

Creating a Better Future Through *Monozukuri*



CSR Report 2021

Corporate Social Responsibility Report

CSR at the Central Glass Group

The Central Glass Group defines CSR as achieving our Corporate Philosophy. The Corporate Philosophy consists of the Basic Philosophy and the Basic Policies which define the specific directions for achieving the Basic Philosophy. We have established the Central Glass Group's Code of Conduct in order to sincerely practice corporate activities based in our Corporate Philosophy.

Basic Philosophy

“Creating a Better Future Through *Monozukuri**”

The Central Glass Group will contribute to the establishment of a truly prosperous society through the spirit of *Monozukuri*.

* *Monozukuri* refers to all the business activities in which the Central Glass Group engages with the basic stance of integrity and sincerity, including R&D, quality oriented manufacturing, and sales. In Japanese, the term *Monozukuri* can be broken down into *mono* (thing) and *tsukuru* (make). The combination of these terms means “making things”, or “manufacturing” in the context of the Central Glass Group. We chose *Monozukuri* to represent the activities of the Group because the term encompasses not only the meaning of “manufacturing” but also the pride and dedication required to produce quality products that contribute to society.

Basic Policies

- Create new value through innovative technologies.
- Endeavor to increase corporate value with global growth as our driving force.
- Grow together with society while remaining environmentally friendly.
- Aim to be a vibrant enterprise with a pioneering spirit and respect for diversity.

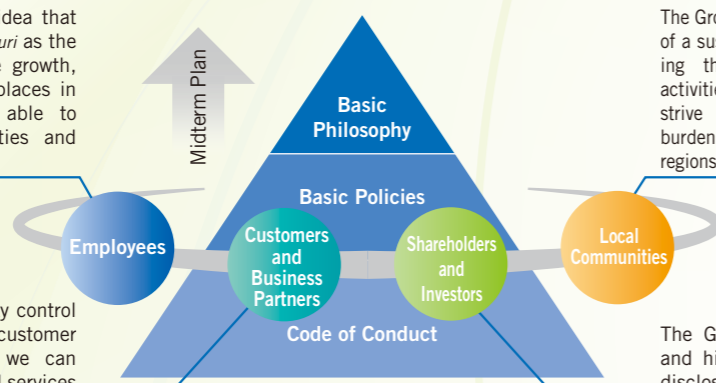
Code of Conduct

1. Be responsible for one's own actions and engage in corporate activities with integrity and sincerity.
2. Place our highest priority on the quality and safety of our products and continue to meet customer needs.
3. Continuously pursue and refine one's sense for original ideas and technologies.
4. Support the realization of a society where everyone can live in comfort and good health, and contribute to the protection of the global environment.
5. Proactively learn about different cultures and customs and create products desired by people around the world.
6. Respect the diversity of every individual and embrace the challenges of the future.

CSR System at the Central Glass Group

The Central Glass Group will fulfill our corporate social responsibilities through continual improvement efforts utilizing the Plan, Do, Check and Act (PDCA) cycle for every activity based on the CSR system outlined below.

The Group focuses on the idea that *Monozukuri* starts with *Hitozukuri* as the foundation of our corporate growth, and we aim to create workplaces in which every employee is able to demonstrate their capabilities and skills to the utmost.



The Group carries out quality control initiatives that always place customer satisfaction first, so that we can provide reliable products and services to our customers. With our business partners, we work to build fair, equitable, and positive relationships of trust.

The Group contributes to the realization of a sustainable society while recognizing the effect that our business activities have on the environment. We strive to reduce our environmental burden and grow in harmony with the regions where we do business.

The Group strives to realize rapid and highly transparent information disclosure. Through our financial results, briefings, and publications, we are working to prioritize communication with all shareholders and investors.

Midterm Plan (FY2018-FY2020)

The Central Glass Group formulated a three-year Midterm Plan for FY2018 to FY2020. Regrettably, we were unable to reach the operating profit, operating profit ratio, and ROE goals set as management targets during FY2020, which was the final year of the Midterm Plan.

Due to the difficulty of predicting specific factors such as the impact of the COVID-19 pandemic and the progress of structural reforms to the glass business, we plan to formulate our next Midterm Plan with a target period of FY2022 to FY2024.

Basic Policies

Achieve new growth by strengthening our business foundations and original technologies.

- Strengthen our business foundations by clarifying and focusing on our priorities.
- Deliver added value by anticipating the needs of customers and society.
- Ensure compliance and contribute to the development of society as a global corporation.

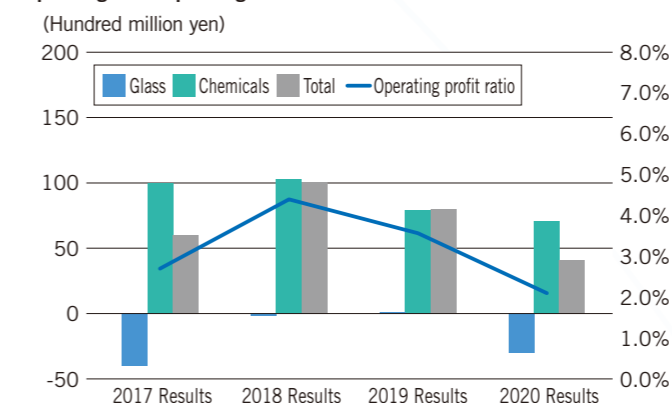
Basic Strategies

1. Return to a medium- to long-term growth path.
 - Pursue returns by selectively allocating management resources to business fields targeted for growth.
 - Secure funding for investments in growing areas through restructuring according to business and organizational characteristics.
 - Boost earning power and efficiency as well as improve cash flows through carefully selected investments.
2. Distribute cash flows based on a well-balanced consideration of shareholder returns, investments and financial discipline.
3. Continue strengthening R&D to ensure future growth.

Management Target

	2020 Targets	2020 Results
Operating profit	18 billion yen	4.1 billion yen
Operating profit ratio	7.0% or more	2.1%
ROE	6.0%	0.8%
Total return ratio to shareholders	At least 30%	247%

Operating Profit/Operating Profit Ratio



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Editorial Policy

This CSR Report 2021 aims to accessibly provide more comprehensive information about our engagement with all of the Central Glass stakeholders from our customers, business partners, and investors to employees and members of the local communities.

Reference Guidelines

- ISO 26000 (Guidance on social responsibility)
- Responsible Care Code of the Japan Responsible Care Council (JRCC)
- Environmental Reporting Guidelines 2018 of the Ministry of the Environment

Report Period

April 2020 to March 2021 (Some exceptions)
(The period for information related to health and safety as well as social and environmental activities of overseas affiliates was from January to December 2020.)

Scope of the Report

The Central Glass Group (Data was only gathered from the plants, research centers, and headquarters of Central Glass Co., Ltd. along with main domestic and overseas affiliates.)

Central Glass Group and the Sustainable Development Goals

Sustainable Development Goals (SDGs) are international objectives to be achieved by 2030 that were adopted at the United Nations Summit held in September 2015. These objectives consist of 17 goals with 169 targets to achieve a sustainable world.

The Central Glass Group works toward the targets set out by the SDGs through various business activities with the aim of contributing to society and the sustainable growth of the Group.



“Creating a Better Future Through *Monozukuri*”

The Central Glass Group will contribute to the establishment of a truly prosperous society through the spirit of *Monozukuri*.



Realizing Our Corporate Philosophy

The Central Glass Group Corporate Philosophy is to contribute to the establishment of a truly prosperous society through *Monozukuri*. It is made up of our Basic Philosophy and Basic Policies, with a Code of Conduct laid out to realize the principles therein. The Corporate Philosophy is the basis for all our efforts as we aim to enhance corporate value.

The *Monozukuri* of Central Glass not only guides our manufacturing processes but also encompasses all of our corporate activities—from research and development to production and sales—to better address the customer as well as social needs.

In addition, harmony with the environment is essential to establishing a truly prosperous society, and one of the Basic Policies of the Central Glass Group.

One of my missions is to promote business development which helps protect the global environment.

Addressing Environmental Issues

Our Group has striven to reduce greenhouse gas emissions thus far as an initiative to prevent global warming. In 2021, Japan set new reduction goals, which means Central Glass must also set its own new targets.

In addition to our initiatives to reduce emissions from our corporate activities, we have also endeavored to develop and commercialize both electrolytes for lithium-ion batteries that help reduce third-party emissions as well as a lineup of hydrofluoroolefin products with a low global warming potential.

To achieve our new targets, the Group will actively promote business development directly connected to the reduction of greenhouse gas emissions.

Compliance

Compliance is indispensable in conducting corporate activities that fulfill our Corporate Philosophy.

The Central Glass Group has established a corporate governance structure to increase transparency and fairness of our overall management as well as to improve efficiency and speed in an effort to maintain compliance as an organization.

Our Group has also drafted a Code of Conduct for all of our employees to follow when carrying out these corporate activities to ensure strict compliance on an individual basis.

However, we have faced many different quality, environmental, health, and safety issues in various fields. To address this need for an even higher level of compliance, we formulated the Quality Guidelines as well as the Guidelines for Environment, Safety, and Health.

We will continue to ingrain awareness of compliance in every Group employee and provide education and training to embed it as part of our corporate culture.

Creating a Vibrant Corporate Culture

Central Glass is a *Monozukuri* (“making things”) company, for which the basic foundation for corporate growth is *Hitozukuri* (“making people”), or human resource development.

The comprehensive human resource development programs that Central Glass has put in place allow each individual to maximize their expertise and skills.

To find the ideal work-life balance, we have also established childcare and nursing care programs. These build a work-friendly environment and support the work-life balance. Moreover, Central Glass is also advancing maternity and parental leave programs available for both male and female employees.

We work to foster an even more vibrant corporate culture regardless of gender, nationality, age or disability so that every employee can not only feel themselves grow but also reach their full potential.

We look forward to the ongoing understanding and support from all of our stakeholders as we move into the future.

Tadashi Shimizu
Representative Director,
President & CEO
Central Glass Co., Ltd.

