trust from our customers for the development of binding agents (surface treatment agents) and, as a result, we have secured a high market share. Binding agents are applied to the surfaces of glass fibers to form strong bonds between the glass fibers and resin.

In terms of manufacturing process technology, we have been increasing the percentage of electrical power used for the melting process, thereby reducing CO₂ emissions for our products. For some of our products, we have been using all-electric melting technology for over 40 years, and we are currently expanding its use to other products. Also, our plants in Japan and Malaysia have been reusing all of the waste glass generated in the production process. Companies in our industry have typically disposed of waste glass in landfills, but we have led the industry with our introduction over 20 years ago of a production system committed to recycling.

Review of the EGP2026 Medium-term Business Plan

We revised product prices in fiscal 2022 in response to increased raw material and fuel prices and logistics costs, and both net sales and profits were strong. However, in fiscal 2023, a decline in capacity utilization due to sluggish demand caused costs to increase, resulting in a significant deterioration in profits. In response to this situation, the NEG Group has worked to reform its business structure and strengthen its global production system, and, thereby, improve profitability. This has enabled us to lay the foundation for our new EGP2028 medium-term business plan.

EGP2028 Medium-term Business Plan

Demand for glass fiber is expected to grow over the medium to long term.

In order to quickly turn the results of the structural reforms implemented under EGP2026 into profits, we will improve production efficiency at our Malaysian plant and introduce automated equipment at our European and American plants. Additionally, in order to achieve carbon neutrality, we are pursuing further increases in high efficiency at our Malaysian plant and introduce automated equipment at our European and American plants.

Market Outlook for Composites by Application

This composite material is expected to grow in the medium to long term.

Global Production Bases (as a percentage of production capacity)
Medical Care, Heat Resistance, and Buildings Business

**Strategies**

- Medical care business (glass tubing for pharmaceutical and medical use): Introduce all-electric glass melting to establish a high-quality, high-efficiency process; Expand sales and find new customers in global markets such as Europe, North America, and India; Develop new applications for high-value-added products that capitalize on their excellent heat resistance and unique printing technology;
- Heat resistance business: Expand sales and develop new applications for high-value-added products that capitalize on their excellent heat resistance and unique printing technology;
- Buildings business: Expand sales of FireLite™ fire-rated glass by promoting its safety and design.

**Business Environment**

**Glass for medical care**

The market for glass tubing for pharmaceutical and medical use has been sluggish worldwide since the second half of fiscal 2022 due to a decline in demand for COVID-19 vaccine containers. However, as medical care continues to grow ever more sophisticated, we are expecting medium- to long-term growth in our high-grade glass tubing for pharmaceutical and medical use business. Moreover, the market for radiation-shielding glass is expected to continue to enjoy stable demand as medical care becomes more sophisticated and radiation equipment technology advances.

**Heart-resistant glass**

Wood-burning stove use demand, which had been expanding due to soaring fuel prices, has cycled back down, creating sluggish market conditions in fiscal 2023. In our cooking appliance glass business, our transparent glass-ceramic top plates, which is one of our core products, has been steadily penetrating the European market.

**Glass for building materials**

Because our FireLite™ fire-rated glass is superior to competitor products (wired-reinforced glass and thermally tempered glass) in terms of fireproofing, heat resistance, and other properties, we are getting a growing number of inquiries from building projects that prioritize quality and safety.

**Our Strengths**

We remain committed to developing technologies related to glass materials, melting, and forming in order to develop a high-quality product line beyond the capabilities of our competitors. Our glass tubing for pharmaceutical and medical use exhibits world-class quality in terms of properties such as chemical durability, glass homogeneity, and forming accuracy. Our products have earned the trust of the pharmaceutical industry across Japan and around the world. Meanwhile, our radiation-shielding glass offers excellent shielding, is available in larger sizes, and contributes to sophisticated medical care and improved safety.

In addition, we have numerous glass-ceramic products with extremely unique properties. These include glass that is particularly resistant to thermal shock and has a thermal expansion coefficient of almost zero, which means it will not break even when heated or rapidly cooled. This glass is being used in a wide range of applications, including cooking appliance top plates, stove windows, and the protection.
Uncovering the Unlimited Possibilities of Glass

Glass is a unique material that can be customized into different shapes with a wide variety of functions by modifying its composition and altering the various forming and processing methods used. By combining our accumulated glass technologies with original ideas, we continue to deliver a variety of high-performance glass products matching contemporary needs.

R&D Policy

We seek to speed up product development and commercialization by putting in place a well-coordinated system of development for materials, processes, and products. The results are then applied to our business strategy for medium- to long-term growth.

R&D Organization

Our R&D and manufacturing departments work closely together. Also, in support of R&D activities, the Corporate Strategy Division handles medium- to long-term business strategy planning; the Marketing Division collects and analyzes information about markets, products, and technologies, performs product and technology promotion, and disseminates information to secure customers; and the Intellectual Property Division is tasked with the research, rights acquisition, and utilization of intellectual property.

The Fundamental Technology Division, Research & Development Group, and Process Development & Engineering Group collaborate in conducting the NEG Group’s research and development. The Fundamental Technology Division engages in glass-related basic research (glass structural analysis, strength, high-temperature melting, and others). The Research & Development Group and Process Development & Engineering Group design, develop, and evaluate the material and process characteristics based on a scientific approach.

Further, using these core technologies as a foundation, we fully capitalize on the characteristics of glass to realize higher functionality, which we will then apply to the creation of new products that are of next-generation glass to meet the needs of society and industry over the medium to long term.

Our manufacturing departments work closely with our R&D departments to come up with products and manufacturing process technologies that will facilitate growth and development in each business segment. Our main objectives are maintaining and improving manufacturing process technology, as well as utilizing that technology to improve the functionality of glass.

In addition to using computational science (including ICT and AI-driven data analysis) for these research and development activities, we work to strengthen development by pursuing co-creation in partnership with universities, research institutes, and companies in Japan and overseas possessing advanced expertise and technology in specific fields.

Intellectual Property Management System

The head office is Intellectual Property Division is primarily focused on facilitating the activities listed below.

- Intellectual property-related investigation, rights acquisition, and utilization
- Analysis of NEG’s and others’ intellectual property and provision of information to management and business departments
- Intellectual property-related employee education
- Incentive system for employee inventions

Intellectual Property Policy

We have established the following basic policy for intellectual property activities, including patent rights, utility model rights, design rights, and trademark rights.

Pursue the appropriate acquisition or protection of intellectual property rights for development results in glass materials, manufacturing methods, and products. Use them to secure business domains and to maintain and strengthen competitiveness in order to differentiate our technology from that of competitors, leveraging this relative superiority for the sake of the company’s development.

Our company philosophy is to “Strive to build a brighter future for the world by uncovering the unlimited possibilities of glass for more advanced creative manufacturing.” In order to achieve this, we work daily to develop materials and products—as well as the various processes that underpin the advanced manufacturing involved in producing them—that will provide new functionality and value. These advanced technologies are important assets for our company and must be appropriately protected.

