

GLASS FOR FUTURE



# ESG Databook 2021

For the year ended December 31, 2021



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## On the Issuance of Our Databook

The Nippon Electric Glass Group ESG Databook 2021 contains information that will be of particular interest to our stakeholders who want to get more information on our environmental, social, and governance-related efforts beyond what appears in our Integrated Report 2021 and on the Company website. With your feedback, we plan to continue improving such reports to make the information easier to understand.

## Organizations Covered

The Nippon Electric Glass Group's 10 companies in Japan and 15 companies outside Japan are covered in this databook. In cases where the coverage area of the data differs, we have indicated the appropriate coverage areas respectively.

## Period of Reporting

### Fiscal 2021 (January 2021 to December 2021)

Some qualitative information regarding fiscal 2022 has also been included in this databook.

## Publication, Next Scheduled Publication

Issued in May 2022. Next scheduled issue in May 2023.

## 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 databook 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.

## Corporate Governance

### Attendance of Board of Directors and Board of Corporate Auditors Meetings in Fiscal 2021

|                              | Name               | Board of Directors                                             | Board of Corporate Auditors |
|------------------------------|--------------------|----------------------------------------------------------------|-----------------------------|
| Representative Directors     | Masayuki Arioka    | 14/14 meetings (100%)                                          | —                           |
|                              | Motoharu Matsumoto | 14/14 meetings (100%)                                          | —                           |
| Directors                    | Hirokazu Takeuchi  | 14/14 meetings (100%)                                          | —                           |
|                              | Koichi Tsuda       | 14/14 meetings (100%)                                          | —                           |
|                              | Hiroki Yamazaki    | 14/14 meetings (100%)                                          | —                           |
|                              | Tomonori Kano      | 11/11 meetings (100%)<br>(Since assuming office in March 2021) | —                           |
| Outside Directors            | Shuichi Mori       | 14/14 meetings (100%)                                          | —                           |
|                              | Reiko Urade        | 14/14 meetings (100%)                                          | —                           |
|                              | Hiroyuki Ito       | 14/14 meetings (100%)                                          | —                           |
| Full-time Corporate Auditors | Masahiko Ohji      | 14/14 meetings (100%)                                          | 13/13 meetings (100%)       |
|                              | Yoshihisa Hayashi  | 14/14 meetings (100%)                                          | 13/13 meetings (100%)       |
| Outside Corporate Auditors   | Katsuhiko Matsui   | 14/14 meetings (100%)                                          | 13/13 meetings (100%)       |
|                              | Tsukasa Takahashi  | 14/14 meetings (100%)                                          | 13/13 meetings (100%)       |

### Training for Directors and Auditors

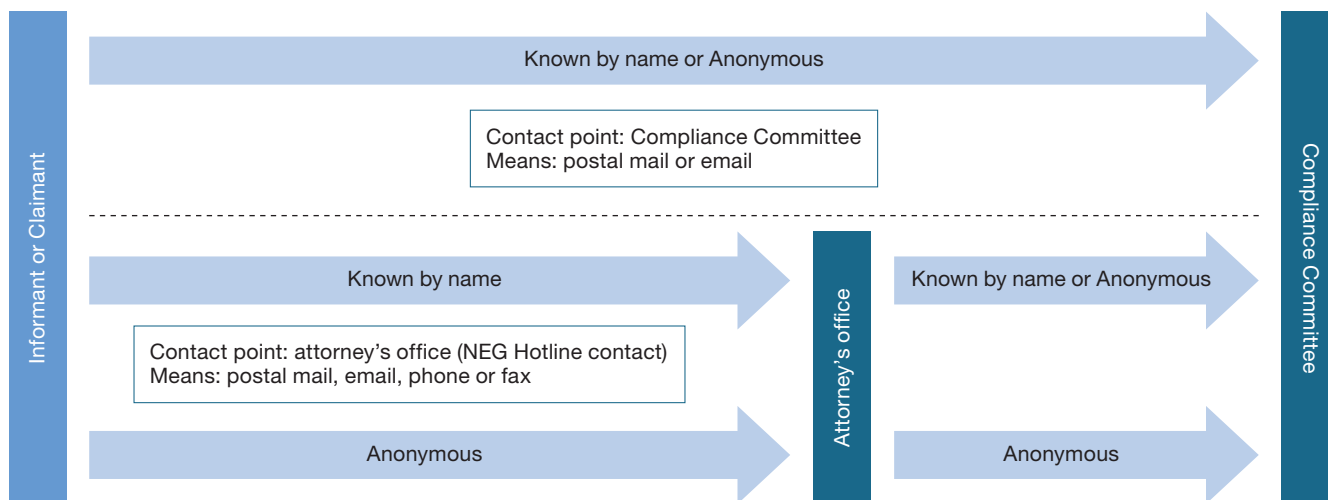
During Compliance Awareness Month, which is held in October of every year, we invite outside instructors to come and give lectures on compliance to our inside directors, full-time corporate auditors, and other executives. We also hold director training seminars every year, which provide our directors with a deeper understanding of current business conditions, including those surrounding corporate governance. Our corporate auditors participate in seminars and information exchanges with outside organizations, through which they deepen their auditing-related expertise. For our outside directors and outside corporate auditors, prior to assuming office, we provide them with explanations about our current corporate situation and systems. After they have assumed office, we provide them with opportunities to conduct interviews with directors and executive officers.

### Total Amount of Directors' and Corporate Auditors' Remuneration in Fiscal 2021

| Category                                                    | Total amount of remuneration (millions of yen) | Total amount for each type of remuneration (millions of yen) |                                     |         |                     | Number of eligible Board Members |
|-------------------------------------------------------------|------------------------------------------------|--------------------------------------------------------------|-------------------------------------|---------|---------------------|----------------------------------|
|                                                             |                                                | Monthly (fixed) remuneration                                 | Restricted stock-based remuneration | Bonuses | Retirement benefits |                                  |
| Directors<br>(Outside Directors excluded)                   | 361                                            | 230                                                          | 40                                  | 90      | —                   | 7                                |
| Corporate Auditors<br>(Outside Corporate Auditors excluded) | 41                                             | 41                                                           | —                                   | —       | —                   | 2                                |
| Outside Directors and Corporate Auditors                    | 37                                             | 37                                                           | —                                   | —       | —                   | 5                                |

## Compliance

### Internal Whistleblowing System “NEG Hotline”



### Number of exposures or claims within the Group

| 2017 | 2018 | 2019 | 2020 | 2021 |
|------|------|------|------|------|
| 4    | 6    | 11   | 11   | 12   |

Note: Figures for 2017 and 2018 are for the Company and its group companies in Japan only.

### Measures to Prevent Corruption

With increasing globalization, the importance of preventing corrupt actions such as bribery in international transactions is being recognized in various countries.