Business Outline of the Central Glass Group

Major Products of Each Segment

Glass Business	Architectural Glass	Float glass, figured glass, wired glass, heat reflective glass, fabricated glass (tempered glass, heat-resistant glass, laminated glass, insulating glass units, security glass, and disaster prevention glass), mirrors, anti-fog mirrors, and decorated glass
	Automotive Glass	IR-cut glass, UV-cut glass, glass antennas, privacy glass, module glass, acoustic glass, defogging glass, head-up display glass, and other various safety glasses
	Glass Fiber	Continuous glass fiber, glass wool

Chemicals Business	Basic Chemicals	Hydrofluoroolefin, polyaluminum chloride, gypsum, and hydrofluoric acid
	Fine Chemicals	Active ingredients and intermediates for pharmaceuticals/agrochemicals, fluorine organic/inorganic compounds, high purity fluorine gases for semiconductors, and electrolytes for secondary lithium-ion batteries
	Fertilizers	Coated fertilizer, NPK compound fertilizer, NK compound fertilizer, ammonium chloride, and organic chemical fertilizer

Europe

Company Name	Location	Main Business Operations
Glass		
Carlex Glass Luxembourg, S.A.	Luxembourg	Manufacture and sale of automotive glass
Chemicals		
Central Glass Germany GmbH	Germany	GMP contract manufacturing of active pharmaceutical ingredients
Central Glass Europe Limited	UK	Investigation and information services
Apollo Scientific Limited	UK	Manufacture and sale of fluorinated chemicals
Central Glass Czech s.r.o.	Czech Republic	Manufacture and sale of electrolytes for secondary lithium-ion batteries

Asia

Company Name	Location	Main Business Operations
Glass		
Taiwan Central Glass Co., Ltd.	Taiwan	Manufacture and sale of processed glass for electronic materials
Yue Sheng Industrial Co., Ltd.	Taiwan	Manufacture and sale of automotive glass and interior parts for automotive
Saint-Gobain Central Sekurit (Qingdao) Co., Ltd.	China	Manufacture and sale of automotive glass
Chemicals		
Giga Gas & Electronic Materials Company	Taiwan	Sale of special gases for information and electronic industries, and chemical products
Giga Gas & Electronic Materials Company Singapore	Singapore	Sale of special gases for information and electronic industries, and chemical products
Giga Gas & Electronic Materials Trading (Shanghai) Co., Ltd.	China	Sale of special gases for information and electronic industries, and chemical products
Zhejiang Central Glass Chemspec Company Ltd.	China	Manufacture and sale of electrolytes for secondary lithium-ion batteries and fluorinated chemicals
Central Glass Trading (Shanghai) Co., Ltd.	China	Wholesale and import/export of glass products, chemical products, chemical fertilizers, glass fiber, and other products
Jiangxi Tinci Central advanced materials Co., Ltd.	China	Manufacture and sale of raw material for electrolytes for secondary lithium-ion batteries
Zhejiang Britech Central Glass Co., Ltd.	China	Manufacture and sale of special gases for semiconductors
JCEL Co., Ltd.	South Korea	Manufacture and sale of and technical service for electrolytes for secondary lithium-ion batteries
Central Glass Korea Co., Ltd.	South Korea	Wholesale and import/export of glass products, chemical products, chemical fertilizers, glass fiber, and other products
Central Glass Company India Private Limited	India	Wholesale and import/export of glass products, chemical products, chemical fertilizers, glass fiber, and other products
Japan Vietnam Fertilizer Company	Vietnam	Manufacture and sale of chemical fertilizers

Japan

Company Name	Location	Main Business Operations
Glass		
Central Glass Sales Co., Ltd.	Tokyo	Construction, wholesale, sale, and installation of architectural and residential glass
Central Glass Engineering Co., Ltd.	Tokyo	Contracted work and construction of architectural glass
Bishu Silica Sand Co., Ltd.	Aichi	Refinement of silica sand and gravel
Mie Glass Industry Co., Ltd.	Mie	Manufacture and sale of secondary fabricated products of flat glass
Central Glass Plant Services Co., Ltd.	Mie	Manufacture and sale of crates and pallets, cutting and secondary processing of flat glass, maintenance of manufacturing facilities, and manufacture and repair of machines and equipment
Central Saint-Gobain Co., Ltd.	Tokyo	Purchase, sale, import and export of automotive glass and other glass products
Central Glass Module Co., Ltd.	Tochigi	Manufacture, processing, and sale of automotive parts, etc.
Japan Tempered & Laminated Glass Co., Ltd.	Gifu	Manufacture of automotive glass and processed architectural glass
Central Glass Fiber Co., Ltd.	Mie	Manufacture, sale, and processing of continuous glass fiber, glass wool, and related products
Sowa Transportation and Warehouse Co., Ltd.	Osaka	Warehousing and freight transport services
Central Insulation Co., Ltd.	Aichi	Manufacture and processing of glass wool products
Chemicals		
Central Chemical Co., Ltd.	Tokyo	Manufacture, processing, and sale of coated fertilizer, ammonium chloride, chemical fertilizers and other related products
Tosho Central Co., Ltd.	Tokyo	Sale of merchandise, insurance agent business, freight-hauling business, and packaging and loading
Central Engineering Co., Ltd.	Yamaguchi	Design and construction of various plants, manufacture and repair of machines and equipment
Ube Analytical Center Co., Ltd.	Yamaguchi	Analysis services for various chemical products, fertilizers, etc.
Ube Yoshino Gypsum Co., Ltd.	Yamaguchi	Manufacture of gypsum plaster

The Americas

Company Name	Location	Main Business Operations
Glass		
Carlex Glass America, LLC	US	Manufacture of float glass and manufacture and sale of fabricated automotive glass
Chemicals		
SynQuest Laboratories, Inc.	US	Manufacture, processing and sale of fluorinated chemical products
Central Glass International, Inc.	US	Investigation and information services, sale of goods



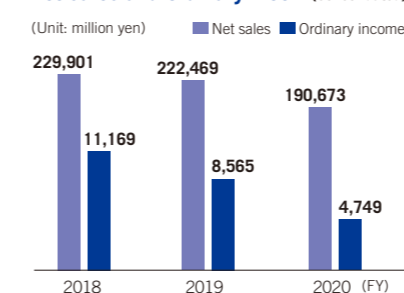
Corporate Outline (As of March 31, 2021)

Company Name	Central Glass Co., Ltd.
Established	October 10, 1936
Number of Employees	1,671 (6,053 consolidated)
Capital	18,168.28 million yen
Listed Stock Exchange	Tokyo Stock Exchange

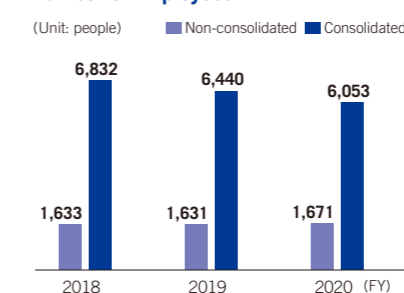
Business Sites in Japan

Head Office	Kowa-Hitotsubashi Bldg., 7-1 Kanda-Nishikicho 3-chome, Chiyoda-ku, Tokyo
Chemical Research Center	17-5 Nakadai 2-chome, Kawagoe City, Saitama Prefecture
Chemical Research Center (Ube)	5253 Okiube, Ube City, Yamaguchi Prefecture
Glass Research Center	1510 Okuchi-cho, Matsusaka City, Mie Prefecture
Ube Plant	5253 Okiube, Ube City, Yamaguchi Prefecture
Matsusaka Plant	1521-2 Okuchi-cho, Matsusaka City, Mie Prefecture
Matsusaka Plant Sakai Manufacturing Site	6 Chikko-Minamimachi, Sakai-ku, Sakai City, Osaka Prefecture
Kawasaki Plant	10-2 Ukishima-cho, Kawasaki-ku, Kawasaki City, Kanagawa Prefecture

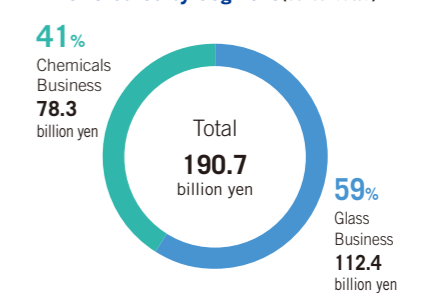
Net Sales and Ordinary Income (Consolidated)