By actively acquiring intellectual property rights, such as patents with strong restraining force, and by appropriately safeguarding and managing them, we keep our competitors from imitating or catching up with us. We also formulate intellectual property strategies for each of our businesses, protecting our business domains while pursuing activities that maintain and strengthen our competitiveness.

Intellectual Property Education

We run a variety of training programs, including group training for new employees and patent search and application training for young to mid-level employees, in order to foster an intellectual property-oriented mindset focused on protecting our own intellectual property while respecting the intellectual property of others, thereby facilitating sound development and business activities.

Rewarding Employee Inventions

We provide incentives for employee inventions and other proposals, which stimulates the acquisition of intellectual property rights, including patents, utility models and designs. Furthermore, we reward employees for these acquired intellectual property rights according to the degree of contribution said rights make to the company.
We will contribute to realizing a sustainable society by working on three priority themes: the Environment, Diversity and Inclusion, and Community Contribution.

The History and Themes of Our CSR Activities

Our work on pollution problems at our Fujisawa Plant (closed in 2015) in the early 1970s taught us to undertake environmental conservation as an issue crucial to the sustainability of our operations. A particular characteristic of glass manufacturers is the consumption of large amounts of energy and resources, and the emission of carbon dioxide. Accordingly, environmental conservation continues to be an issue of the utmost importance for our Group. At the same time, we have engaged in conservation as an issue crucial to the sustainability of our businesses.

The Basic Policy of Our Priority Themes

In order to further clarify the direction of our CSR activities, we have determined a basic policy for each of our priority themes. Furthermore, we have identified corporate governance as the foundation of the core elements of our CSR and are positioning and developing it within the framework of our CSR.

The Foundation of Value Creation (ESG)

We have established the Environment, Diversity and Inclusion, and Community Contribution as the three priority themes (those with materiality) of our CSR. These themes have a strong association with the priority issues that we have focused on so far (environmental conservation, community contribution, employment of the disabled).

Environment

The theme of environmental conservation has been carried forward as the basic principle of our CSR, with the environment-friendly manufacturing as the basic policy.
Environmental conservation is one of the top management priorities of a glass manufacturer that uses a large amount of resources and energy. We hold consideration for the environment as an important value and have always been conscious of the need to conserve natural resources and energy sources, thereby contributing to the preservation of biodiversity and the reduction of greenhouse gas emissions. We will strive to adapt our activities to the requirements of the 21st-century society to prevent pollution, thereby optimizing our presence in society. We will set environmental objectives and targets and attain them through optimization of our essential operations and environmental protection activities in which all employees participate. We will also continuously improve our environmental management system to enhance our environmental protection performance.

Environmental Management System

Our environmental management system is composed of an Environmental Management Organization, business departments (including manufacturing group companies inside and outside Japan), and staff departments—all working under the president and executive officer in charge of environmental management.

Environmental Management Meeting

This meeting is held every three months. The executive officer in charge of the environmental chair of the meeting, which is attended by the president, senior presidents, general managers of our business departments, and representatives of our major group companies that carry out manufacturing. The meeting serves as a forum for deliberations related to groupwide environmental activities, covering our responses to climate change and many other environmental issues, along with the rollout of environmental conservation initiatives.

Environmental Charter

This charter is informed to all employees and affiliated companies, and is made available to parties outside the company on request.

Environmental Principles

Preservation of the global environment is extremely important and indispensable for the prosperity of civilization and humanity in the 21st century. Nippon Electric Glass, upholding its corporate philosophy of "To build a brighter future for the world by uncovering the unlimited possibilities of glass for more advanced creative manufacturing" and adhering to "Consideration for the environment" as one of its essential corporate values, strives to be and remain the world's leading manufacturer of special glass by ensuring state-of-the-art technological development, the highest-quality standards, efficient production, and ready product supply. Nippon Electric Glass and its group companies are committed to contributing to the preservation of the global environment and the realization of a recycling-based society by adopting highly efficient and environmentally responsible processes.

Action Plan

1. We will strive to achieve the environmental goals set by the organization and provide (a) the environment-related agreements and conventions that we have signed, and (b) the statement of our own and voluntary environmental restrictions.
2. We will enhance our environmental impact in all aspects of our corporate activities and in all stages of the product lifecycle, including procurement, manufacturing, transportation, sales, use, reuse, treatment, and disposal.
3. We will attain the world's highest-level manufacturing to more effectively utilize natural resources and energy sources.

Environmental Management Organization

The Board of Directors makes decisions on important management affairs of the NEG Group and supervises the execution of business affairs. Also, in management issues related to climate-related matters, the Board of Directors creates systems, formulates measures and targets, and sets priority issues to be addressed and resolved, and evaluates and provides advice on measures executed by the president, who acts as the person responsible for business execution. Outside directors (four outside directors and two outside corporate auditors) participate in meetings of the Board of Directors. The president executes measures based on the decisions and advice of the Board of Directors as the person responsible for business execution. The Management Committee deliberates on the company’s important managerial affairs and draws up detailed action plans regarding the decisions made at the Board of Directors meetings. The CSR Committee has been established to engage in comprehensive discussion about the direction and content of CSR activities, including climate-related matters, and to have flexibility in developing such activities. In addition, the committee addresses broad sustainability-related challenges such as ESG and the SDGs, centered on our three priority themes for CSR (the environment, diversity and inclusion, and community contribution). The committee is chaired by an executive officer in charge of general affairs, is comprised of CSR-related department heads and other managers, and has a secretariat based in the General Affairs Division. The CSR Committee drafts, discusses, and promotes the contents of the support provided to each division related to the reported items in question from the standpoint of sustainability. In addition, the committee addresses broad sustainability-related challenges such as ESG and the SDGs, centered on our three priority themes for CSR (the environment, diversity and inclusion, and community contribution). The committee is chaired by an executive officer in charge of general affairs, is comprised of CSR-related department heads and other managers, and has a secretariat based in the General Affairs Division. Furthermore, to increase the effectiveness of our initiatives for each of our priority themes, we have established three working teams to address major areas. The Environment Team handles climate change and biodiversity protection, while the Diversity and Inclusion Team handles human capital and human rights, and the Community Contribution Team handles educational support and similar matters.

The main activities of the CSR Committee are to develop CSR-related basic policies; establish priority themes; draft, discuss, and promote measures to address priority themes; to design and discuss information disclosure policies and disclosure content; and to provide recommendations and reports to the Management Committee and Board of Directors as appropriate.

About Nippon Electric Glass Value Creation Story Value Creation Strategies The Foundation of Value Creation (ESG) Financial and Corporate Information

Disclosures in Accordance with TCFD Recommendations

Consideration for the environment is one of our key values, and, with the belief that the world's most efficient manufacturing leads to the world's most environmentally friendly manufacturing, we have been working to save energy and reduce CO₂ emissions through improvements in our quality and yield. In November 2021, we declared our support for the Task Force on Climate-related Financial Disclosures (TCFD) to analyze risks and opportunities that climate change brings to our business, as well as to inform our stakeholders of financial impacts and our countermeasures.