Our Group Code of Conduct prohibits the bribery of public officials or others in positions of public service in Japan or any other country. The issue of preventing corruption is addressed in compliance training at our group companies both in Japan and abroad, held during Compliance Awareness Month.

### Measures to Maintain Fair Business Dealings

We recognize the importance of adhering to antitrust laws in promoting fair international dealings.

Our Group Code of Conduct prohibits actions such as price-fixing or cartel agreements, and based on the internal rules at our group companies inside and outside Japan, any contact with a director and an employee of a competitor must be requested ahead of time and reported on afterwards. Adherence to the antitrust laws is covered in our annual group company compliance training, and we also hold seminars on the antitrust laws for employees who work in sales.

## Compliance Education, Workshops, and Lectures Held in Fiscal 2021

|          | Name                                        | Intended Persons                                                                                                                 | Times | Participants | Themes                                                                                                                                                                                                                                                                   |
|----------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Japan    | Education for new employees (new graduates) | All new employees (new graduates)                                                                                                | 2     | 38           | <ul style="list-style-type: none"> <li>Corporate Philosophy, Code of Conduct, Principles of Activities</li> <li>What is compliance?</li> <li>Internal whistleblowing system</li> <li>Case studies and the like</li> </ul>                                                |
|          | Workshop (online)                           | Managers at our Company and subsidiaries in Japan (Participants shall inform other employees in their workplace of the content.) | 4     | 156          | <ul style="list-style-type: none"> <li>Outline of compliance</li> <li>Recent trends (background and notes)</li> <li>Internal whistleblowing system and the like</li> </ul>                                                                                               |
|          | Lecture                                     | Executives and general managers at our Company, representatives of subsidiaries in Japan, area branch managers                   | 1     | 58           | <ul style="list-style-type: none"> <li>On quality fraud</li> </ul>                                                                                                                                                                                                       |
|          | Antitrust seminar for sales departments     | Employees of our Company engaged in sales activities                                                                             | 2     | 57           | Antitrust laws <ul style="list-style-type: none"> <li>Outline of antitrust laws</li> <li>Effects of revision to laws and case studies</li> </ul>                                                                                                                         |
| Overseas | e-Learning                                  | Managers at subsidiaries in Malaysia, the U.S.A. and Europe                                                                      | —     | 312          | <ul style="list-style-type: none"> <li>Corporate Philosophy, Code of Conduct, Principles of Activities</li> <li>Protecting human rights in the supply chain</li> <li>Trade secrets, personal information</li> <li>Internal whistleblowing system and the like</li> </ul> |

As a result of these efforts, no cases occurred in fiscal 2021 of bribery, anticompetitive acts, or any other infraction requiring legal action.

## BCP

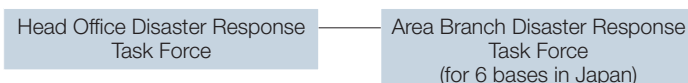
### BCP Response Training

At our BCP response training carried out in November 2021, we simulated the scenario of a major earthquake in the active fault zone on the west coast of Lake Biwa, set up a remote disaster headquarters, and elicited issues that could arise.



BCP response training

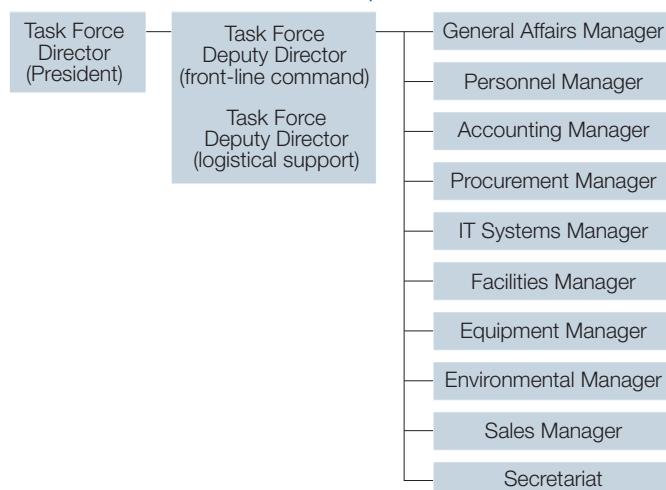
### BCP Activation Structure



#### Roles

- Head Office: Implement basic policy and decision-making for general disaster response.
- Area Branches: Facilitate disaster response while coordinating closely with the Head Office.

#### Structure of Head Office Disaster Response Task Force



## Risk Management

### Business Risks

| Risk                                                                                  | Description                                                                                                                                                                                                                                                                                                            | Possibility | Effect | Response                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ① Risks related to procurement of materials and other items                           | Limited supply or delays for raw materials and fuels, or rising prices of such materials or logistical costs                                                                                                                                                                                                           | Medium      | High   | Maintain good relations with suppliers, find new suppliers, increase the number of suppliers, and switch to general-purpose materials.                                                                                                                                                                         |
| ② Risks related to natural disasters, accidents and outbreaks of communicable disease | Suspension of operations or delays in production and shipments caused by natural disasters such as earthquakes, typhoons, and heavy rains, or accidents such as fires and power outages, or outbreaks of infectious disease (including such occurrences in the supply chain); and costs to repair damage to facilities | Medium      | High   | Implement a business continuity plan; provide seismic reinforcement of structures; implement disaster-preparedness measures; arrange dispersed manufacturing sites; and prevent the introduction and spread of communicable diseases.                                                                          |
| ③ Risks related to information management                                             | Claims for damages due to the leaking of confidential information that our Group obtained in the course of business, or tarnished corporate reputation due to such problems; and the suspension of business activities or information systems operation due to a computer virus or cyberattack                         | Medium      | Medium | Establish an Information Management Committee, deploy security systems, and provide in-house training.                                                                                                                                                                                                         |
| ④ Drastic changes in demand and market structure                                      | Contracted demand for existing products due to technological innovation, or fluctuation of price or supply of products due to intensified competition                                                                                                                                                                  | Medium      | Medium | Speed up R&D, respond to new needs through aggressive sales.                                                                                                                                                                                                                                                   |
| ⑤ Capital expenditure risks                                                           | Significant change in demand forecast, shortage of plant capacity, sudden change in price of major equipment or materials                                                                                                                                                                                              | Medium      | Medium | When and however necessary, build new production facilities and continuously upgrade them.                                                                                                                                                                                                                     |
| ⑥ Environmental risks                                                                 | A shift to stricter environmental regulations, or more corporate responsibilities related to the environment demanded by society                                                                                                                                                                                       | Medium      | Medium | Develop environmentally friendly products, ensure that facilities and management systems exert minimal impact on the environment, raise production efficiency, practice the 3Rs (reduce, reuse, recycle), strengthen efforts to reduce carbon emissions, and promote disclosure based on TCFD recommendations. |
| ⑦ Risks related to legal restrictions                                                 | Violation of the laws or regulations of the country or region where we operate                                                                                                                                                                                                                                         | Medium      | Low    | Comply with laws and regulations, survey changes in legal revisions, and hold periodic in-house education and audits.                                                                                                                                                                                          |
| ⑧ Risks related to fluctuations in currency exchange rates and interest rates         | Fluctuations in currency exchange rates and interest rates                                                                                                                                                                                                                                                             | Medium      | Low    | Utilize forward exchange contracts, properly manage interest-bearing debt, and carry out interest rate swap transactions.                                                                                                                                                                                      |
| ⑨ Risks related to certain products                                                   | Change in investment or sales plan or material procurement policy of our major customers                                                                                                                                                                                                                               | Low         | High   | Diversify our customer base.                                                                                                                                                                                                                                                                                   |
| ⑩ Risks related to overseas business operations                                       | Unanticipated changes in laws or regulations; international tax risk; particular trade practices; changes in political or social conditions; and social turmoil due to terrorism, war, outbreaks of infectious disease, or other factors                                                                               | Low         | Medium | Facilitate close communication between overseas subsidiaries and local authorities, and get advice from experts.                                                                                                                                                                                               |
| ⑪ Securing human resources and business-related risks                                 | Difficulty in securing appropriate human resources for future business development and labor-related compliance violations                                                                                                                                                                                             | Low         | Medium | Secure an optimal and effective workforce through active recruitment and training of diverse personnel; achieve labor saving through automation and other means; and institute labor management according to laws and regulations.                                                                             |
| ⑫ Risks related to intellectual property rights                                       | A litigation related to intellectual property rights                                                                                                                                                                                                                                                                   | Low         | Medium | Obtain intellectual property rights useful for business, survey and monitor other companies' intellectual property rights, develop alternative technologies, and take over or license intellectual property from other companies.                                                                              |