Number of Employees

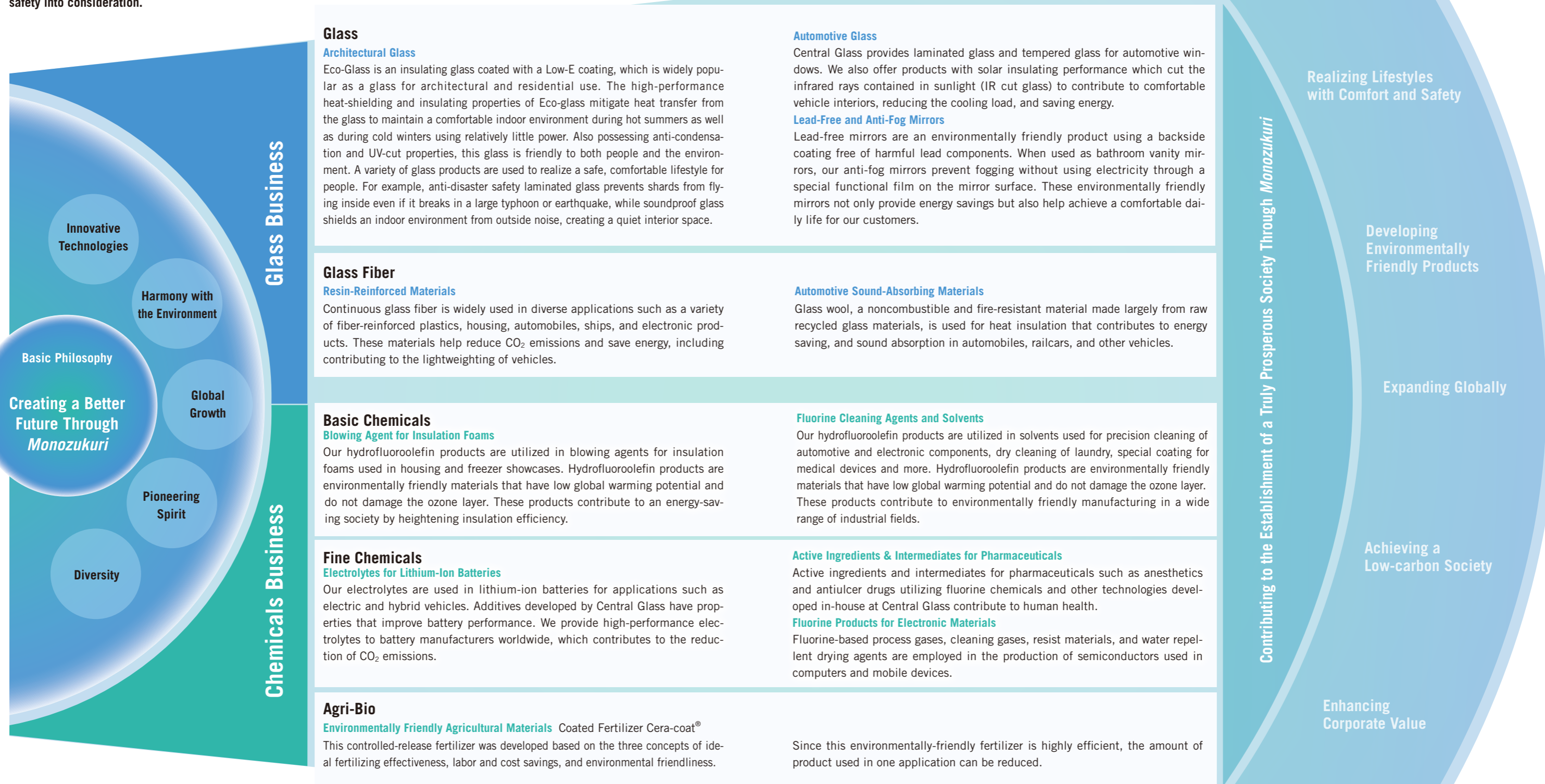


FY2020 Sales by Segment (Consolidated)



The Future of Glass and Chemicals Pioneered by the Central Glass Group

As part of the mission of the Central Glass Group to deliver products that widely contribute to society, the Group supports many aspects of a comfortable daily life such as providing raw materials for glass products used in commercial buildings, residences and automobiles, as well as raw materials for industrial products, materials supporting industrial production processes, fertilizers, and pharmaceutical products. The Central Glass Group will create value new to the world through its business activities in addition to developing and providing environmentally friendly products and products that take people's health and safety into consideration.



Launch of Shonan Research Center as a New Research and Development Site Inside the Shonan Health Innovation Park Collaborative Next-generation Medical Research and Development Complex

On May 6, 2021, Central Glass opened the Shonan Research Center as a new research and development site. The Shonan Research Center acts as an organization under Central Glass's Chemicals Business Development Department, which is responsible for overseeing new businesses. This new center will not only research and develop new pharmaceutical products but will also promote external joint ventures and collaboration for the purpose of creating new life science businesses. As a shared facility inside of the Shonan iPark collaborative research complex, the Shonan Research Center will pursue drug discovery research in an environment welcoming discussion with experts specializing in consultations on pharmaceutical product development, while taking advantage of the advanced laboratory instruments and evaluation apparatuses required for pharmaceutical research and development.

Initiatives in the Life Sciences as the Next Growth Business

Central Glass has pinpointed the life sciences as one of its next growth businesses in the Midterm Plan. The life science field involves not only chemical substances in which Central Glass is particularly skilled but also biological products derived from genes and proteins, as well as cells, animals, humans and other living things. The life sciences have been highlighted as one sector certain to show worldwide growth. The industry is rapidly releasing completely new types of pharmaceutical products, medical devices, and regenerative medical products. One recent example is the world's first practical application of an mRNA vaccine for COVID-19.

Central Glass has been highly praised by customers in Japan and overseas for providing a variety of chemical substances, including a general inhalation anesthetic (sevoflurane) in the field of pharmaceutical products. In the future, in order to apply the technologies cultivated through our businesses thus far to the challenge of developing the next generation of pharmaceutical products, Central Glass needs to acquire a broader range of life-science technologies than ever before as well as collaborate with pharmaceutical companies and startups. To tackle these challenges, Shonan Research Center launched as a new research and development site inside the Shonan Health Innovation Park in May 2021.

Shonan Health Innovation Park Overview

Shonan Health Innovation Park (Shonan iPark; located in Fujisawa, Kanagawa) is a science park established by Takeda Pharmaceutical Company as an enormous research complex in April 2018. iPark acts as a place accelerating health innovation by bringing together industry, government, and academia in a variety of small- to large-scale projects. This has formed an ecosystem of companies and

organizations, from pharmaceutical companies to next-generation medical, AI, and venture capital firms, as well as government agencies, in total comprising more than 100 companies and 2,000 people.

Official website
<https://www.shonan-health-innovation-park.com/>

VOICE

The Shonan Research Center is engaged in research activities and business development in the life sciences, which have been identified by Central Glass as a growth business. The life sciences are hard to describe in a single word because the field is extremely broad. The Shonan Research Center develops products to satisfy unmet medical needs for illnesses which are difficult to treat.

For example, regarding neurodegenerative disease which is an illness caused by the clumping of abnormal proteins in the human body, Central Glass released a research paper presenting a new pharmacological mechanism in 2021. At the Shonan Research Center, we aim to pursue the synergy between Central Glass's core technologies of chemical synthesis and materials development while collaborating with companies and research institutes in a wide range of business fields, as one aspect of Central Glass's growth strategy.



Tsuyoshi Ogawa (Left)
 Shonan Research Center
 Advanced Business Group
 Chemicals Business
 Development Department



Central Glass Office Space at iPark



Testing and Evaluation Equipment Used to Research and Develop Pharmaceutical Products



Photo of Shonan Health Innovation Park

Increasing Transparency and Fairness of Overall Management

The Central Glass Group has established a corporate governance structure to increase transparency and fairness of our overall management as well as to improve efficiency and speed. We carry out initiatives to raise all employees' awareness of compliance in order to practice sincere corporate activities.



Corporate Governance

The Central Glass Group is continually increasing the transparency and fairness of our overall management, and strives to establish an efficient and rational organizational structure that can swiftly respond to changes in the business environment in order to further enhance our corporate value and expand our revenue. This is our fundamental concept of corporate governance.

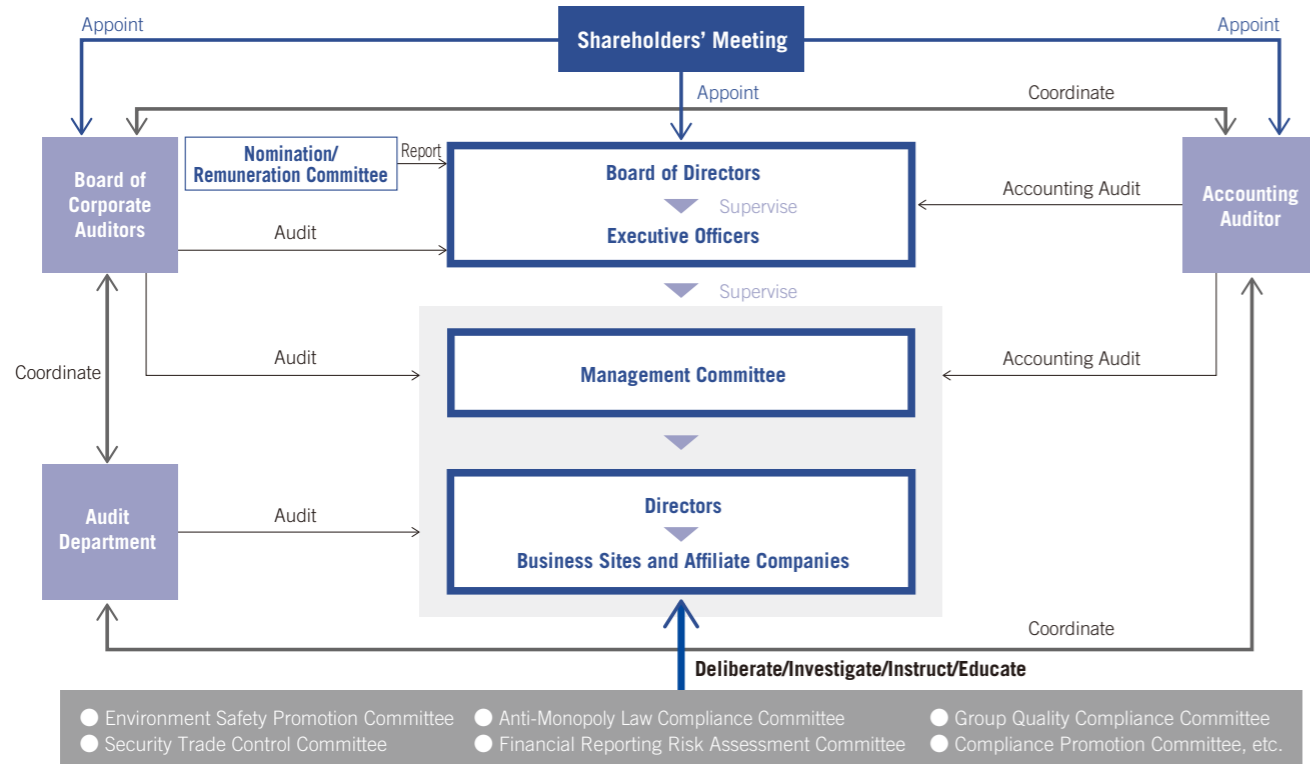
Based on this concept, we position our Board of Directors and Board of Corporate Auditors as the foundation of our corporate governance. In addition, we have adopted an executive officer system. By separating decision-making regarding important business matters, the supervision

of business execution, and the actual execution of business, we have slimmed down the Board of Directors to make management more efficient and prompt.

We have, in addition to an assigned Accounting Auditor in accordance with the Companies Act, an Audit Department for the purpose of internal auditing, which conducts audits of the full range of activities of Central Glass Co., Ltd. and our affiliates, and reports its findings to the Representative Director and the Board of Corporate Auditors.