Governance and Risk Management

The figure on the right shows our governance structure for CSR, including for climate-related risks and opportunities.
The Foundation of Value Creation Story

1. Scenario Analysis

We have carried out the following scenario analysis in order to evaluate the business impacts under different scenarios, as well as to evaluate our strategic resilience with regard to climate-related risks and opportunities.

Analysis steps

1. Scenario Analysis
   - Identify important climate-related risks and opportunities; establish parameters

Step 1

2. Establish climate-related scenarios

Step 2

3. Evaluate business impact under the different scenarios

Step 3

4. Evaluate strategic resilience with regard to climate-related risks and opportunities; investigate further countermeasures

Step 4

Businesses targeted for analysis

All NEG Group businesses are targeted for analysis.

Established scenarios

<table>
<thead>
<tr>
<th>Category</th>
<th>Scenario overview</th>
<th>Main reference scenarios</th>
</tr>
</thead>
</table>
| 1.5°C/2°C scenario | This scenario involves the enactment of policies and regulations aimed at achieving a decarbonized society and which seek to keep global warming to within 1.5°C/2°C below the pre-industrial revolution global temperature. Compared with the 4°C scenario, the transition risks are high, but the physical risks can be kept low. Demand for products that contribute to the achievement of a decarbonized society will become high. | • IEA World Energy Outlooks 2023 Net-Zero Emissions by 2050 Scenario
• IEA World Energy Outlooks 2023 Announced Pledges Scenario
• IEA World Energy Outlook 2019 Sustainable Development Scenario
• IPCC RCP8.6 |

4°C scenario | This scenario involves a future where the policies and regulations, which various countries have announced are fulfilled, but no new policies or regulations are introduced. Energy-related CO2 emissions continue to increase worldwide. Compared with the 1.5°C/2°C scenario, transition risks are low, but the physical risks will grow larger. | • IEA World Energy Outlooks 2023, 2019 Stated Policies Scenario
• IPCC RCP8.5 |

Evaluation timeline

The impact on the NEG Group's business by major climate-related risks and opportunities identified from scenario analysis was evaluated on a timeline focused on the year 2030.

2. Major Climate-related Risks and Opportunities Identified, Evaluation of Impact on Business, and Countermeasures

<table>
<thead>
<tr>
<th>Type</th>
<th>Risks and opportunities</th>
<th>Impact on business</th>
<th>Countermeasures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition risks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy and legal</td>
<td>Carbon pricing introduction and increase</td>
<td>Increase in manufacturing costs</td>
<td>Enactment of the carbon neutrality action plan</td>
</tr>
<tr>
<td></td>
<td>Investment in manufacturing facilities to reduce CO2 emissions</td>
<td>Increase in depreciation costs</td>
<td></td>
</tr>
<tr>
<td>Reputation</td>
<td>Negative criticism of energy-intensive companies</td>
<td>Decreased sales*</td>
<td></td>
</tr>
<tr>
<td>Market</td>
<td>Increase in energy prices</td>
<td>Increase in logistics costs</td>
<td>Maintain good relationships with suppliers, pursue supplier development and diversification, switch to generic items</td>
</tr>
<tr>
<td></td>
<td>Soaring glass raw material prices due to changes in the supply and demand structure for resources</td>
<td>Increase in procurement costs*</td>
<td></td>
</tr>
<tr>
<td>Physical risks</td>
<td>Acute</td>
<td>Negative impact on operations and logistics due to increased frequency of disasters, extreme weather, typhoons, and flooding</td>
<td>Decreased sales*</td>
</tr>
<tr>
<td></td>
<td>Chronic</td>
<td>Negative impact on operations due to drought</td>
<td>Decreased sales*</td>
</tr>
</tbody>
</table>

Resource efficiency

Opportunities

<table>
<thead>
<tr>
<th>Type</th>
<th>Risks and opportunities</th>
<th>Impact on business</th>
<th>Countermeasures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products</td>
<td>Increased demand for glass fiber for wind turbines due to increased construction of wind power generation facilities</td>
<td>Increased sales</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased demand for low-carbon products (thin sheet glass for PFDAs), which contribute to reduced production and shipping costs in customer processes</td>
<td>Increased sales</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased demand for glass fiber for strengthening functional plastics, which will be used to lighten automotive bodies and in battery casings as EVs become more widespread</td>
<td>Increased sales*</td>
<td></td>
</tr>
<tr>
<td>Market</td>
<td>Increased demand for all-solid-state Na-ion batteries as they go to market and society transitions to becoming decarbonized</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Estimation of impact on business

Low: < 10 billion yen; Medium: ≥10 billion yen but < 30 billion yen; High: ≥ 30 billion yen
*Due to a lack of data for calculating impact on business, qualitative descriptions are utilized.

3. Strategic Resilience

Following updates to the reference scenarios, we reviewed impacts on business. Although they increased due to soaring raw material and fuel costs caused by global inflation and other factors, we will enhance our business resilience by incorporating new technologies and solutions from inside and outside the company and implementing the above actions, such as the carbon neutrality action plan.
Electrification for melting, forming, and processing facilities

Percentage of all-electric melting

In order to achieve CO₂ emissions reduction targets, we are working to improve our information disclosure during fiscal 2024, such as by creating a system for calculating emissions volume. Due mainly to reduced manufacturing in the displays business and composites business, in fiscal 2023, CO₂ emissions (Scope 1 + 2) declined from the previous fiscal year. Meanwhile, as a result of pursuing improvement activities in our carbon neutrality action plan, CO₂ emissions intensity (Scope 1 + 2) also declined from the previous fiscal year.

**Environmental Business Plan**

Our Environmental Business Plan is our own unique initiative that applies business management principles to environmental conservation. We believe activities that minimize environmental impact are key to achieving the world’s most efficient manufacturing. Thus, we have been undertaking activities to reduce waste since 2001 and to reduce water consumption since 2003. And in 2021, we launched energy efficiency-related activities.

We are working to reduce environmental impact from waste and water through continuous reduction and recycling, using specific intensity as an indicator. For energy, we are pursuing activities that improve energy usage efficiency according to efficiency improvement plans and targets that we establish, using energy intensity in glass manufacturing as an indicator.

**Initiatives to Protect the Global Environment**

As part of our initiative to protect the global environment and contribute to sustainable systems, we take measures to conserve biodiversity while supplying and developing eco-friendly products that save energy and generate energy.

**News**

*News* Nippon Electric Glass Signs Its First VPPA for Solar Power

NEG concluded a VPPA for the first time with a renewable energy power generator. A VPPA is a means for a consumer to virtually obtain only the environmental value of renewable electricity generated outside the consumer’s premises. It is a new way to introduce renewable electricity that became possible in Japan in 2022. The CO₂ reduction effect from this agreement is expected to be approximately 770 t-CO₂ per year. We will continue to accelerate various initiatives as we work towards carbon neutrality.