## Environmental Management Logo

This logo was created in June 1993 and is used in our Environmental Management System activities and Environmental Charter. The design was selected from among internal suggestions. The green leaves represent new environmental technologies, nature, and the hands of our employees, while the blue circle depicts the sky and the Earth, environmental equipment made by our employees, and the community and society surrounding us.



## Promoting the Environmental Management Plan

In an effort to improve our environmental performance in fiscal 2021, we achieved 36 of the 39 targets we recognized at our plants in Japan. In fiscal 2022, we identified 42 targets that address urgent issues related to reductions in carbon dioxide emissions, energy and resource consumption; and matters directly linked to our core operations.

## ISO 14001 Certification Status

In August 2017, we renewed our certification of registration for the international environmental standard ISO 14001:2015 (revised in 2015). Then in 2020 we retained our certification in the first renewal audit under the new standard. To further improve our environmental performance, we are committed to implementing the PDCA (Plan, Do, Check, Act) cycle.

### ISO 14001 Certification Status of Our Group

| Company name                                                            | Date of certification |
|-------------------------------------------------------------------------|-----------------------|
| Nippon Electric Glass Co., Ltd.<br>(multi-certification at four plants) | Aug. 27, 1999         |
| Group companies                                                         | Date of certification |
| <b>Japan</b>                                                            |                       |
| SGS Engineering Co., Ltd.                                               | Jan. 19, 2001         |
| Nichiden Glass Processing Company, Limited                              | Nov. 1, 2002          |
| Shiga Nichiman Company, Limited                                         | Feb. 15, 2013         |
| LTCC Materials Co., Ltd.                                                | Dec. 25, 2020         |
| <b>Overseas</b>                                                         |                       |
| Techneglas LLC                                                          | Jan. 31, 2000         |
| Nippon Electric Glass (Malaysia) Sdn. Bhd.                              | Jan. 12, 2002         |
| Nippon Electric Glass Taiwan Co., Ltd.                                  | Sep. 18, 2006         |
| Paju Electric Glass Co., Ltd.                                           | Aug. 28, 2007         |
| Nippon Electric Glass (Korea) Co., Ltd.                                 | Oct. 9, 2007          |
| Electric Glass (Shanghai) Co., Ltd.                                     | Dec. 21, 2009         |
| Electric Glass (Korea) Co., Ltd.                                        | Dec. 9, 2014          |
| Electric Glass (Guangzhou) Co., Ltd.                                    | Nov. 11, 2015         |
| Electric Glass (Xiamen) Co., Ltd.                                       | Apr. 17, 2017         |
| Electric Glass Fiber NL, B.V.                                           | May 22, 2017          |
| Electric Glass (Nanjing) Co., Ltd.                                      | Apr. 13, 2018         |

## Environmental Education

All of our employees are regarded as important contributors to our environmental initiatives, so we provide them with various types of training in environmental management. We focus on upgrading the skills of our internal auditors and evaluators of environmental management, and train employees who have that responsibility.

In fiscal 2021 such training was carried out for 38 new internal auditors.

## Environmental Business Plan

### Energy Efficiency

In 2021 we initiated efforts under an energy business plan that makes visible the amount of energy used in product manufacturing processes globally and promotes the efficient use of energy and reduction of wasteful use.

We analyze the data obtained to boost productivity and develop effective measures, while continuing to reduce our energy intensity (production weight ratio) by setting targets and creating improvement plans for improving energy efficiency.

### Waste Reduction

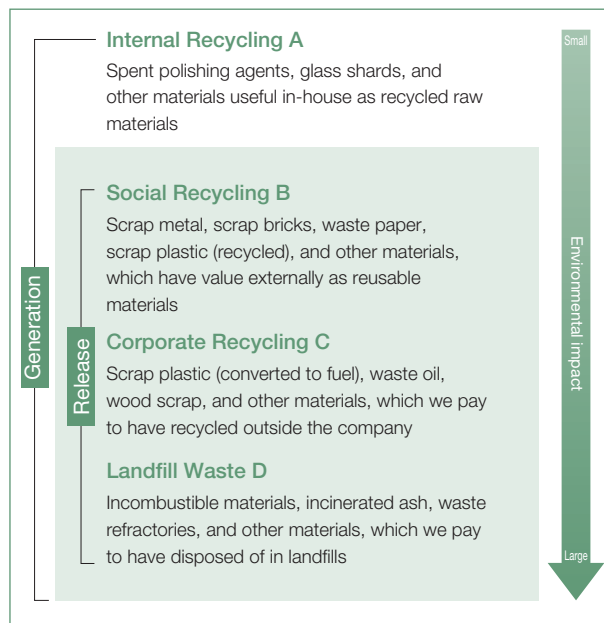
As part of the waste reduction efforts we launched in 2000, we separate waste into two categories: “normal waste,” which comprises waste generated by our normal production activities, and “bulky construction waste,” which is waste generated by such activities as periodic maintenance of glass melting furnaces.

These waste categories are further separated into the four subcategories shown in the accompanying figure, with “Landfill Waste D” being our highest waste reduction priority due to its high environmental impact.