The Board of Corporate Auditors, the Accounting Auditor, and Audit Department staff exchange information and opinions, ensure coordination, and share problems to enhance and drive the efficiency of the auditing process.

Organizational Chart for Corporate Governance



Board of Directors

As a rule, the Board of Directors meets once a month, or when necessary, to deliberate and resolve legal and important managerial issues in line with the regulations covering the Board of Directors, and supervises the execution of business by the Directors and Executive Officers including the Representative Director.

Independent Outside Corporate Auditors and Outside Directors, who have no potential for a conflict of interest with ordinary shareholders, ensure fairness within the Board of Directors and serve the role and function of rejecting arbitrary decisions made by the Board of Directors.

Management Committee

The Management Committee generally meets once a week, in line with the regulations governing its activities, to deliberate and resolve proposals to be put forward to the Board of Directors and other important issues affecting the execution of business.

Board of Corporate Auditors

The Board of Corporate Auditors generally meets once a month to deliberate and resolve important auditing issues. Corporate Auditors also share information and frequently exchange opinions with each other. In addition they meet periodically with the Representative Director to discuss important matters of management and auditing.

The Corporate Auditors attend important meetings such as those of the Board of Directors, and audit the performance of duties that are carried out by the Directors and Executive Officers, as well as the performance of duties of each department and affiliate of the Group.

Audit Department

The Central Glass Group has established the Audit Department at the head office for the purpose of managing internal control systems related to internal audits and financial reporting.

Internal audits are carried out to maintain the effectiveness and efficiency of group-wide operations, conserve resources, and manage compliance with laws and regulations as well as internal rules. Operating audits are also conducted preemptively to prevent dishonest practices. Through these audits, the Audit Department strives to sustain appropriate and efficient business operations by providing counsel and advice about improvements when necessary.

In FY2020, they conducted operating audits based on the annual plan. When counsel or advice about improvements was given through the audit, they provided continual support until improvements were implemented.

They also raise awareness about the Central Glass Group Policy Initiative each year and evaluate the effective-

ness of internal control at important sites from an objective standpoint as management of its internal control system for financial reporting.

In FY2020, they conducted assessments in line with this policy initiative and submitted an internal control report that analyzed its effectiveness for the group-wide financial reporting as of March 31, 2021.

The Audit Department also convenes regularly and when necessary to cooperate with the Corporate Auditors. The mutual exchange of information and establishment of a cooperative framework drives the comprehensiveness and efficiency of audits.

Environment Safety Promotion Committee

The Central Glass Group set up the Environment Safety Promotion Committee as an organization to promote group-wide environment, safety, and health activities throughout the entire life cycle from development to disposal of products based on the Guidelines for Environment, Safety, and Health.

In FY2020, we introduced remote meetings in addition to traditional video conferencing systems as a measure to prevent the spread of COVID-19, and held meetings with 118 participants, including Environment Safety Promotion Committee members, from several different locations. The head office reported on the FY2019 group-wide activity results for the Environment Policy, Safety and Health Management Policy, and environment and safety issues, in addition to laying out the group-wide activity plan for each policy for FY2020. The manufacturing departments as well as the research and development departments each reported their FY2019 activity results and FY2020 activity plan, shared information, and carried out activities toward continuous improvement.

Committee Composition (As of April 1, 2021)

Chairperson	Executive Officer in charge of the Environment and Safety Department
Vice-Chairpersons	Executive Officer (Deputy) in charge of the Environment and Safety Department
Committee Members	General Managers of the Personnel Department, Glass Quality Assurance Department, Chemicals Technical Planning & Management Department, Chemicals Production Engineering Center, Chemicals Quality Assurance Department, Environment and Safety Department, Quality Assurance Division, Chemical Research Center, Glass Research Center; Plant Managers of Ube Plant, Matsusaka Plant, Kawasaki Plant; and the Site Manager of the Matsusaka Plant Sakai Manufacturing Site
Observers	Corporate Auditors



Environment Safety Promotion Committee

Anti-Monopoly Law Compliance Committee

The Central Glass Group has established an Anti-Monopoly Law compliance system and set up the Anti-Monopoly Law Compliance Committee as an organization to promote adherence to the Anti-Monopoly Law.

In FY2020, while primarily conducting internal education in the sales division, the Anti-Monopoly Law Compliance Committee also verified whether any information was disclosed that may conflict with the Anti-Monopoly Law, examined the trends in detection of cartels, and surveyed subcontracting relations. Furthermore, the committee also explained the Anti-Monopoly Law and provided education about the Act Against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors through outside instructors and engaged in activities to ensure compliance with the Anti-Monopoly Law.

Committee Composition (As of April 1, 2021)

Chairperson	Executive Officer in charge of the Corporate Administration Department
Committee Members	General Managers of the Corporate Administration Department, Purchasing Department, Glass Sales Department, Automotive Glass Department, Glass Business Planning & Development Department, Chemicals Sales Department, Medi-chemicals Sales Department, Specialty Chemicals Sales Department, Electronic Materials Sales Department, Energy Materials Sales Department, Chemicals Business Planning & Development Department, Chemicals Technical Planning & Management Department, Agri-Bio Business Promotion Department, and Glass Fiber Department
Observers	Corporate Auditors; General Manager of the Audit Department; Tocho Central Co., Ltd.; Central Chemical Co., Ltd.; Central Glass Fiber Co., Ltd.; and Central Saint-Gobain Co., Ltd.

Group Quality Compliance Committee

In March 2020, the Group replaced the Product Safety Committee with the Group Quality Compliance Committee as a Group-wide organization to further strengthen the quality assurance system of the entire Central Glass Group, including product safety activities.

The Group Quality Compliance Committee promotes quality control activities through the meeting committee structure below.

- (1) Quality promotion meetings: Promotes PDCA quality activities
- (2) Emergency response meetings: Rapidly responds to any quality and product safety issues
- (3) Corrective action meetings: Defines comprehensive measures to prevent any recurrence.

The committee has also established meetings to promote quality activities in each segment. The details of the discussed content of the segment meetings are reported to the committee secretariat.

The quality promotion meetings held in FY2020 confirmed the progress of activities during FY2020 and shared the quality promotion activity policy for FY2021. 66 people

took part in these meetings, including Group Quality Compliance Committee members. Emergency response meetings and corrective action meetings are convened as necessary.

Committee Composition (As of April 1, 2021)

Chairperson	Executive Officer in charge of the Quality Assurance Division
Vice-Chairpersons	General Manager of the Quality Assurance Division
Committee Members	General Managers of the Corporate Administration Department, Purchasing Department, Glass Sales Department, Automotive Glass Department, Glass Business Planning & Development Department, Glass Quality Assurance Department, Chemicals Sales Department, Medi-chemicals Sales Department, Specialty Chemicals Sales Department, Electronic Materials Sales Department, Energy Materials Sales Department, Chemicals Business Development Department, Chemicals Technical Planning & Management Department, Chemicals Production Engineering Center, Chemicals Quality Assurance Department, Agri-Bio Business Promotion Department, Glass Fiber Department, Chemical Research Center, Glass Research Center; Deputy General Manager of the Chemical Research Center; Plant Managers of the Ube Plant, Matsusaka Plant, Kawasaki Plant; Site Manager of Matsusaka Plant Sakai Manufacturing Site; and Presidents of affiliate companies (main affiliate companies)
Observers	Corporate Auditors

Security Trade Control Committee

The Central Glass Group exports goods and provides technology in accordance with export and trade laws, such as the Foreign Exchange and Foreign Trade Control Act which regulates trade regarding supplying exports of cargo as well as providing technology to non-residents and to foreign countries, for the purpose of sustaining international peace and safety and preventing the stockpiling of weapons of mass destruction as well as conventional arms. We act under a basic policy to never breach such laws and have established the Security Trade Control Program to fully raise internal awareness about this policy as well as a Security Trade Control Committee to thoroughly implement this program.

In FY2020, the Security Control Committee fully raised awareness about compliance with laws and regulations by providing reports on the classification of exported products of the Glass Segment and Chemicals Segment; distributing information on major amendments to laws, regulations and policies; and sharing the results of internal audits.

Committee Composition (As of April 1, 2021)

Chairperson	Representative Director
Committee Members	General Managers of the Glass Business Planning & Development Department, Chemicals Technical Planning & Management Department, Information & Computer System Department, Glass Sales Department, Automotive Glass Department, Chemicals Sales Department, Medi-chemicals Sales Department, Specialty Chemicals Sales Department, Electronic Materials Sales Department, Energy Materials Sales Department, Chemicals Business Planning Development Department, Agri-Bio Business Promotion Department, Glass Fiber Department, Environment and Safety Department, Chemical Research Center, and Glass Research Center
Outside Committee Members	General Manager in charge of exports and imports at Tocho Central Co., Ltd.
Observers	Corporate Auditors and General Manager of the Audit Department

Financial Reporting Risk Assessment Committee

The Central Glass Group evaluates and analyzes the influence of management decision-making and accounting records on financial reporting. We set up the Financial Reporting Risk Assessment Committee to ensure the reliability of financial reporting.

In FY2020, the committee provided guidance to avoid any potential financial reporting risks by evaluating and analyzing projects that had such risks due to internal and external factors.

Committee Composition

Chairperson	Executive Officer in charge of the Finance & Accounting Department
Committee Members	Executive Officers in charge of the Corporate Administration Department, Audit Department; General Managers of the Finance & Accounting Department, Corporate Administration Department, and Audit Department
Observers	Corporate Auditors

Compliance Promotion Committee

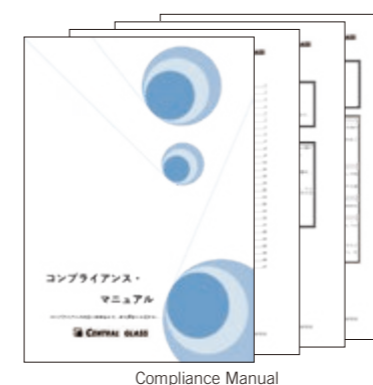
The Central Glass Group has established a Compliance Manual to promote compliance. We have also set up the Compliance Promotion Committee as an organization to assess and deliberate on matters related to compliance.