Power plant sites: 5 locations in different areas of Mie Prefecture, including Matusaka City

Start of power generation: March 2024

Contract period: 20 years
Diversity and Inclusion

As a driver of long-term value creation, we work to ensure the diversity of our workforce and to create an environment where they can flourish.

Our Way of Thinking on Human Resources

The glass business requires a lot of time and significant investment to develop materials and processes; hence, if you want to develop innovative products and achieve sustainable growth, you cannot simply chase short-term profit. We prioritize our human resources as drivers of long-term value creation and strive to create an environment where highly engaged employees with diverse values and a long-term perspective undertake challenging work.

In 2020, we set forth an ideal for our personnel that they would be persons capable of performing at a world-class level in all areas. In order to help them achieve this, we have established a variety of growth and development programs, including level-specific training, career education, and self-development programs. Also, in order to create a more employee-friendly environment, we are working to accommodate greater flexibility in work styles and to pursue measures for occupational health and safety and health and productivity management. In terms of human resource management, we are working in a variety of areas to improve employee motivation, such as by revising our skills and performance-based remuneration system and improving how we treat retired employees.

Hiring a Diverse Workforce

As we believe that employees are the foundation of a company’s growth, we hire a diverse range of human resources regardless of their gender, age, nationality, or other characteristics. As well, in addition to expanding the number of recent graduates hired, we also incorporate new recruiting methods and approaches. For example, we hire highly qualified, mid-career professionals and leverage our connections with researchers to recruit personnel. We also make use of referral recruitment when hiring employees locally. Even amidst accelerating job mobility, we are creating a wide range of entry points, such as for previous NEG employees to be rehired, to help us in securing a diverse workforce.

We are also a proactive employer of people with disabilities. In 1980, we established a special-purpose subsidiary aimed at employing people with disabilities. We were among the first six companies in Japan to do so. Since then, we have sought to increase our employment rate for people with disabilities to 4.6%, far above the statutory requirement of 2.5%, and have hired people with disabilities as full-time employees. Moving forward, we will continue to employ people with disabilities.

Human Resource Development

In order to attain our goal of becoming the world’s leading manufacturer of special glass, we need to have personnel capable of performing at a world-class level in all areas. We help our employees to better themselves by offering them a range of study opportunities, such as on-the-job training, professionallevel-specific training, global human resource training, skills training, and self-development programs that include acquiring industry certification. We will continue to provide our employees with further training, which will help them get to that next level.

Essential Qualifications and Character

- **Professional**: Analyze the learning in order to promote capabilities for professionals in all situations, and support your expertise
- **Independent**: Rises to a crisis and a dilemma to voluntarily take new challenges
- **Proactive**: Seizes tomorrow and a vision to horizontally take new challenges
- **Innovative**: Acts with integrity in the promotion of a company's growth and development programs, including level-specific training, global human resource training, skills training, and self-development programs that include acquiring industry certification. We will continue to provide our employees with further training, which will help them get to that next level.

**Progress in Diverse Work Styles and Work Efficiency**

We carry out a wide range of initiatives, including expanding work-style diversity to encompass telecommuting, remote work, and the like, implementing five-day holidays and no-overtime days, supporting employees in balancing work with childcare and nursing care, and fostering work-style reform seminars. These efforts have enabled us to reduce overtime work and increase the taking of paid leave. Employees reap the rewards of these efforts in the form of human-resource investments such as expanded job benefits and IT funding. We will continue to pursue improvements as we review and revise our efforts.

**Support for Raising the Next Generation and Women’s Empowerment**

In February 2019, we received Platinum Kurumin accreditation under the Act on Advancement of Measures to Support Raising Next-Generation Children in Japan and have continued providing such support in order to expand our employees’ options for work styles conducive to childcare and nursing care. These efforts have helped achieve successes such as realizing an 86% rate (fiscal 2023) of male employees taking their childcare leave.

We are also working to foster more women in management and other leadership positions by hiring more of them for career-track jobs, and by holding gatherings where our female employees and female outside directors can share opinions on topics related to their empowerment.

**Empowering Employees with Roots in Other Countries**

As the number of our non-Japanese employees increases, we are providing follow-up support to ensure their understanding of the company’s policies, and supporting their smooth workplace communications through measures such as Japanese language classes and a mentoring system. In October 2019, we promoted the first foreign national employee to a position of manager, and have promoted more since then. In January 2023, we appointed a foreign national employee of an overseas subsidiary as an executive officer at the head office for the first time ever. Going forward, we will be putting energy into ensuring that workplace environments allow employees of many different backgrounds to participate in the workplace with vitality, building synergy through the mutual respect of each other’s culture.

**Empowering Employees with Roots in Other Countries**

As the number of our non-Japanese employees increases, we are providing follow-up support to ensure their understanding of the company’s policies, and supporting their smooth workplace communications through measures such as Japanese language classes and a mentoring system. In October 2019, we promoted the first foreign national employee to a position of manager, and have promoted more since then. In January 2023, we appointed a foreign national employee of an overseas subsidiary as an executive officer at the head office for the first time ever. Going forward, we will be putting energy into ensuring that workplace environments allow employees of many different backgrounds to participate in the workplace with vitality, building synergy through the mutual respect of each other’s culture.

**Occupational Safety and Health; Health and Productivity Management**

Every year, a company-wide conference of the committee on occupational safety and health is convened and attended by the president and the labor union head. Action policies and targets are set regarding health, safety, and productivity management at NEG. These are then approved by the Management Committee and disseminated across the company.

**Occupational Safety and Health**

Our Principles of Activities state that we prioritize safety in all work by complying with all laws, regulations, and company rules concerning workplace health and safety. In addition, action policies for company-wide safety and health state that all NEG employees put safety first in everything they do. Members of NEG committees such as those on occupational safety and health and accident prevention take the lead in a wide range of safety and health activities, including creating a workplace conducive to working in safety and health, thoroughly understanding and implementing risk measures in all workplaces, and making continuous improvement through the PDCA cycle.

**Health and Productivity Activities**

Our health and productivity management philosophy forms the basis for an action policy aimed at maintaining and improving the mental and physical health of each employee. This allows us to create a vibrant working environment that increases the creativity and productivity of the entire corporate. We have established key performance indicators (KPIs) for mental and physical health, and are rolling out activities, education, and other initiatives aimed at improving the health of employees in each area. In fiscal 2023, we launched the Health and Productivity Management Committee, which deliberates on health- and productivity-related Initiatives and sets actions that all NEO regions should take to carry these out.
Community Contribution

For its business to last, a company must strive for harmony with the local community and solutions to the issues that community faces. We aim to grow in unison with communities through activities such as supporting education and taking part in local events.

Supporting the Younger Generation

Our educational support activities centered in Shiga Prefecture, where NEG is based, are aimed at getting youngsters interested in science. We also collaborate with universities to carry out glass-related research and to foster the researchers and engineers who will form the pillars for advancements in the glass industry.