With regard to normal waste requiring landfill disposal (Landfill Waste D), our ongoing efforts since 2009 to minimize and recycle what we generate on a daily basis have reduced the percentage of this waste per total weight of products sold to 0.1% or less. On the other hand, however, as a result of glass fiber business acquisitions in the U.K., Netherlands, and U.S.A. in 2016 and 2017, the amount of normal waste that the Group produces has increased dramatically. Moving forward, we will continue to promote our efforts overseas to reduce the amount of normal waste we generate.

With regard to bulky construction waste requiring landfill disposal (Landfill Waste D), the majority of this waste is generated from glass melting furnace repairs and comprises unrecyclable waste brick. In 2017, we put in place a mechanism for shifting this waste to Social Recycling B by having a refractory manufacturer use waste chromium (Cr) bricks and zirconium (Zr) bricks as raw materials. This has also contributed to a significant reduction in landfill waste disposal associated with Cr bricks, which are classified as specially controlled industrial waste.

### Waste Categories



### Normal Waste (Landfill Waste D) per Total Weight of Products Sold

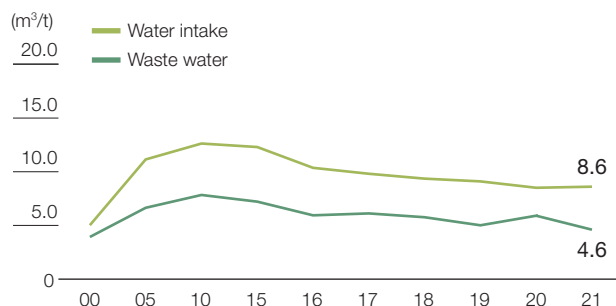


### Water Reduction

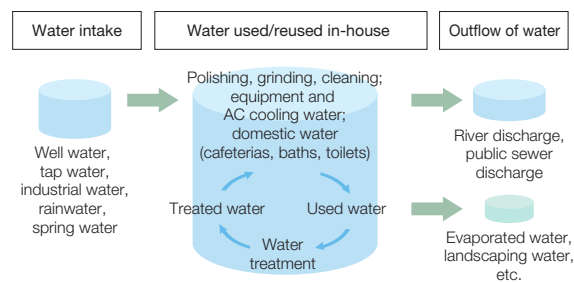
We believe that our level of manufacturing refinement is represented in the way water is used. Consequently, by managing our water usage we are increasing our understanding of the entire glass manufacturing process, including melting, forming, and processing, while further improving our process technology and equipment. The graph on the next page shows the change overtime in water intake and waste water per total weight of products sold. Although intensity increased after fiscal 2004 due to the rapid switchover from CRTs to LCDs, our intensity has declined as a result of management efforts to improve utilization efficiency within the LCD business since fiscal 2014.

To reduce the intake volume of valuable water resources, we are promoting the reuse of water used in high volumes for cooling in the melting and forming stages and for cleaning at the processing stage. We are also reducing water intake and water out even for other uses through cascading (downcycling), depending on the purpose of the water use or required grade, as well as recycling water through purification.

### Water Intake/Waste Water per Total Weight of Products Sold



### Water Flow



## Our Global Warming Countermeasures

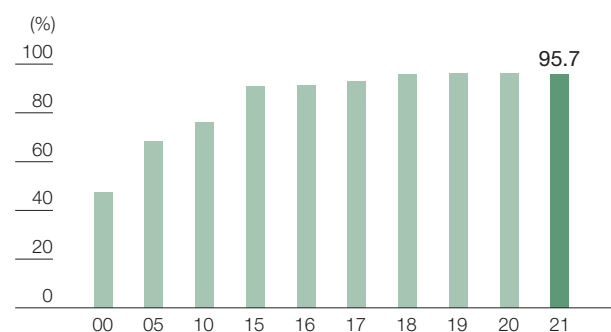
Reducing greenhouse gas emissions from melting furnaces is a vital issue in the glass manufacturing industry, which uses a high volume of energy for melting, and it is a top priority for us.

### ■ Oxy-fuel Firing Glass Melting Furnaces

An oxy-fuel firing furnace differs from an air combustion furnace in that nitrogen is not taken into the furnace, which means that less exhaust gas (and consequently exhaust heat) is produced, thus reducing fuel consumption and CO<sub>2</sub> emissions. Furthermore, the generation of thermal nitrogen oxides (NOx) in a furnace is reduced.

In 1993, we installed Japan's first oxy-fuel firing glass melting furnace. This technology has now been adopted for almost all of our furnaces.

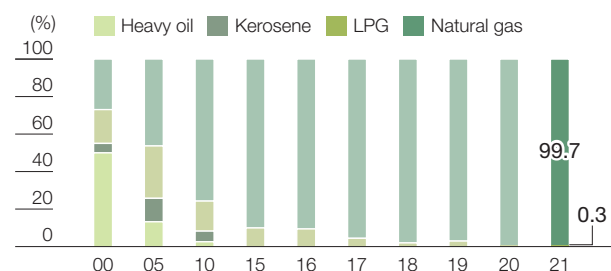
### Percentage of Oxy-fuel Firing Furnaces among All Melting Furnaces



### ■ Fuel Conversion in Glass Melting Furnaces

We have been making a shift to fuels that produce lower carbon emissions—actively switching to the use of natural gas over the last 20 years. In 2010 we completely stopped using heavy oil, and in 2020 we achieved a natural gas usage rate of 99.7%.

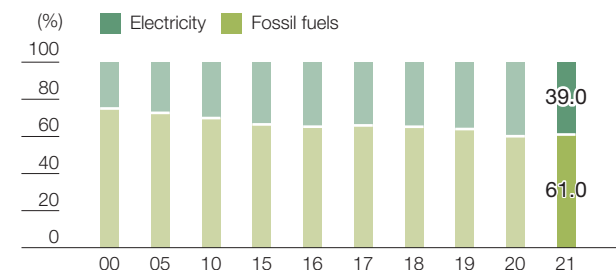
### Fuel Conversion



### ■ Increasing Electricity Usage in the Glass Melting Process

In the current melting process, both gas and electricity are used. When using electricity, we insert electrodes into the molten glass, a method of heating that uses the direct passage of electric current. This method is highly energy efficient, and produces less exhaust heat than gas combustion. Carbon emissions can also be reduced going forward by introducing renewable energy sources. To achieve this, our Group is promoting a shift to hybrid melting furnaces that can be powered by electricity. A further shift to all-electric melting furnaces is the direction in which we are headed, with the aim of achieving carbon neutrality in the future.