In FY2020, the committee conducted compliance promotion education as part of its response to internal reports.

The Compliance Promotion Committee revised the Compliance Manual in light of amendments to laws, regulations, and internal rules and announced the changes to all employees.

Committee Composition (As of April 1, 2021)

Chairperson	Executive Officer in charge of the Corporate Administration Department
Committee Members	General Managers of the Corporate Administration Department, Personnel Department, and Audit Department
Observers	Corporate Auditors



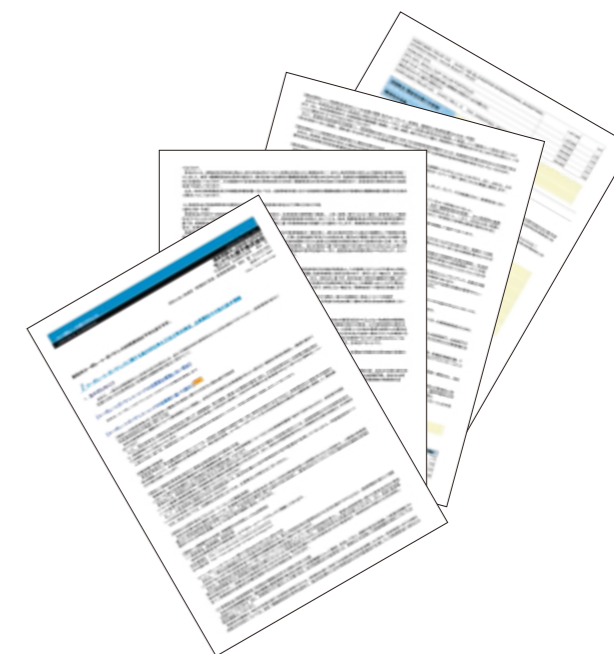
Compliance Manual

Compliance with the Corporate Governance Code

We regularly publish a corporate governance report that includes our compliance activities and performance in accordance with the amendments enacted to the Corporate Governance Code (hereafter referred to as CG Code) by the Tokyo Stock Exchange in June 2018.

In accordance with the policy on reducing cross-shareholdings which requires ongoing disclosure, we disclosed the findings from an examination held by the Board of Directors into the appropriateness of cross-shareholdings held by Board of Directors as well as the results of an evaluation and analysis into the effectiveness of the Board of Directors as a whole in fiscal 2020. Japan plans to revise the CG Code in 2021, following which we will publish reports in accordance with the newly revised standards.

Moreover, the Tokyo Stock Exchange plans to restructure its market segments on April 4, 2022. We have begun investigating which market segment to select and plan to undergo the market selection process starting in September.



Corporate Governance Report



Everything is for People and the Global Environment

The Central Glass Group, as part of the Responsible Care Initiative, shall ensure environment, safety, and health compliance in all processes from development to manufacturing, logistics, use, final consumption, recycling, and disposal with the sincere cooperation of each and every employee. The Group shall announce the achievements and engage in dialogue and communication with society.

Environment and Safety Management

Guidelines for Environment, Safety, and Health

The Central Glass Group established the Guidelines for Environment, Safety, and Health in October 2020 based on the Corporate Philosophy and Code of Conduct. The Group faces a higher level of corporate risk as society grows more concerned about environmental issues as well as occupational safety. While not only appropriately complying with the law, we promote management considering the environment and safety with the aim of carrying out corporate activities at a higher standard, meeting social demands, and creating a safe and comfortable working environment.

Guidelines for Environment, Safety, and Health

Enacted: October 30, 2020

“Everything is for people and the global environment”

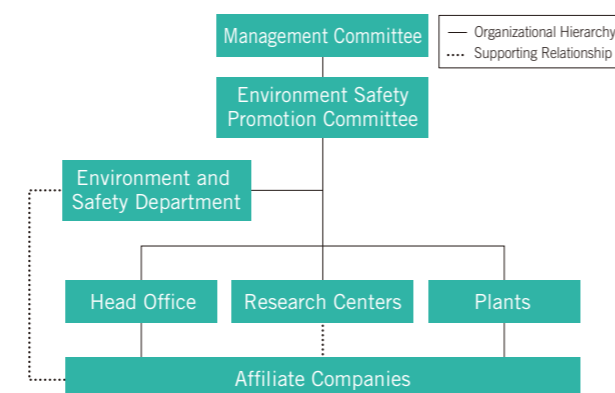
The Central Glass Group, as part of the Responsible Care Initiative, shall ensure environment, safety, and health compliance in all processes from development to manufacturing, logistics, use, final consumption, recycling, and disposal with the sincere cooperation of each and every employee. The Group shall announce the achievements and engage in dialogue and communication with society.

Management system	Compliance	Accurately understand and comply with the details of laws and regulations.
	Continuous improvements	Engage in activities based on rules such as regulations and standards and strive for continuous improvement.
	Prevention and risk treatment	Try to prevent problems from occurring and, if a problem should occur, make efforts to prevent a recurrence by analyzing the root cause appropriately.
		Confirm the conformity, validity, and efficacy of each requirement through regular audits and investigations and take appropriate action if necessary.
Environmental protection		Understand the influence that activities related to all processes from development to manufacturing, logistics, use, final consumption, recycling, and disposal have on the environment and promote the reduction of their environmental impact.
Process Safety and disaster prevention		Secure a working environment that enables employees to work safely and ensure the safety and security of the local community by making efforts to prevent accidents and disasters such as fire, explosions, and chemical spills.
Occupational health and safety		Endeavor to eliminate potential dangers in the working environment and promote activities that lead to the support and maintenance of mental and physical health, in addition to promoting habits to protect one's own life, body, and health.
Distribution safety		Comprehensively promote safe logistics to protect employees, forwarding agents, pickup and delivery service providers, and the environment by managing the means of transportation, transportation status, and safety information, and make efforts to broadly communicate measures in the event of an accident.
Chemical substance management		Protect the safety of all operators, including our customers and the environment, by understanding the danger and toxicity of chemical substances and managing and handling them properly.
Communication		Announce the details of our activities and achievements and actively engage in dialogue with all stakeholders.

Environment and Safety Management Promotion System

The Central Glass Group established the Environment Safety Promotion Committee with the Environment and Safety Department acting as the secretariat to promote Group-wide environment and safety efforts. The head office, research centers, plants and affiliate companies incorporate items unique to each business site into a general activity plan and engage in specific environment and safety initiatives.

Environment and Safety Management Promotion System



FY2020 Targets and Performance Results

Issues	(Plan) FY2020 Targets	(Do) FY2020 Performance Results	(Check) Ratings	(Act) FY2021 Initiatives
Environment and safety management	Promote FY2020 Environment Policy. Promote Safety and Health Management Policy in 2020.	<ul style="list-style-type: none"> Drafted annual policies and implemented activities at each business site in accordance with the FY2020 Environment Policy and Management Policy for Safety and Health in 2020. Verified the progress of initiatives through environmental safety self-audits and on-site environment and safety audits. Conducted management-level reviews via the Environment Safety Promotion Committee. 	○	Promote FY2021 Environment Policy. Promote Safety and Health Management Policy in 2021.
Promotion of environmental protection	Reduce FY2020 greenhouse gas emissions (Target: 15% reduction relative to FY2005).	<ul style="list-style-type: none"> CO₂ emissions 430,000 tons (54.3% reduction relative to FY2005). 	○	Set FY2030 targets for the reduction of CO ₂ emissions. Carry out activities to achieve these targets.
	Reduce FY2020 final disposed amount of industrial waste (Target: 71% reduction relative to FY2000).	<ul style="list-style-type: none"> Final disposed amount of industrial waste: 9,800 tons (85.4% reduction relative to FY2000). 	○	Set FY2025 targets for the reduction of the final disposed amount of industrial waste. Carry out activities to achieve these targets.
Promotion of security and disaster prevention	Implement equipment safety measures and ensure operational safety.	<ul style="list-style-type: none"> Thoroughly implemented voluntary and statutory inspections. Adopted and installed safety equipment. Prepared and provided comprehensive work standards and other documentation. 	○	Implement equipment safety measures and ensure operational safety.
	Encourage the effective use of accident data.	<ul style="list-style-type: none"> Took advantage of the Security and Disaster Prevention Database and shared accident data and preventive recurrence measures with domestic affiliates. 	○	Encourage the effective use of the Security and Disaster Prevention Database.
Promotion of industrial health and safety	Maintain and improve the workplace environment. Achieve zero-accident records.	<ul style="list-style-type: none"> Implemented measures to prevent occupational accidents, utilizing information such as factor analyses of the 2019 occupational accident report. Instructed each business site to utilize safety and health activities to eradicate occupational accidents. Number of occupational accidents: 29 (down 11 from FY2019). 	△	Implement measures to prevent occupational accidents based on the 2020 occupational accident report.
Promotion of logistical safety	Prevent accidents during the transportation of chemical substances and minimize the damage in case of incidents.	<ul style="list-style-type: none"> Issued Yellow Cards for chemical products, including chemical substances not legally mandated to require a card. Verified that Yellow Cards are properly used according to internal rules through an internal database, audits, and other measures. 	○	Continue to prepare new Yellow Cards and revise existing Yellow Cards as necessary.
Promotion of the management of chemical substances	Reduce emissions of chemical substances into the environment. Continue compliance with relevant laws and regulations.	<ul style="list-style-type: none"> Investigated switching from raw materials containing PRTR substances to alternative products. Provided the necessary notifications in accordance with the Chemical Substances Control Law and Act on Confirmation, etc. of Release of Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR System) and other laws and regulations. Verified the level of compliance with relevant laws and regulations through voluntary audit reports and on-site environment and safety audits. 	○	Reduce emissions of chemical substances into the environment. Continue compliance with relevant laws and regulations.
	Identify asbestos use and storage and execute proper disposal.	<ul style="list-style-type: none"> Conducted surveys on the level of asbestos use, storage and disposal once a year for buildings and facilities. Verified the level of asbestos use and storage through voluntary audit reports and on-site environment and safety audits. 	○	Identify asbestos use and storage and continue to execute proper disposal.
	Strictly manage machinery containing PCBs and conduct disposal according to laws and regulations.	<ul style="list-style-type: none"> Surveyed the level of storage and disposal of equipment containing PCBs each quarter. Verified the management status of equipment containing PCBs through voluntary audit reports and on-site environment and safety audits. 	○	Identify the use and storage of equipment containing PCBs and continue to execute proper disposal in accordance with laws and regulations.
	Mitigate risks through SDS/GHS Labeling.	<ul style="list-style-type: none"> Issued SDS and GHS labeling for chemical products, including chemical substances not mandated by law. Acquired the latest version of SDS for raw materials and provided SDS education. 	○	<ul style="list-style-type: none"> Ensure issuance of SDS and GHS labeling for chemical products. Carry out education on SDS for raw materials.
Communication	Participate in regional activities. Coexist with local communities.	<ul style="list-style-type: none"> Contributed to local volunteer as well as social welfare activities. Engaged in dialogues with local communities (online meetings) 	○	<ul style="list-style-type: none"> Continue to contribute to local volunteer and social welfare activities. Continue to hold dialogues with local communities.