Academic-Industrial Collaboration

We concluded a comprehensive university–industry collaboration agreement with the University of Shiga Prefecture in 2007. Based on that agreement, we have been collaborating with the university on a variety of ongoing projects, which include the establishment of an endowment course, joint research and technological exchange on glass engineering, and supporting the development of tomorrow’s leaders.

In 2023, we launched the NEG endowment course in the basic science of glass at Kyoto University. The course digs deep into basic research on glass with the aim of fostering the next generation of glass researchers and engineers.

Supporting Shiga Prefecture’s Lake Biwa Floating School Program

Since 2019, we have been supporting education and self-development through an environmental studies program for children in Shiga Prefecture. In 2023, NEG agreed to renew the naming rights partnership contract with Shiga Prefecture in order to continue our support for another four years.

Visiting Lessons

(Sponsorship of Otsu City Science Museum’s “Innovation for the Future” classes for inventing, discovering, and making things)

To teach local elementary and junior high school students about glass applications and characteristics, NEG employees visit the Otsu City Science Museum to give hands-on lessons. There were 29 participants in this program in 2023.

Record of 2023 Activities (Inside and Outside Japan)

- Donations of flower seedlings to local schools and neighborhood councils: Approx. 23,000 seedlings
- Donations of Omi rice to children’s community kitchens and to children of foreign parents in Shiga Prefecture: 6 tons
- Employees joining community activities: Approx. 320
- People visiting our summer festival and other events: Approx. 7,730
- People joining dialogue between the NEG Group and neighborhood councils: Approx. 100
- Visitors to our plants and showroom: Approx. 340
- Visitors to our facilities that are open to the public (green space, etc.): Approx. 80

Visit NEG’s showroom

Studying glass applications and characteristics in an “Innovation for the Future” class

Participation in JST Support Program for Female Students in Choosing Science Courses

In conjunction with the University of Shiga Prefecture, in 2020 we started participating as a collaborating enterprise in the Support Program for Female Students in Choosing Science Courses, run by the Japan Science and Technology Agency (JST). There were 15 participants who visited NEG as part of the program in 2023.

Coexistence with Local Communities

To strengthen our ties with local communities, we carry out volunteer activities such as clearing and planting greenery, host various events to which we invite local residents, and carry out donation and support activities.

Donations of Omi rice from Shiga Prefecture were donated to children of foreign parents

Omi rice from Shiga Prefecture was donated to children of foreign parents

Record of 2023 Activities (Inside and Outside Japan)

- Donations of flower seedlings to local schools and neighborhood councils: Approx. 23,000 seedlings
- Donations of Omi rice to children’s community kitchens and to children of foreign parents in Shiga Prefecture: 6 tons
- Employees joining community activities: Approx. 320
- People visiting our summer festival and other events: Approx. 7,730
- People joining dialogue between the NEG Group and neighborhood councils: Approx. 100

Visitors to our summer festival after a long hiatus

NEG executives visit a lab in the NEG endowment course at Kyoto University

The multi-purpose room, called the Neg Room, in the program’s Uminoko learning ship
Roundtable Discussion of the Chairman and Outside Directors

We hope to see the new structure deliver one-of-a-kind business and transform the corporate culture.

Transitional to a new structure and evaluating business operations

Matsumoto
I believe that there needs to be metabolism within organizations. I served as president for eight years but decided to step down in fiscal 2022, as a change in top management would send a very strong message that NEG is changing. I recommended Mr. Kishimoto as my successor, because I wanted him to capitalize on his career in the technical field to promote development. What are your thoughts on the past year?

Y. Ito
After many discussions with the Nomination and Remuneration Advisory Committee, and after having spent a considerable amount of time interviewing Mr. Kishimoto, the thing that stood out to me first was that he is a very frank person. I also realized that Mr. Kishimoto, the thing that stood out to me first was that he is a very frank person.

Urade
Unless we establish new business pillars alongside displays and composites, NEG will not last. This is just what he is determined to do, as he is strongly aware of the need for change. Fiscal 2023 was his first year as president, and, given the global situation and the economy, I think it was a very difficult time to achieve results. But my assessment is that we succeeded in proactively streamlining business and halting the decline in business performance.

H. Ito
I also felt that President Kishimoto was able to handle difficult situations extremely well, exhibiting resilience and prudence. Additionally, all members of the management team fulfilled their responsibilities in their respective areas, giving me the sense that the transition to the new structure has been carried out well.

Being conscious of cost of capital and share price

Matsumoto
There was a request from the Tokyo Stock Exchange to improve the price-to-book (P/B) ratio, which is below 1.0. What do you think of NEG’s response?

H. Ito
As with all of the requests that have been made to date, such as the call to address climate change, this request was thoroughly discussed at board meetings, and NEG’s response is reflected in the new EGP2028 medium-term business plan. Rather than saying that we should just do whatever will get the P/B ratio above 1.0, these discussions about P/B ratio and return on equity (ROE) were treated as opportunities to highlight the direction of change, such as focusing on development. I think that’s something commendable.

Y. Ito
The goal set for ROE in EGP2028 is 8%. This will not be easy to achieve simply by expanding on existing businesses. It will require a concerted effort to launch new businesses and increase profitability, which, to my mind, means investing more into R&D. Since the targets are still somewhat unclear, it’s important that future board meetings be used to identify solutions.

Urade
Stakeholders’ evaluation of a company comes with an expectation that the share price and ROE will be high; hence I think actions such as the acquisition of treasury stock provided good short-term effect. However, for a manufacturing company like NEG, which requires large fixed assets, you cannot just rely on numbers alone, and I think that reasonable stakeholders pay close attention to this. A healthy path forward is for the share price and ROE to increase depending on how much profit the company will generate in the future, and I hope that this will continue to be the case.

Expectations for the new EGP2028 Medium-term Business Plan

Matsumoto
EGP2026 was formulated based on the situation as it was during fiscal 2020 to 2021, but the world has changed dramatically since then, and manufacturing costs and international shipping costs have skyrocketed. Moreover, given the increasing geopolitical risks and other factors, which called for a completely different set of prerequisites and created the situation in fiscal 2023, EGP2026 had become a house of cards. As it became clear within the company that the business portfolio needed to be changed, there were calls by shareholders and the stock market for more efficient management. Thus, we were given another five-year period, and the plan was revised into the new EGP2028.

Y. Ito
Customers and business partners. I’d like to strike a balance and avoid discussions that focus on only one direction. The management team will continue discussing how to address this request in a way that contributes to business operations, taking into account NEG’s current situation.