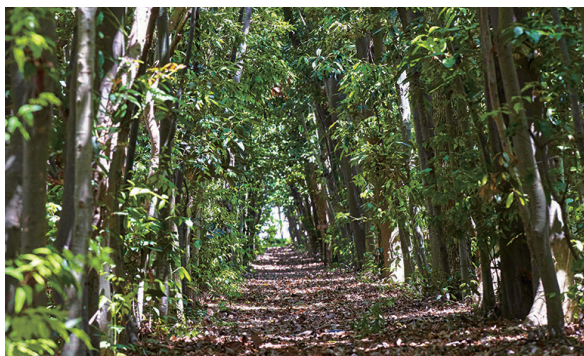
### Electricity Usage



## Protecting Biodiversity

To fulfill our social responsibility as a corporation, we are required to make efforts to protect the global environment in our business operations. We have identified “consideration for the environment” as one of our key values, and we have been working to reduce our environmental footprint. Committed to the principle of leaving nature untouched, except for the locations required for our business operations, the Notogawa Plant maintains natural forests that make use of the native vegetation of the local Suzuka Mountain Range, and has even left local streams undisturbed since it was established. Flower seedlings are also grown in a greenhouse inside the plant and used to beautify the local area.

In addition to reducing emissions of greenhouse gases, our employees participate in volunteer work to maintain forests carried out by a local forestry cooperative, and we take part in the extermination of invasive fish species in an effort to protect the ecosystem of Lake Biwa. Through such initiatives, we are working to conserve local biodiversity.



Pedestrian path through native natural vegetation

## Environmental Topics ①

### The Lake Biwa Carbon Credit Partner Agreement

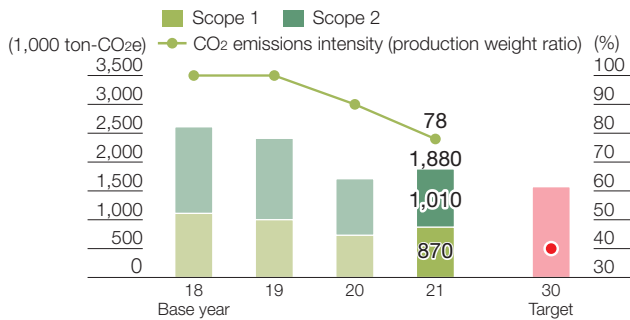
In March 2021, we entered into a partner agreement with the Shiga Prefecture Afforestation Public Corporation, a general incorporated association whose director is the governor of Shiga Prefecture, Taizo Mikazuki. The Lake Biwa Carbon Credit system, began in 2021, allows Shiga Prefecture to use the national government's J-Credit Scheme to earn credits for amounts of CO<sub>2</sub> emissions reduced through energy-saving measures or the utilization of renewable energy, or for the amount of CO<sub>2</sub> absorbed through forest management. The Shiga Prefecture Afforestation Public Corporation can then sell those credits to partners. The system's aim is to achieve net zero carbon emissions in Shiga in the future. The funds from the buying and selling of offset credits are used to protect forests, from which the water of Lake Biwa originates, creating a positive cycle of reinforcement between the Shiga CO<sub>2</sub> Net Zero movement and Lake Biwa environmental conservation efforts.

Since 2018, we have been purchasing J-credits continuously from the Konze Forestry Association in Ritto, Shiga Prefecture, and this is our second case of purchasing J-credits through the Lake Biwa Carbon Credit system. We will continue on a regular basis to purchase credits produced in the prefecture, and support over the medium-to-long term forest conservation activities in Shiga, our home prefecture, to contribute to the Shiga CO<sub>2</sub> Net Zero movement and the conservation of Lake Biwa.



## Analysis of Environmental Impact (fiscal 2021 consolidated basis)

### Annual CO<sub>2</sub> emissions and CO<sub>2</sub> emissions intensity



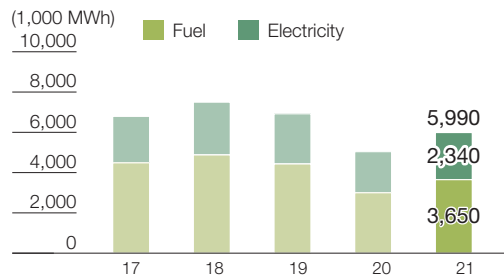
### 2030 reduction targets (relative to 2018)

- CO<sub>2</sub> emissions: 36% reduction
- CO<sub>2</sub> emissions intensity: 60% reduction (production weight ratio)

### Input

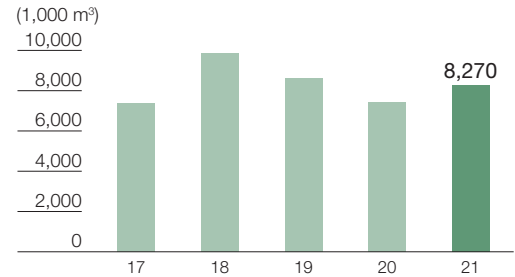
#### 1. Energy

##### Total energy



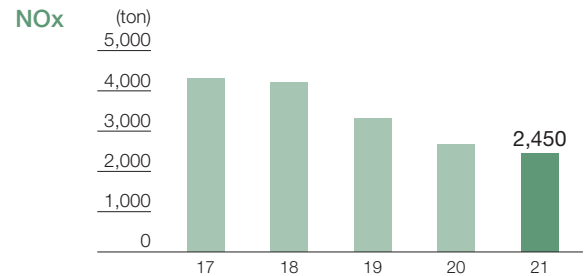
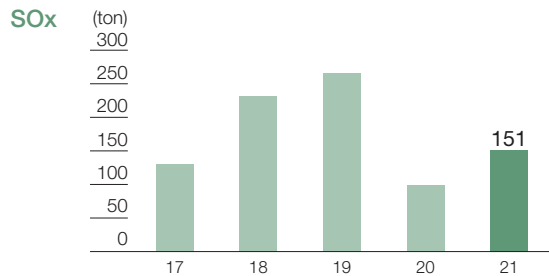
#### 2. Water

##### Water intake

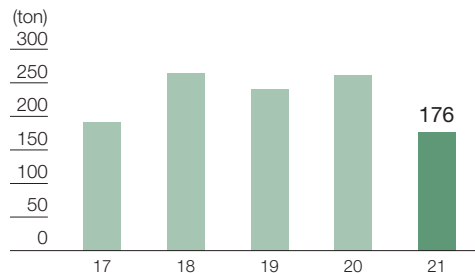


### Output

#### 1. Atmosphere

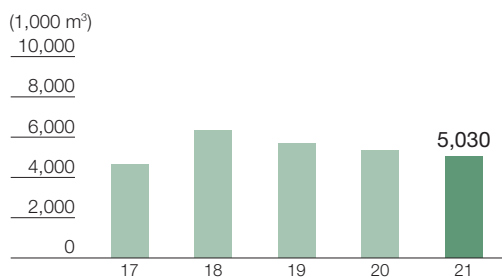


##### Particulate matter



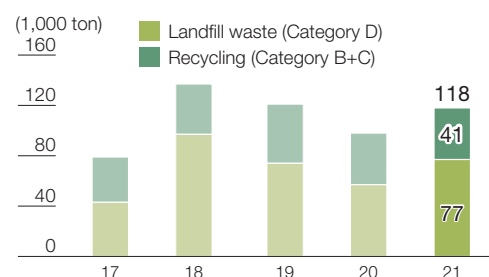
#### 2. Water

##### Waste water



#### 3. Waste

##### Total emissions



## Environmental Accounting (The Company)

(Millions of yen)