Rating: ○ ... Achieved target △ ... Achieved most targets but not all × ... Additional measures required — ... Not applicable
* The period for data collected about industrial health and safety was from January to December 2020.

What Is Responsible Care (RC)?

Responsible Care is a set of voluntary activities to implement and improve environmental safety measures based on a public commitment to a management policy aimed at preserving the environment and ensuring safety and health in all product processes from development to manufacturing, logistics, use, final consumption, recycling, and disposal. Based on the recognition that companies must not merely comply with laws and regulations but should also execute voluntary management in order to sustain the environment, safety, and health as well as fulfill their corporate social responsibilities, an optimal balance of legal compliance and voluntary industry (corporate) management has become essential.



Environment and Safety Audits

The Central Glass Group checks the status of management systems, environmental conservation, safety and disaster prevention, industrial health and safety, logistical safety, chemical substance management and communication at the plants, research centers and domestic affiliates.

These checks ask each business site to respond to an environmental safety self-audit check sheet and to undergo on-site environment and safety audits by an audit team to directly verify the level of management on-site.

In FY2020, 51 business sites in Japan comprising the Central Glass Group conducted environmental safety self-audits, in addition to which we executed on-site environment and safety audits at 10 of those sites.

At overseas affiliates, we also audited industrial accident conditions and environmental conservation measures at 10 companies.

Our Group will continue to conduct environment and safety audits as well as various inspections to encourage

continuous improvement of environment and safety activities at domestic and overseas business sites.

Promotion of Environmental Protection

Material Balance of the Central Glass Group

The Central Glass Group continuously works to reduce its impact on the environment by quantitatively tracking the environmental burden of production processes as well as identifying and improving environmental issues. These efforts primarily focus on reducing emissions of greenhouse gases and discharge of environmentally hazardous substances into the air and water, as well as on recycling waste and reducing the final disposed amount.

We will continue to monitor our resource consumption and amount of waste to further control emissions and discharge from greenhouse gases, environmentally hazardous substances, and waste as well as enhance recycling to build a recycling-oriented society.

Material Balance (FY2020 Results)

INPUT

Total Amount of Materials Input 927,000 tons		Total Amount of Water Resources Input 18,453 million m ³		Amount of Net Energy Input 12,314 TJ	
Central Glass Co., Ltd.	Affiliate Companies	Central Glass Co., Ltd.	Affiliate Companies	Central Glass Co., Ltd.	Affiliate Companies
652,000 tons	275,000 tons	11.025 million m ³	7.428 million m ³	6,514 TJ	5,800 TJ



OUTPUT

Atmosphere		Water		Waste	
Total Emissions of Greenhouse Gases 824,000 tons-CO ₂ e		Total Amount of Discharged Water 17,002 million m ³		Total Amount of Waste Produced 83,000 tons	
Central Glass Co., Ltd.	Affiliate Companies	Central Glass Co., Ltd.	Affiliate Companies	Central Glass Co., Ltd.	Affiliate Companies
460,000 tons-CO ₂ e	364,000 tons-CO ₂ e	10.887 million m ³	6.115 million m ³	22,000 tons	61,000 tons
Emissions of Air Pollutants 5,188 tons		Discharge of Water Pollutants 76 tons		Final Disposed Amount of Waste 17,600 tons	
Central Glass Co., Ltd.	Affiliate Companies	Central Glass Co., Ltd.	Affiliate Companies	Central Glass Co., Ltd.	Affiliate Companies
4,133 tons	1,055 tons	57 tons	19 tons	9,800 tons	7,800 tons

Reporting range

- Central Glass Co., Ltd.: 3 plants, 1 manufacturing site, 3 research centers, the Chemicals Production Engineering Center, and the head office
- Domestic affiliates: 15 major affiliates
- Overseas affiliates: 10 major affiliates
- Total emissions of greenhouse gases: Includes energy and non-energy fields, six gases, transport, and fluorocarbons

Recycling Rate of Waste 82%

Central Glass Co., Ltd.	Affiliate Companies
68%	89%

Reduction of Greenhouse Gas Emissions

Central Glass Co., Ltd.

Central Glass Co. Ltd. set an FY2020 target for reducing greenhouse gas emissions from plant operations by 15% relative to FY2005 levels with this goal serving as a mid-term initiative to prevent global warming.

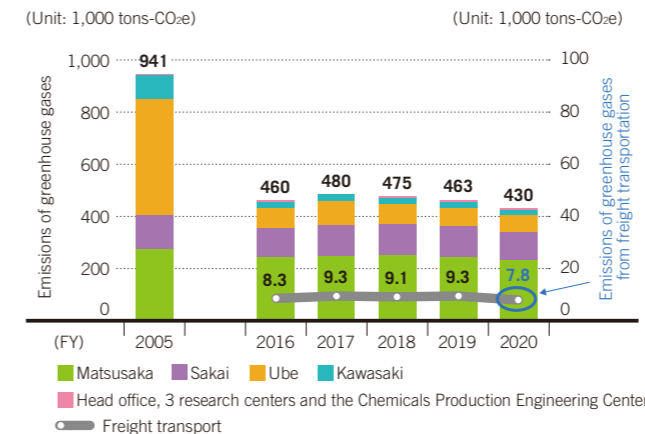
Our greenhouse gas emissions due to plant operations in FY2020 have already achieved this target through only 430,000 tons of emissions (CO₂ equivalent, 54.3% reduction relative to FY2005) as a result of power optimization of plant operations. We also strove to reduce the

amount of greenhouse gas emissions that were generated during the transportation of products relative to the previous year by shifting toward use of railway and sea vessels. As a result, these emissions declined to 7,800 tons-CO₂e from 9,300 tons-CO₂e in the previous fiscal year.

During FY2020 we pushed forward considerations on targets to be set for 2030 and temporarily formulated a plan for reduction targets according to the 2015 Intended Nationally Determined Contribution (INDC). However, this plan was put on hold due to changes in the national reduction targets at the end of FY2020. At the Leaders'

Summit on Climate held in April 2021, Japan announced its 2030 numerical targets. In light of this announcement, we plan to set our 2030 targets as soon as possible while taking into account domestic measures set by the government and industry trends.

Changes in Greenhouse Gas Emissions (Central Glass Co., Ltd.)



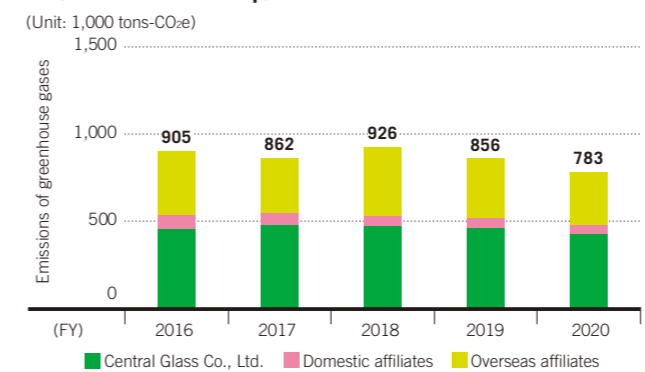
Central Glass Group

Our Group is always working to reduce greenhouse gas emissions both at our domestic and overseas affiliates.

As a result, the Central Glass Group was able to reduce its year-on-year greenhouse gas emissions to 783,000 tons-CO₂e.

We will continue efforts to reduce the amount of greenhouse gas emissions throughout the entire Central Glass Group including both domestic and overseas affiliates.

Changes in Greenhouse Gas Emissions (Central Glass Group)



Reduction of the Final Disposed Amount of Industrial Waste

Central Glass Co., Ltd.

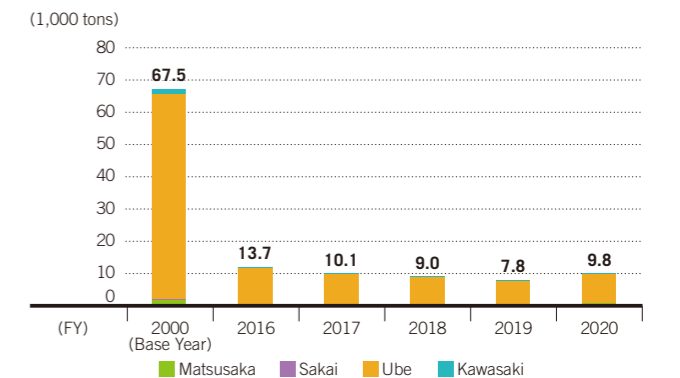
Central Glass Co. Ltd. set a target for FY2020 to reduce the final disposed amount of industrial waste by 71% relative to FY2000 in an effort to reduce its industrial waste.

We achieved the FY2020 target by reducing the final disposed amount of industrial waste to 9,800 tons, down 85.4% from FY2000. Although waste did increase in the year-on-year comparison, this was due to processing unprocessed waste that had been in storage and waste that previously could not be transported due to construction

work at the contractor. Central Glass Co., Ltd. expects recycling efforts to lower the amount of final disposed waste in FY2021 and beyond.