Urade
There’s a lot to discuss on this point, but in order for business to continue, we need good relationships not only with shareholders but also with employees, customers, and business partners. I’d like to strike a balance and avoid discussions that focus on only one direction. The management team will continue discussing how to address this request in a way that contributes to business operations, taking into account NEG’s current situation.
Reiko Urade

Matsumoto Motoharu

Hiroyuki Ito

Y. Ito

H. Ito

Value Creation (ESG)

Sustainability strategy

At NEG, the three themes that comprise the foundation of CSR are the environment, diversity and inclusion, and community contribution. We carry out a range of activities under each theme. Diversity and inclusion and human capital came up frequently in board meetings in fiscal 2023. Earlier, Mr. Hiroi Ito spoke about communicating passion; President Kishimoto is doing his utmost to also facilitate greater motivation and engagement among employees. NEG is making an effort to employ more diverse human resources than before, such as by hiring more mid-career professionals and more foreign nationals.

For example, to ensure diversity when appointing executives, it would be a good idea to establish nomination criteria such as having experience in at least two business areas or having worked in multiple locations outside of Japan. I’m not sure how effective this would be, but, in any case, I feel that some kind of master plan for human resource development is needed.

I also appreciate the big decision to close down factories in South Korea and the Netherlands just before the formulation of EGP2028 and, together with this, that NEG is responding to the issues it has been facing. Beyond this, my hope is that EGP2028 is treated not just as a plan but that the spirit embodied in it is conveyed to every workplace within NEG. Communicating this passion will catalyze a range of discussions inside NEG about work and the company. I hope that EGP2028 will create such opportunities.

Review of, and outlook for, the Board of Directors

Finally, I’d like to hear your honest opinions regarding the running of the Board of Directors, its transparency, and issues in fiscal 2023.

Some changes in the situation in Japan or overseas that have a strong impact on business, such as the case in fiscal 2023. Time is limited, and while I believe the Board of Directors reaches conclusions after thorough discussions by the Management Committee, it would be good to know in depth about the process leading to the conclusion.

Sometimes we don’t have a full understanding of the background of a topic. There’s room for us to work harder in this regard, and we’re discussing the idea of having meetings of just outside directors, even if only once or twice a year. Even just hearing from the relevant person in charge would be fine, because I think having the opportunity to study beforehand the current issues that will be discussed at the board meeting enables us to make more appropriate statements and to engage in deeper discussion.

Since the number of outside directors will increase by one in fiscal 2024, it may be a good idea to divide the responsibilities for solving questions among the outside directors in order to allow for deeper discussion. It would also be a good idea to simplify the materials that are provided to us. Improving how meetings are held, such as by using IT to go paperless, represents one possible means of revitalizing the board meetings.

The presence of outside directors has a huge impact on the management of the company, as they speak from a common-sense perspective and view things fairly. Management takes the opinions of the outside directors very seriously, and they will send a plan back to be reread if they think the outside directors would not approve of it. I also want to revalue the Board of Directors and, as you suggested, would like to rethink how we create materials and provide explanations. I look forward to working with you all in fiscal 2024.
The Foundation of Value Creation (ESG)

Management

As of March 26, 2024

Chairman of the Board (Representative Director)
Motohru Matsumoto

President (Representative Director)
Akira Kishimoto

Director and Senior Vice President
Hiroki Yamazaki

Director and Senior Vice President
Mamoru Morii

Outside Director
Hiroyuki Ito

Outside Director
Reiko Urade

Outside Director
Masaaki Kadomi

Outside Director
Takuo Horiuchi

Outside Director
Hitoshi Kanaya

Senior Vice Presidents
Noriro Nakamura
Masashi Kobayashi
Takuo Horiuchi

Vice Presidents
Tosshiyuki Nakajima
Hidetaka Oda
Ken Hamajima
Takui Oka

Skills Matrix of Directors

<table>
<thead>
<tr>
<th>Name</th>
<th>Position in the company</th>
<th>Outside independent</th>
<th>Gender</th>
<th>Nominated and Reconfirmed</th>
<th>Advisory Committee Total (indication)</th>
<th>4 Years Service</th>
<th>Major Knowledge, Experience, and Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motohru Matsumoto</td>
<td>Chairman of the Board</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Akira Kishimoto</td>
<td>President</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nahomi Aoto</td>
<td>Director</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takuji Oka</td>
<td>Vice President</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hiroki Yamazaki</td>
<td>Director</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mamoru Morii</td>
<td>Director</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The table above does not indicate all the expertise possessed by each director.
Corporate Governance

We aim to reach the targets set forth in our Medium-term Business Plan, EGP2028, by enhancing our competitiveness with a motivated Board of Directors and strengthened supervisory functions across management.

Our Corporate Governance Policy

We believe that to increase corporate value and achieve sustained growth, it is essential to continue to ensure managerial transparency and strengthen supervisory functions regarding systems for directors, and the amount of remuneration determined for directors. It then reports its conclusions to the Board of Directors. In recent years, the number of issues, such as climate change, human capital, and human rights, that companies must address in order to achieve sustainable growth has been growing. Society increasingly expects companies to help solve the challenges facing it and to provide greater information disclosure. Therefore, we have established the CSR Committee as a cross-organizational entity that engages in comprehensive discussion of the direction and content of our CSR activities. The committee makes recommendations to management, flexibly develops activities, and contributes to more appropriate information disclosures.

Diagram of Corporate Governance System (as of March 28, 2024)

Journey towards Stronger Corporate Governance

Governance Highlights

Nomination and Remuneration Advisory Committee outside director ratio

Outside directors: 4
Women: 2
44.4%
66.7%
As of March 28, 2024

Outside directors: 4
Men: 7
Inside directors: 5

Female director ratio

Outside directors: 4
Men: 7
Inside directors: 5
22.2%
With regard to the question about the appropriateness of the size of the Board of Directors, some were of the opinion that the current size is the minimum acceptable size, while others were of the opinion that it should be smaller. In order to strengthen our governance system, at the ordinary general meeting of shareholders held on March 28, 2024, we increased the number of outside directors by one and appointed nine directors (of which four are outside directors). (1) With regard to the question about the appropriateness of the size of the Board of Directors, some were of the opinion that the current size is the minimum acceptable size, while others were of the opinion that it should be smaller. In order to strengthen our governance system, at the ordinary general meeting of shareholders held on March 28, 2024, we increased the number of outside directors by one and appointed nine directors (of which four are outside directors).

With regard to the question about the appropriateness of the size of the Board of Directors, some were of the opinion that the current size is the minimum acceptable size, while others were of the opinion that it should be smaller. In order to strengthen our governance system, at the ordinary general meeting of shareholders held on March 28, 2024, we increased the number of outside directors by one and appointed nine directors (of which four are outside directors). (2) With regard to the question about the appropriateness of the size of the Board of Directors, some were of the opinion that the current size is the minimum acceptable size, while others were of the opinion that it should be smaller. In order to strengthen our governance system, at the ordinary general meeting of shareholders held on March 28, 2024, we increased the number of outside directors by one and appointed nine directors (of which four are outside directors).

Analysis and Evaluation of the Effectiveness of the Board of Directors

All of our directors respond to an annual questionnaire to investigate the effectiveness of the Board of Directors. The questionnaire focuses on (1) the Board of Directors in general, (2) the running of Board of Directors meetings, and (3) outside directors.