| Category                            |                                                                                          | Main Activities                                                                                                                                                                    |                                                   | 2020       |          | 2021       |          |
|-------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|------------|----------|------------|----------|
|                                     |                                                                                          |                                                                                                                                                                                    |                                                   | Investment | Expenses | Investment | Expenses |
| (1) Costs within operational area   | Costs to reduce environmental footprint of production activities within operational area | Breakdown                                                                                                                                                                          |                                                   | 29         | 3,225    | 99         | 2,993    |
|                                     |                                                                                          |                                                                                                                                                                                    | ① Anti-pollution maintenance and management costs | 8          | 422      | 80         | 491      |
|                                     |                                                                                          |                                                                                                                                                                                    | ② Global environmental conservation costs         | —          | 1,075    | 6          | 691      |
|                                     |                                                                                          |                                                                                                                                                                                    | ③ Resource recycling costs                        | 21         | 1,728    | 14         | 1,811    |
| (2) Upstream and downstream costs   | Costs to reduce environmental footprint of upstream and downstream production activities | Costs for green procurement, product recycling, container and packaging recycling, environmental conservation measures                                                             | —                                                 | 195        | —        | 166        |          |
| (3) Costs of management activities  | Environmental conservation costs within management activities                            | Costs for environmental education, ISO 14001 system construction and maintenance, and measuring of environmental footprint; labor costs of environmental managers                  | —                                                 | 666        | 3        | 742        |          |
| (4) Research and development costs  | Environmental conservation costs of R&D activities                                       | Expenses related to the development of environmentally friendly products, expenses related to production technology designed to reduce environmental impact                        | 18                                                | 227        | 80       | 887        |          |
| (5) Costs for social initiatives    | Environmental conservation costs of social initiatives                                   | Beautification and tree-planting activities for harmonious coexistence with local communities, support for local communities, environment-related advertising costs, afforestation | —                                                 | 134        | —        | 101        |          |
| (6) Environmental remediation costs | Costs to deal with damage to the environment                                             | Environmental restoration expenses                                                                                                                                                 | —                                                 | 64         | —        | 221        |          |
| (7) Other costs                     | Other costs relating to environmental conservation                                       | Expenses for dismantling and removal of environment-related equipment and facilities                                                                                               | 184                                               | 36         | 48       | 27         |          |
| Total                               |                                                                                          |                                                                                                                                                                                    | 231                                               | 4,547      | 957      | 5,137      |          |

Note: Regarding investment and expenses, only costs clearly arising directly from environmental concerns have been aggregated. In regard to production facilities and R&D, only sections related to the environment have been included.

(Millions of yen)

| Item                                                          | Contents                                                                                                                                                 | 2020   | 2021   |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|
| Total investment                                              | Scheduled repair of glass melting furnaces and production rationalization investment, investment to improve manufacturing productivity of major products | 19,224 | 34,234 |
| Total research and development costs                          | Development and improvement of process technology, and development of products, including FPD glass and glass for electronic devices                     | 5,893  | 6,272  |
| Proceeds from sales of valuable resources related to ③ of (1) | Sales of scrap metal, scrap bricks, etc.                                                                                                                 | 9      | 10     |
| Proceeds from sales of valuable resources related to (2)      |                                                                                                                                                          | 0      | 0      |

## Environmental Topics ②

### Glass Fiber Recycling

Recycling technologies have long been used in Japan in the glass fiber business to produce fiber used in various applications such as automobiles, households appliances, and everyday items.

When used as a composite reinforcing material, glass fibers are bundled together and surface-treated with organic material, both as protection and to enable the fibers to bond with resin. That finish poses a problem, causing many glass fiber manufacturers to treat loss and waste generated in the manufacturing process as industrial waste. We have eliminated the finish, so we can grind the glass fiber and turn it entirely into reusable material. Also, we collect the dust in the vapor generated from molten glass, whose main component is boric acid, and reuse it in glass raw material—a technology established in the 1980s. These technologies also help to conserve resources and clean exhaust gas.



Glass fiber also used in electric vehicles and fuel cell vehicles

## Environmentally Friendly Products

We contribute to a sustainable society by providing products that help conserve the global environment.

Sales of environmentally friendly products: 90 billion yen in fiscal 2021

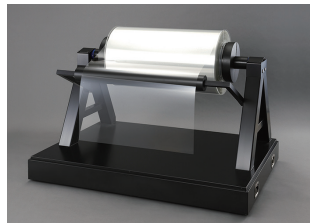


### Saving energy and labor



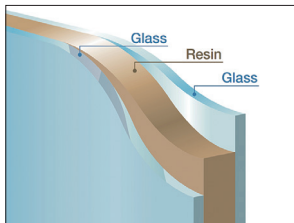
#### E Glass Fiber (Chopped strands)

Used in plastic automobile parts, this material helps make cars lighter.



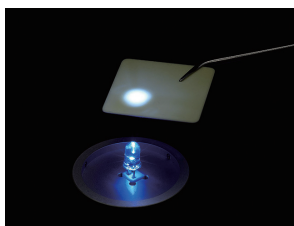
#### G-Leaf™, ultra-thin glass

Just micrometers thin, it helps make devices lighter. It also expands the possibilities of labor saving in manufacturing through its use in a roll-to-roll process.



#### Lamion™, ultra-thin glass laminated on resin

This material combines the superb properties of glass and resin. It is used on train station platform doors thanks to its strength and light weight.



#### Lumiphous™, phosphor-glass composite

This wavelength-converting material helps expand the range of applications for energy-saving LED lighting.

### Creating energy



#### E Glass Fiber (Roving)

This material is used as reinforcement for the plastic blades of wind turbines. It also holds promise as reinforcement in the hydrogen gas tanks of fuel-cell vehicles.

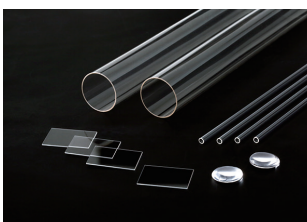


Test charging of a smartphone using the sodium-ion battery

#### All-solid-state sodium-ion secondary battery (under development)

We have newly developed a glass-ceramic cathode material, in addition to anode material, using sodium ions, which has resulted in the world's first all-solid-state sodium-ion secondary battery. The battery's use of sodium, which is a cheap and abundant resource, and its high stability, offer practical-level performance and great promise for the future. The product is under development and we hope to commercialize it as soon as possible.