We plan to set the next midterm targets for 2025 as early as possible according to Keidanren's Voluntary Action Plan for Establishing a Sound Material-Cycle Society while incorporating changes in our business environment. In addition to reducing the final disposed amount of industrial waste, Central Glass will also work to control waste production, improve the recycling rate, and in particular carry out measures for waste plastic. We will actively pursue the 3Rs as well.

Final Disposed Amount of Industrial Waste (Central Glass Co., Ltd.)



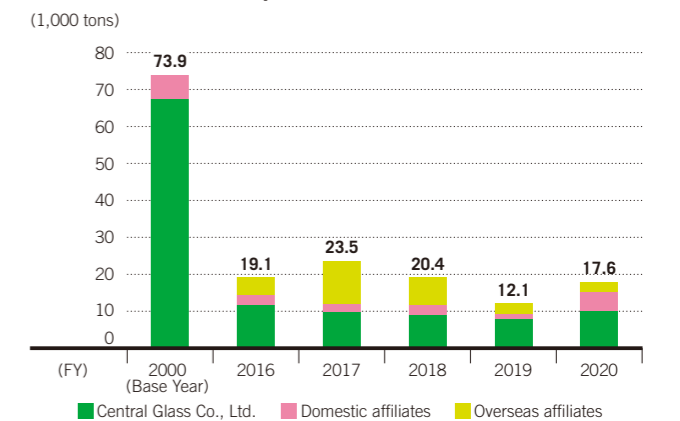
Central Glass Group

The Group is always working to reduce the industrial waste output of both its domestic as well as its overseas affiliates.

In FY2020, the final disposed amount of industrial waste increased at domestic affiliates due to carrying out the final disposal of construction waste. This disposal of construction waste in Japan led to an increase year on year in the final disposed amount of industrial waste for the entire Central Glass Group, despite overseas affiliates continuing to reduce their final disposed amount of industrial waste.

The Group, including both domestic and overseas affiliates, will continue to engage in Group-wide 3R initiatives.

Final Disposed Amount of Industrial Waste (Central Glass Group)



Air and Water Pollutant Emissions

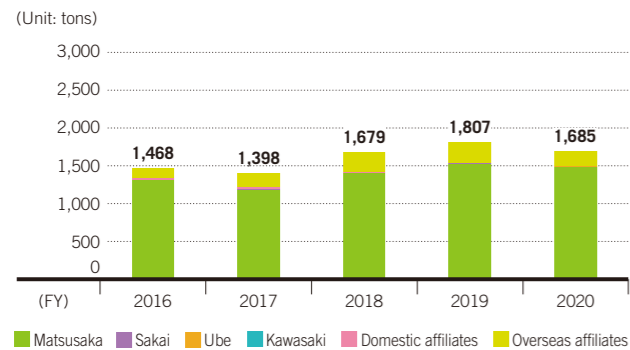
The Central Glass Group operates plants in compliance with the local emission standards for atmosphere, water quality, and other environmental indicators for each business site. Reducing emissions of air and water pollutants is an important challenge in regard to the global environment and human health and safety. We will continue to carry out appropriate management.

* The figures in the following graphs differ from previous CSR reports because business sites have been retroactively added that were not included in the aggregate in the past.

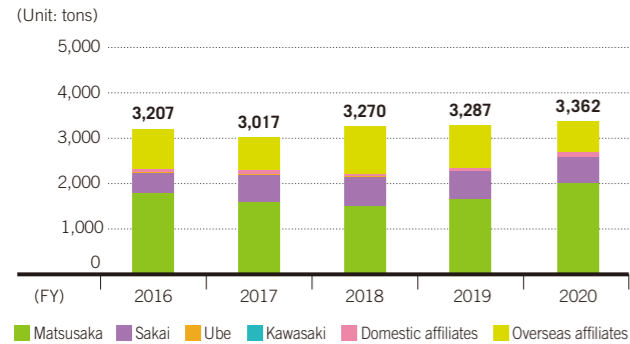
Air Pollutant Emissions

The trends in air pollutant emissions for sulfur oxide (SOx), nitrogen oxide (NOx), and ash dust are shown below.

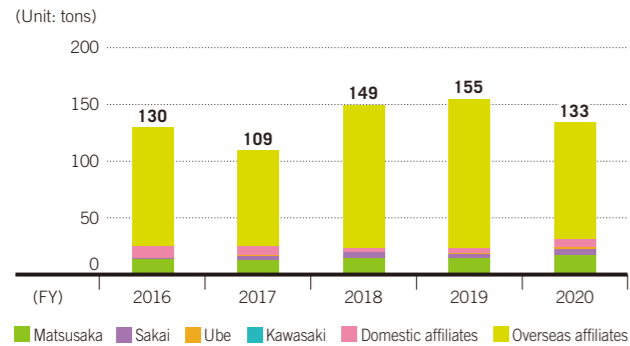
SOx Emissions



NOx Emissions



Ash Dust Emissions

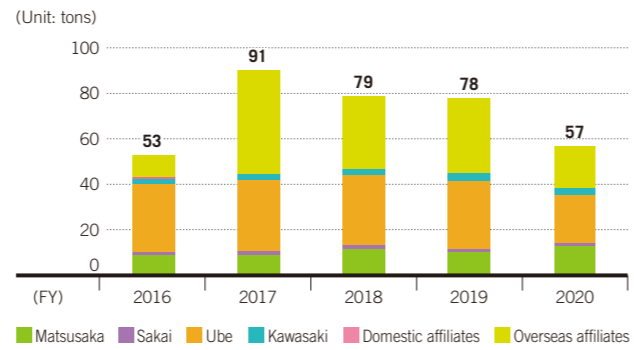


* For chemical oxygen demand (COD)—a water pollutant emission—the figures for Matsusaka Plant for 2019 and previous years have been revised using periodic manual measurement analysis data due to the possibility that analysis results using automatic continuous measurement were undercalculated. Therefore, the values reported in this report differ from previous CSR Reports. However, we continue to monitor and maintain the concentration of daily discharge into public waters at well below regulated levels.

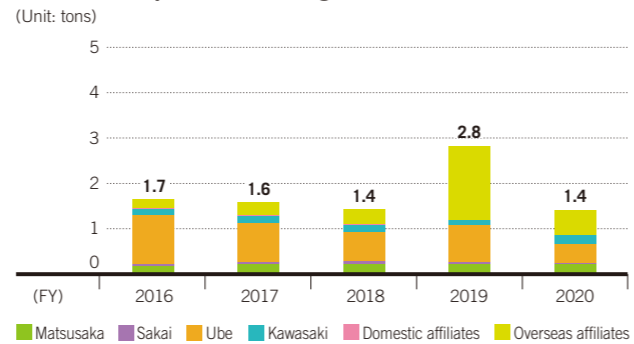
Water Pollutant Discharge

The trends in water pollutant discharge for chemical oxygen demand (COD), phosphorous and nitrogen are shown below.

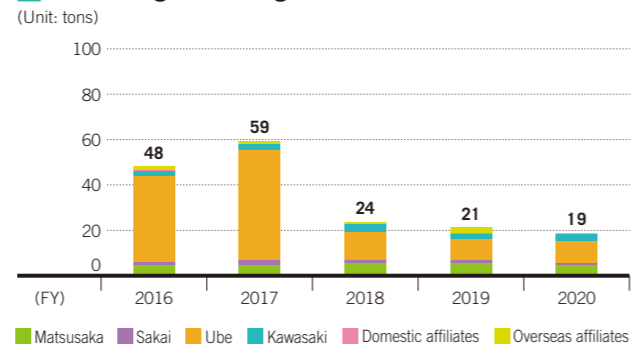
Chemical Oxygen Demand (COD)



Total Phosphorous Discharge



Total Nitrogen Discharge



* The data for overseas affiliates is collected according to the standards in each region and is shown only as reference.

Reduction of Chlorofluorocarbon Emissions from Industrial Air-conditioning Equipment and Refrigerators

Central Glass Co., Ltd. strives to reduce leakage of chlorofluorocarbons when using equipment through proper control of refrigerants such as inspections of industrial air-conditioning equipment and refrigerators in accordance with the Act on Rational Use and Proper Management of Fluorocarbons.

As a result of simplified and regular inspections at each business site of a total of 2,788 pieces of equipment in FY2020, we notified Japan of 3,498 tons-CO₂e emissions in total in compliance with this law.

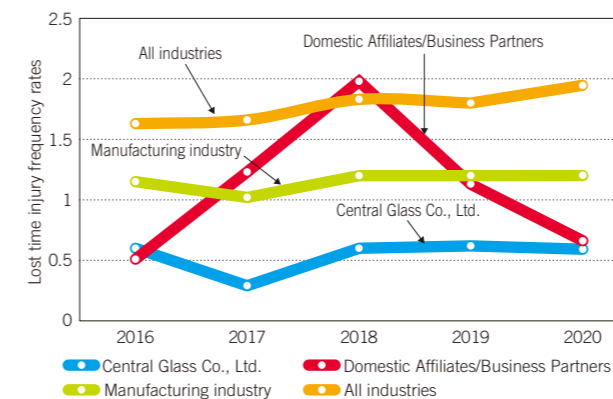
In the future, we will strive to reduce emissions of chlorofluorocarbons through measures that include identification and repair of leakage areas, equipment management, and control of the amount of refrigerants.

Industrial Health and Safety

The Central Glass Group drafts a management policy for health and safety and conducts occupational health and safety activities at each business site in Japan and overseas.

In 2020, Central Glass Co., Ltd. and domestic affiliates and business partners suffered a total of 29 occupational accidents, of which 8 cases resulted in lost work hours and 21 cases resulted in no lost time. However, the lost time injury frequency rate of occupational accidents was roughly half that of the manufacturing industry in Japan. We observed an increasing trend in lacerations when handling glass and chemical spills during equipment maintenance, which we are addressing by strengthening operational risk assessments.

Lost time injury frequency rates



Lost time injury frequency rate = (number of deaths or injuries resulting in lost work hours/total working hours) x 1,000,000 (The frequency rate of accidents that result in lost work hours per million working hours)
The lost time injury frequency rates for all industries and for the manufacturing industry are referenced from the Ministry of Health, Labour and Welfare's 2020 Survey on Industrial Accidents.