Fiscal 2022 Questionnaire Questions, Opinions, and Action Taken

With regard to the question about the appropriateness of the size of the Board of Directors, some were of the opinion that the current size is the minimum acceptable size, while others were of the opinion that it should be smaller. In order to strengthen our governance system, at the ordinary general meeting of shareholders held on March 28, 2024, we increased the number of outside directors by one and appointed nine directors (of which four are outside directors). (1) With regard to the question about the appropriateness of the size of the Board of Directors, some were of the opinion that the current size is the minimum acceptable size, while others were of the opinion that it should be smaller. In order to strengthen our governance system, at the ordinary general meeting of shareholders held on March 28, 2024, we increased the number of outside directors by one and appointed nine directors (of which four are outside directors).

With regard to the question about the appropriateness of the size of the Board of Directors, some were of the opinion that the current size is the minimum acceptable size, while others were of the opinion that it should be smaller. In order to strengthen our governance system, at the ordinary general meeting of shareholders held on March 28, 2024, we increased the number of outside directors by one and appointed nine directors (of which four are outside directors). (2) With regard to the question about the appropriateness of the size of the Board of Directors, some were of the opinion that the current size is the minimum acceptable size, while others were of the opinion that it should be smaller. In order to strengthen our governance system, at the ordinary general meeting of shareholders held on March 28, 2024, we increased the number of outside directors by one and appointed nine directors (of which four are outside directors).

Fiscal 2023 Questionnaire Opinions

From the fiscal 2023 questionnaire, some were of the opinion that, due in part to the effects of the COVID-19 pandemic, outside directors did not really have enough opportunities to tour factories in Japan and overseas and to exchange opinions with local executives. Also, there was feedback that sometimes board meeting materials are distributed at the last minute. Based on the results of the questionnaire, we have determined that the Board of Directors is viable and that its effective functioning has been ensured. However, we will strive to enhance deliberations at Board of Directors meetings by making improvements based on evaluation results and will continue to evaluate its effectiveness.

Compliance System

We established our Compliance Committee as a specialized body that ensures our Group members continue to comply with laws and regulations. The Committee also provides information on corporate ethics and is primarily focused on the items listed at right.

Compliance Program

To ensure that all employees are informed on compliance matters, we have established the Group Code of Conduct and Principles of Activities, a wallet-sized card printed with the Corporate Philosophy Structure, Code of Conduct, Principles of Activities, and an introduction to the NEG Hotline are distributed to employees of group companies in Japan.

Ensuring Compliance

To raise compliance awareness (for example, for high ethical standards and respect for human rights) throughout our Group, each year we carry out compliance training as part of an education program for newly hired employees and antitrust seminars for employees engaged in sales activities. We also ensure awareness among management by holding workshops for directors and executive officers. At those sessions, participants take the opportunity to discuss themes such as governance and compliance. In addition, we have designated the confidentiality of the informants is strictly protected at both contact points, so that no unfair treatment will occur. This whistleblowing system has been set up at all of our subsidiaries, including those outside of Japan, and we are working to ensure that our stakeholders know about the system and that it functions properly.

UK Modern Slavery Act

Subsidiary Electric Glass Fiber UK, Ltd. has published a transparency statement pursuant to Section 54 of the UK Modern Slavery Act 2015.

Risk Management

Our Group reviews business risks on a periodic basis, based on our policy on internal control, and takes the necessary steps to manage such risks. In cases involving any business risks that are deemed significant, responsible divisions or specialized committees formulate regulations and guidelines, conduct training, prepare manuals, and undertake additional activities as deemed necessary.
We declare in our Group Code of Conduct that we disclose necessary corporate information in a timely and appropriate manner, and communicate on a broad basis with stakeholders. To enhance our corporate value, we strive to maintain active communication and deepen mutual understanding with various stakeholders.

**Communicating with Customers**

The principle of “customer first” is a key value in our corporate philosophy structure, and a commitment to bring the world the best in customer-oriented one of our essential management policies. We have basic policies for product safety and quality assurance, through which we aim to further improve customer satisfaction and deliver safe, reliable, and high-quality products.

**Product Safety Basic Policy**

- We always offer safe products that consumers can use without worry.
- Place the utmost importance on ensuring product safety from the design stage.
- Continuously improve product safety through quality assurance.
- Reduce risks throughout the product life cycle.
- In case of an accident involving our product, disclose information and ensure product safety promptly.

**Quality Assurance Basic Policy**

- Understand customer needs for products and continuously reflect these needs in product specifications.
- Market products that comply with appropriate quality assurance standards.
- Continuously improve product quality and enhance the level of manufacturing that ensures product quality.

**Communicating Product Information**

We use exhibitions and our website as communication tools for introducing products and providing various relevant information.


**Basic Procurement Policy**

Under the basic procurement policy that we have established, we seek to build up reliable relationships with business partners who can provide us with a stable supply of products and services of superior quality at competitive prices. In order to enhance the performance and efficiency of the entire supply chain, we ask our business partners to agree to produce a stable supply following our supply chain guidelines, improve their competitiveness, comply with laws and regulations, respect human rights, and protect the environment.

**Advising on information disclosure**

Minerals such as tin, tantalum, tungsten, and gold sourced in the Democratic Republic of the Congo and adjoining countries in Africa are used to finance armed groups carrying out inhumane acts. That is why we place great importance on responsible procurement practices to ensure we do not source conflict minerals.

**Basic Procurement Policy**

- Open and fair business dealings
- Harmonious mutual prosperity with partners
- Compliance with social norms
- Consideration for human rights
- Environmental consciousness
- Policies regarding conflict minerals

**Procurement policy and guidelines**


**Communicating with Shareholders and Investors**

**Information Disclosure Policy**

Through the use of the Tokyo Stock Exchange’s Timely Disclosure Network (TDnet), and by posting information on our website in a timely fashion, we ensure that we provide prompt disclosure of information according to the rules for disclosure established by the Tokyo Stock Exchange. Furthermore, with regard to information that we believe will assist our stakeholders in gaining a better understanding of our Group, we make active use of news releases and web pages to present such information in a timely, appropriate, and fair manner, in accordance with Japan’s Fair Disclosure Rules.

[https://www.neg.co.jp/en/fr/disclosure/](https://www.neg.co.jp/en/fr/disclosure/)
### Consolidated Financial Data from the Past 10 Years

Nippon Electric Glass Co., Ltd. and consolidated subsidiaries

*Fiscal year ended December 31, 2014 was a nine-month period due to a change in the fiscal year-end.