### Reducing environmental impact



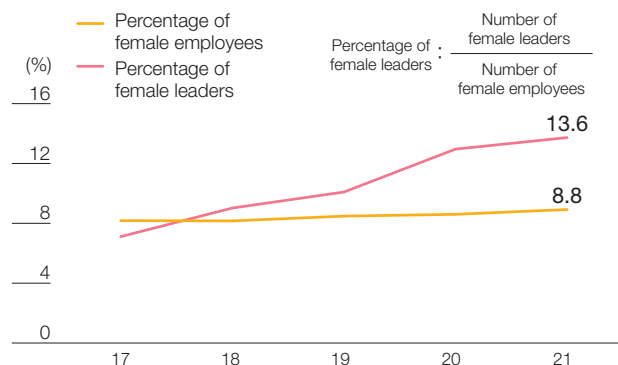
#### High-efficiency deep UV transmitting glass

Used for LED antiseptic lamps, this glass can contribute to the replacement of antiseptic lamps that use environmentally harmful mercury.

## Percentage of Female Employees and Female Leaders (The Company)

Under our Women's Empowerment Project we hold events for female employees to exchange information and opinions with each other and with staff at other firms. We are also working to nurture female leaders for positions in management.

Percentage of Female Employees and Female Leaders



Note: A female leader is a female employee who oversees and manages subordinates.

## Support for Raising the Next Generation

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. Under our Sixth Action Plan (2018–2021), we implemented measures encouraging male employees to take childcare leave and employees to take annual paid leave, and expanded our system to accommodate different working styles. Our Seventh Action Plan went into effect in April 2021, aiming to build a pleasant working environment that enables all employees to achieve a healthy balance in their work and home life.

### 7th Action Plan (Outline and Implementation)

(April 1, 2021 to December 31, 2023)

- Encouragement of male employees to participate in childcare
- Work-style reforms to create a workplace that encourages personnel diversity



### Implemented: April 1, 2021 to December 31, 2021

- Childcare leave
 

| Gender | Utilization rate               |
|--------|--------------------------------|
| Women  | Utilization rate: 100% (1/1)   |
| Men    | Utilization rate: 31.0% (9/29) |
- System to enable diverse working styles, reduction of overtime work, promotion of use of paid leave
  - ・ Promotion of 5 consecutive days of leave taken twice a year (ongoing)
  - ・ Expansion of workplaces eligible for flextime
  - ・ Review of an easier-to-use work-from-home system

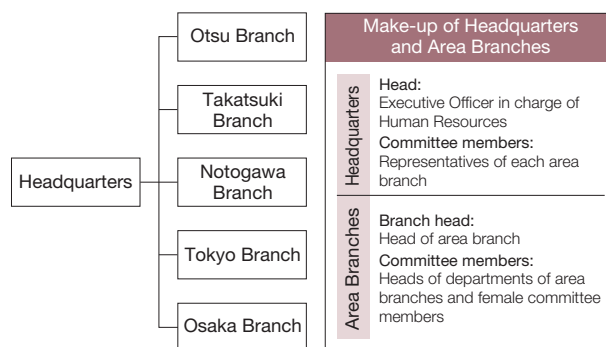
## Human Rights Initiatives

In line with the spirit of our Corporate Philosophy Structure, respect for human rights are set forth in our Code of Conduct and Principles of Activities. Led by our committee on human rights issues, we perform human rights education and participate in and dispatch executives to projects run by local governments and external groups. Our Company is a board member of the Shiga Prefecture Human Rights Issues Liaison Committee. Based in Shiga Prefecture, where our main operations are located, this committee allows us to play a leading role in promoting human rights in the region.



Human rights education

### Organization Chart of the Committee on Human Rights Issues



## Health and Productivity Management

Since we believe that improving the health of all employees leads to corporate growth, we are developing health and safety activities based on health and productivity management. We are also implementing work-style reforms. 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. One initiative is a total ban on smoking in all plants and sales headquarters in Japan starting in fiscal 2021.

### Mental and Physical Health KPIs

#### Physical health

Percentage with BMI of 25 or more

2020 34.5% ▶ 2022 28.0%

#### Mental health

Percentage suffering from high stress

Average for past 3 years 20.3% ▶ 2022 16.0%

The Company and our Health Insurance Society were both certified in the 2022 Certified Health and Productivity Management Outstanding Organizations Recognition Program. The selections for certification are made jointly by the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi. This certification system recognizes companies that engage in strategic health and productivity management for their employees. This marks our fourth consecutive certification.



2022  
健康経営優良法人  
Health and productivity

## Health and Safety

Regarding health and safety, our Principles of Activities state that “We put safety first in everything we do, and we abide by all rules and regulations regarding health and safety.” Under our company-wide health and safety program, our health and productivity management philosophy forms the basis for an action policy aimed in part 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 corporation.

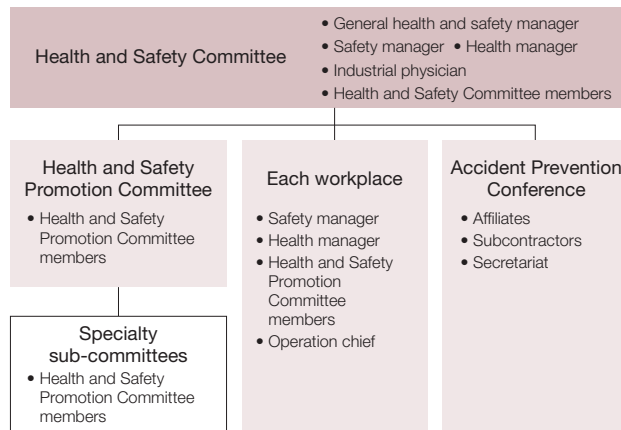
In addition to periodic workplace patrols, we also implement educational awareness campaigns, hazard prediction (*kiiken yochi*) activities, and information sharing among all operational sites both in and outside Japan, so that we can increase awareness of health and safety issues and achieve our zero-accident benchmark. Furthermore, for all employees we have an EAP (Employee Assistance Program) and conduct stress checks as part of our measures concerned with mental health.

In fiscal 2021, there was one employee accident at the Company resulting in lost workdays. This has brought into focus issues that we will incorporate into the health and safety initiatives we implement in fiscal 2022 and afterward in order to ensure we remain accident-free.

Industrial accident frequency rate (the Company)

0.42

### Organization Chart of Health and Safety for Each Area



## Work-style Reforms

We started promoting work-style reforms in 2017. By eliminating unnecessary and duplicated work through task inventory checks and maximizing use of IT, we have improved efficiency. These efforts have enabled us to reduce overtime work and increase the taking of paid leave. The benefits of these efforts have been returned to our employees via an expanded welfare program and other ways.

### Number of Paid Leave Days Taken

|             | Days Taken | Percentage of Days Taken |
|-------------|------------|--------------------------|
| Fiscal 2021 | 15.9       | 66%                      |

### Main Initiatives

- Task inventory checks
- Conference reforms (shorter, etc.)
- Active use of IT
- 5 consecutive days of leave taken twice a year
- Full implementation of no-overtime days
- Establishment of a new work-from-home system
- Establishment of a new return-to-work system
- Expansion of workplaces eligible for flextime
- Provision of child-rearing and nursing care-related information
- Work-style reform seminars

### \* New initiatives (from 2022)

- Expansion of work-from-home system
- Expansion of workplaces eligible for flextime
- System revision to align with revision to the Child Care and Family Care Leave Act
- Conducting of employee awareness survey

## Human Resource Development

In order to attain our goal of being the world's leading manufacturer of special glass, we need to have human resources 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, 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 more robust training, which will help them get to that next level.

### Training Programs

| Level                                   | By level                                                                                                                                                                                                                                                                  | Career development                        | Language study | By job category | By skill/purpose                                                                                                                                                                                                                     | Self-development | Outside training |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| Director                                | Director training                                                                                                                                                                                                                                                         |                                           |                |                 |                                                                                                                                                                                                                                      |                  |                  |
| Executive                               | Executive training                                                                                                                                                                                                                                                        |                                           |                |                 |                                                                                                                                                                                                                                      |                  |                  |
| Manager                                 | Manager training<br>Secondary evaluator training<br>Primary evaluator training<br>New appointee evaluator training                                                                                                                                                        | Life plan and career development training |                |                 | Compliance training<br>Human rights training<br>Electric information security seminars<br>Accounting seminars<br>Intellectual property seminars<br>AI/IoT seminars<br>Occupational health and safety seminars (mental health, other) |                  |                  |
| Middle-career employee – Young employee | Managerial/Technical course<br>Middle-career employee 10th-year training<br>Young employee 5th-year training<br>Young employee 3rd-year training                                                                                                                          | General course<br>OJT                     |                |                 | OJT<br>Young employee 3rd-year training                                                                                                                                                                                              |                  |                  |
| New employee                            | Managerial/Technical course<br>Review training after first year on the job<br>Technical Practical training at assigned post<br>Administrative Practical training at assigned post and overseas<br>Practical training in shift work<br>Group training upon joining company | General course<br>OJT                     |                |                 | OJT<br>Review training after first year on the job                                                                                                                                                                                   |                  |                  |

\* Global Communications Program

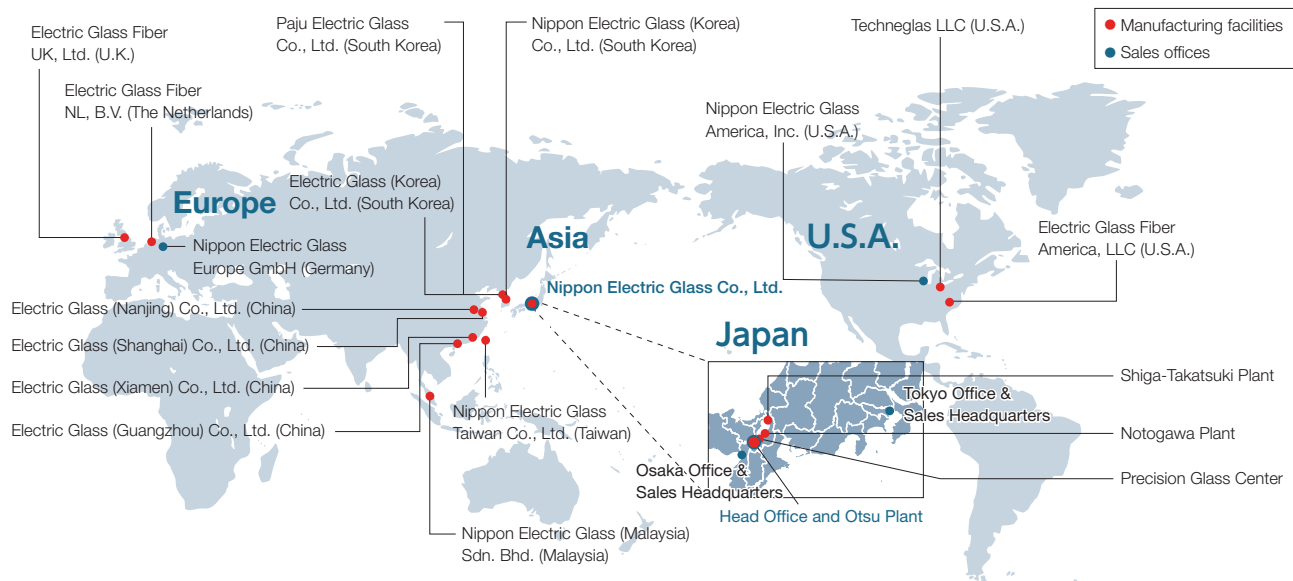
## Corporate Information

### Corporate Profile

|                                   |                                                                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Founded</b>                    | December 1, 1949                                                                                                                                    |
| <b>Company Name</b>               | Nippon Electric Glass Co., Ltd.                                                                                                                     |
| <b>Head Office</b>                | 7-1, Seiran 2-chome, Otsu, Shiga 520-8639, Japan<br>Tel: +81-77-537-1700 Fax: +81-77-534-4967                                                       |
| <b>Sales Headquarters (Osaka)</b> | 10F, Sumitomo Seimei Shin-Osaka Kita Bldg., 1-14, Miyahara 4-chome, Yodogawa-ku, Osaka 532-0003, Japan<br>Tel: +81-6-6399-2711 Fax: +81-6-6399-2731 |
| <b>(Tokyo)</b>                    | 9F, Shinagawa Grand Central Tower, 16-4, Konan 2-chome, Minato-ku, Tokyo 108-0075, Japan<br>Tel: +81-3-5460-2510 Fax: +81-3-5460-2525               |

|                                                 |                                                         |
|-------------------------------------------------|---------------------------------------------------------|
| <b>Plants (in Japan)</b>                        | Otsu, Shiga-Takatsuki, Notogawa, Precision Glass Center |
| <b>Capital</b>                                  | 32,155 million yen                                      |
| <b>Number of Employees</b>                      | 6,251<br>(consolidated, as of December 31, 2021)        |
| <b>Stock Exchange Listings</b>                  | Tokyo Stock Exchange (Prime Market)                     |
| <b>Stock Code</b>                               | 5214                                                    |
| <b>Fiscal Year</b>                              | January 1 to December 31 of each year                   |
| <b>Ordinary General Meeting of Shareholders</b> | Held each year in March                                 |
| <b>Transfer Agent for Common Stock</b>          | Sumitomo Mitsui Trust Bank, Limited                     |

### Global Operations



### Web Directory

#### Company

<https://www.neg.co.jp/en/company/>

- Top Message
- Corporate Philosophy
- Corporate Governance
- Locations



#### CSR

<https://www.neg.co.jp/en/csr/>

- Our Way of Thinking on CSR
- The three priority themes and main activities of CSR



#### Investor Relations

<https://www.neg.co.jp/en/ir/>

- Financial Highlights
- IR Calendar
- IR Library
- Stock Information