<table>
<thead>
<tr>
<th>Results of operations</th>
<th>2014/12*</th>
<th>2015/12</th>
<th>2016/12</th>
<th>2017/12</th>
<th>2018/12</th>
<th>2019/12</th>
<th>2020/12</th>
<th>2021/12</th>
<th>2022/12</th>
<th>2023/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>¥192,692</td>
<td>¥251,178</td>
<td>¥239,412</td>
<td>¥282,447</td>
<td>¥300,327</td>
<td>¥257,511</td>
<td>¥242,886</td>
<td>¥232,034</td>
<td>¥234,635</td>
<td>¥279,975</td>
</tr>
<tr>
<td>Operating profit (loss)</td>
<td>5,224</td>
<td>22,035</td>
<td>19,571</td>
<td>32,202</td>
<td>24,866</td>
<td>16,258</td>
<td>17,661</td>
<td>32,780</td>
<td>26,184</td>
<td>(10,421)</td>
</tr>
<tr>
<td>Profit (loss) attributable to owners of the parent</td>
<td>5,938</td>
<td>9,637</td>
<td>4,969</td>
<td>27,164</td>
<td>15,200</td>
<td>(33,670)</td>
<td>15,253</td>
<td>27,906</td>
<td>28,168</td>
<td>(26,188)</td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>28,420</td>
<td>37,154</td>
<td>31,256</td>
<td>28,735</td>
<td>29,776</td>
<td>28,576</td>
<td>24,932</td>
<td>26,721</td>
<td>28,962</td>
<td>37,185</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>45,214</td>
<td>49,212</td>
<td>46,429</td>
<td>52,913</td>
<td>49,340</td>
<td>20,160</td>
<td>23,447</td>
<td>44,894</td>
<td>68,024</td>
<td>34,402</td>
</tr>
<tr>
<td>Research and development</td>
<td>5,527</td>
<td>6,183</td>
<td>6,658</td>
<td>6,898</td>
<td>6,959</td>
<td>6,901</td>
<td>6,259</td>
<td>6,599</td>
<td>7,266</td>
<td>8,094</td>
</tr>
</tbody>
</table>

### Financial status

| Total assets            | ¥731,185 | ¥726,938 | ¥693,918 | ¥764,420 | ¥725,320 | ¥664,801 | ¥658,140 | ¥688,130 | ¥747,907 | ¥703,917 |
| Current assets          | 264,001  | 267,430   | 254,870   | 262,932   | 247,742   | 241,483   | 246,400   | 264,512   | 271,680   | 202,105   |
| Net property, plant, and equipment | 387,273  | 386,013   | 367,399   | 393,818   | 386,541   | 358,682   | 355,728   | 380,281   | 425,630   | 392,586   |
| Current liabilities     | 82,701   | 105,400   | 86,025    | 103,836   | 112,992   | 96,485    | 103,577   | 117,935   | 131,665   | 109,043   |
| Interest-bearing debt   | 109,141  | 109,731   | 101,997   | 120,661   | 112,005   | 100,479   | 103,687   | 117,375   | 131,985   | 104,175   |
| Net assets              | 522,577  | 519,801   | 509,564   | 543,789   | 521,548   | 477,155   | 476,920   | 499,743   | 528,912   | 490,130   |

### Cash flows

| Cash flows from operating activities | ¥38,837 | ¥46,797 | ¥48,261 | ¥46,160 | ¥52,002 | ¥21,637 | ¥47,862 | ¥69,882 | ¥31,563 | $(9,585) |
| Cash flows from investing activities | (29,264) | (32,638) | (36,139) | (68,644) | (19,551) | (14,317) | (19,760) | (31,755) | (57,155) | (107,777) |
| Cash flows from financing activities | 1,699    | (7,892)  | (17,624) | 9,797    | (28,503) | (21,976) | (7,370)  | (29,178) | (5,874)  | (11,573)  |
| Cash and cash equivalents at end of year | 129,823 | 133,856 | 126,167 | 113,835 | 116,249 | 100,977 | 121,215 | 134,723 | 106,863 | 75,083    |

### Per share of common stock (yen and dollars)

| Net income (loss)         | ¥59,690 | ¥96,888 | ¥49,950 | ¥273,293 | ¥214,260 | ¥348,550 | ¥157,840 | ¥290,988 | ¥302,760 | $(282,900) |
| Net assets                | 5,163.32 | 5,159.30 | 5,069.60 | 5,416.93 | 5,346.03 | 4,885.50 | 4,886.10 | 5,321.77 | 5,635.52 | 5,463.53    |
| Cash dividends            | 60.00    | 80.00    | 80.00    | 90.00     | 100.00    | 100.00    | 100.00    | 110.00    | 120.00    | 120.00     |

### Financial indicators (%)

| Operating margin          | 2.7      | 8.8      | 8.2      | 11.4      | 8.3       | 6.3      | 7.3      | 11.2      | 8.1       | (3.7)      |
| Equity ratio              | 70.2     | 70.6     | 72.7     | 70.5      | 71.2      | 71.0     | 71.7     | 70.9      | 69.1      | 69.2       |
| Return on equity          | 1.2      | 1.9      | 1.0      | 5.2       | 2.9       | (6.8)    | 3.2      | 5.8       | 5.5       | (5.2)      |

**Notes:**
1. Net income (loss) per share and net assets per share are calculated on the average number of shares outstanding during each year and the number of shares outstanding at the end of each year, respectively.
2. As there were 5 whisper stock spirited during the past three years, diluted net income per share was not calculated.
3. As of December 31, 2020, Nippon Electric Glass Co., Ltd. had 24 consolidated subsidiaries and 1 affiliated company accounted for by the equity method. Note that Electric Glass Fiber NL, B.V. commenced bankruptcy proceedings on September 26, 2023 and has since been excluded from NEG's consolidated data.
4. Capital expenditures for the fiscal year ended December 31, 2014 were calculated based on the period from April 1, 2014 to December 31, 2014 for NEG and its domestic consolidated subsidiaries and the period from January 1, 2014 to December 31, 2014 for NEG's overseas consolidated subsidiaries.
5. Per share of common stock amounts are retroactively adjusted for subsequent stock consolidation. On July 1, 2017, common shares were consolidated at a ratio of 5 to 1 based on the number of shares held by shareholders of record as of June 30, 2017.
6. NEG and its consolidated subsidiaries have adopted the “Partial Amendments to Accounting Standard for Tax Effect Accounting” (Accounting Standards Board of Japan [ASBJ] Statement No. 28, February 16, 2013). According to relevant revised ASBJ regulations from the beginning of the fiscal year ended December 31, 2022. Accordingly, consolidated financial statements for that fiscal year reflect the application of this standard and the relevant revised ASBJ regulations.
7. NEG and its consolidated domestic subsidiaries have applied the “Accounting Standard for Revenue Recognition” (Accounting Standards Board of Japan [ASBJ] Statement No. 29, March 31, 2020) and the relevant revised ASBJ regulations from the beginning of the fiscal year ended December 31, 2022. Accordingly, consolidated financial statements for that fiscal year reflect the application of this standard and the relevant revised ASBJ regulations.
8. U.S. dollar amounts have been translated from Japanese yen solely for the convenience of the reader using the prevailing exchange rate at December 31, 2023 of ¥142 to U.S. $1.00.

---

**Nippon Electric Glass Integrated Report 2023**

---