Overseas affiliates are also taking action to eradicate occupational accidents on each business site.

The Central Glass Group will continue to carry out industrial health and safety activities to eliminate occupational accidents.

Security and Disaster Prevention

Safety is the highest priority in our corporate activities and the prevention of accidents and disasters is the foundation of corporate activities. Under the guidance of the authorities regarding the environment, security, and disaster prevention, Central Glass Co., Ltd. and its domestic affiliates have established full-scale security and disaster prevention systems for the purpose of eliminating all accidents whether fire, explosion, or chemical leak. In the last several years however, we have seen an increase in accidents related to forklifts.

In FY2020, the Central Glass Group strived to prevent these accidents by increasing practical forklift training opportunities offered through manufacturers and intensifying hands-on training even at partner companies.

We also work to preemptively prevent accidents and disasters at each business site through efforts such as activities that are based on the Security and Accident Prevention Guidelines issued by the Japan Chemical Industry Association (JCIA) and through the passing down of skills and know-how to our young employees by veteran engineers well-versed in their work.

The Central Glass Group will continue to make every effort to ensure not only safe working environments for its employees but also safe and secure local communities.

(Refer to Activities at Individual Plants (Security and Disaster Prevention Initiatives) on page 34 and 35.)



Safety Guidance for a Transport Partner at a Central Glass Plant

Logistical Safety

Central Glass Co., Ltd. and domestic affiliates implement periodic training and education not only for their employees but also for employees of business partners to which they outsource transporting according to the Guidelines for Logistical Safety Management, in order to prevent accidents during the transportation of chemical substances and to minimize the damage in case of incidents.

The Group prepares Emergency Contact Cards (Yellow Cards)* for drivers to carry, which include simple instructions on handling accidents during transportation, not only for hazardous substances such as high-pressure gases and poisonous substances for which carrying Yellow Cards is

legally mandated, but also for chemical substances not subject to the mandate.

We will continue efforts to improve safety during distribution to prevent accidents during the transportation of chemical substances and minimize the damage in case of incidents.



Emergency Contact Card (Yellow Card)

* The Emergency Contact Card (Yellow Card) is a card provided as preparation for potential accidents during the transportation of chemical substances, such as high-pressure gas or hazardous substances, that lists the dangers of the chemical substances in transport; procedures which should be taken by the transportation personnel, fire-fighters, and police in the event of an accident; and contact information.

Promotion of the Management of Chemical Substances

Management of Chemical Substances

Central Glass Co., Ltd. and its domestic affiliates survey, collect and report on substances subject to Pollutant Release and Transfer Register (PRTR) notification in accordance with the PRTR Law and the PRTR System.

The number of substances subject to PRTR notification in FY2020 increased from the previous year by one substance to a total of 61, due to an increase in product lines and production volume. (Refer to PRTR data on page 23.)

We will always adhere to the Industrial Safety and Health Act, Poisonous and Deleterious Substances Control Act, High Pressure Gas Safety Act, and any other relevant laws and regulations in order to ensure the safety and health of our employees and further improve the management of chemical substances to reduce our environmental impact.

Our overseas affiliates also comply with all local laws and regulations and engage in chemical substance management.

We will continue working to properly manage chemical substances throughout the Central Glass Group, including both at domestic and overseas affiliates.

Asbestos Management

Some of the materials used in buildings and production facilities at Central Glass Co., Ltd. and its domestic affiliates contain asbestos. We identify, properly manage and dispose of these materials upon removal in accordance with the relevant laws such as the Air Pollution Control Act, Industrial Safety and Health Act, and Waste Management and the Public Cleansing Act.

In order to ensure appropriate handling, the Group identifies whether there is any asbestos in places where employees work, inspects whether asbestos has been

used before demolitions or renovations of buildings or structures, and takes the necessary steps to prevent any exposure to asbestos during work. In addition, we survey the state of use, storage, and disposal of asbestos at Central Glass Co., Ltd. and domestic affiliates once a year and confirm the actual conditions during on-site environment and safety audits.

The Central Glass Group will also adhere to legal amendments related to the management of asbestos announced in FY2020 and planned for a staggered roll out through FY2023 to ensure proper management now and into the future.

Management of Instruments Containing PCBs

Central Glass Co., Ltd. and its domestic affiliates ensure instruments such as transformers, stabilizers, and capacitors that contain polychlorinated biphenyl (PCB) comply with the Act on Special Measures Concerning Promotion of Proper Treatment of PCB Waste, Waste Management and Public Cleansing Act, and other laws and regulations. We dispose of such instruments through strict management following the set schedule of disposal.

In order to ensure appropriate handling, we survey the state of storage and disposal of instruments containing PCBs at Central Glass Co., Ltd. and domestic affiliates each quarter and confirm the level of management conduct during on-site environment and safety audits.

In FY2020 as in the previous fiscal year, we stepped up surveys on the progress of storage and disposal to ensure the timely disposal of any equipment with a high concentration of PCBs that would soon reach the deadline for disposal, such as equipment containing fluorescent light ballast. We also drafted disposal plans to dispose of equipment with a low concentration of PCBs within the appropriate time frame.

We will always adhere to laws and regulations and will properly manage systematic disposal of instruments containing PCBs.

SDS/GHS Labeling

In accordance with the GHS^{*1}, the Central Glass Group provides information through SDS^{*2} and GHS labeling^{*3}. When handling chemical substances, measures necessary for risk abatement can be taken based on the information listed in the SDS and the GHS labels, which leads to safety and protection of the environment.

In addition to SDS and GHS labeling, multiple departments issue and approve cross-checks to ensure full compliance with the Industrial Safety and Health Act, the PRTR Law, and the Poisonous and Deleterious Substances Control Act.

In FY2020, we worked to provide information externally both in Japan and overseas by issuing SDS and GHS labeling that adhered to the FY2019 revisions to the JIS Z 7252 and JIS Z 7253 which include procedures for creating SDS and GHS labeling. Our Group also raised internal awareness about SDS and GHS labeling of products, raw materials and other items among employees who handle chemical substances in an effort to ensure meticulous and proper handling.

We will continue to provide accurate information through SDS and GHS labeling.

*1 GHS: Globally Harmonized System of Classification and Labelling of Chemicals. This globally harmonized system classifies and labels chemical products.

*2 SDS: Safety Data Sheet. Data sheets that list information related to the hazardousness of chemical substances as well as information concerning the environment.

*3 GHS labeling: Labels including information according to the GHS such as the visual indications for each hazardous substance category are directly printed on, adhered or attached to chemical products.

PRTR Data (FY2020)

Business Site	Ordinance Designation No.	Substance Name	Quantity			Year-on-Year Emissions	Transported
			Atmosphere	Water	Soil		
Ube Plant	16	2, 2'-Azobisisobutyronitrile	0	0	0	→	0
	33	Asbestos	0	0	0	→	15000
	41	3'-Isopropoxy-2-trifluoromethylbenzaniide (also known as Flutolanil)	0	0	0	→	0
	71	Ferric chloride	0	0	0	→	0
	80	Xylene	660	0	0	↘	5
	81	Quinoline	0	0	0	→	0
	94	Chloroethylene (also known as vinyl chloride)	0	0	0	→	0
	149	Carbon tetrachloride	0	0	0	→	7800
	213	N,N-Dimethylacetamide	0	0	0	→	95000
	232	N,N-Dimethylformamide	19	0	0	→	0
	243	Dioxins (Unit: mg-TEQ/year)	3.0	0.069	0	↘	0
	281	Trichloroethane	1200	0	0	↘	0
	349	Phenol	110	200	0	↘	0
	374	Hydrogen fluoride and its water-soluble salts	460	0	0	↘	540
	411	Formaldehyde	0	0	0	→	0.1
438	Methylnaphthalene	44	0	0	↘	0	
Matsusaka Plant	132	Cobalt and cobalt compounds	0	0	0	→	0
	242	Selenium and selenium compounds	110	0	0	↘	0
	412	Manganese and Manganese compounds	60	0	0	↘	0
	438	Methylnaphthalene	19	0	0	↘	0
Matsusaka Plant Sakai Manufacturing Site	80	Xylene	89	0	0	↘	0
	296	1,2,4-Trimethylbenzene	100	0	0	→	0
Kawasaki Plant	81	Quinoline	0	0	0	→	0
	94	Chloroethylene (also known as vinyl chloride)	0	0.3	0	↘	0
	104	Chlorodifluoromethane (also known as HCFC-22)	1800	0	0	↘	0
	149	Carbon tetrachloride	170	0.9	0	↘	8900
	213	N,N-Dimethylacetamide	11	0	0	→	52000
	243	Dioxins (Unit: mg-TEQ/year)	0.087	0.056	0	↘	0
	262	Tetrachloroethylene	0	0.7	0	↘	1400
	280	1,1,2-Trichloroethane	0	2.3	0	↘	1300
	300	Toluene	46	0	0	↘	1600
	374	Hydrogen fluoride and its water-soluble salts	0	0	0	→	38
392	n-hexane	0	0	0	↘	10000	
Chemicals Production Engineering Center	277	Triethylamine	0	0	0	→	4300
	374	Hydrogen fluoride and its water-soluble salts	0	0	0	→	1100
Chemical Research Center (Ube)	374	Hydrogen fluoride and its water-soluble salts	7	0	0	↘	13
Central Glass Plant Services Co., Ltd. (Central Japan)*	53	Ethyl benzene	6500	0	0	-	1900
	80	Xylene	12000	0	0	-	1900
	82	Silver and its water-soluble compounds	0	0	0	-	55
	272	Water-soluble copper salts (excluding complex salts)	0	0	0	-	270
	296	1,2,4-Trimethylbenzene	2100	0	0	-	640
	300	Toluene	1600	0	0	-	3000
412	Manganese and Manganese compounds	0	0	0	→	330	
Central Glass Plant Services Co., Ltd. Tsukuba Plant	412	Manganese and Manganese compounds	0	0	0	→	790
Central Glass Plant Services Co., Ltd. Sakai Plant	412	Manganese and Manganese compounds	0	0	0	→	220
	82	Silver and its water-soluble compounds	0	0	0	→	0
Mie Glass Industry Co., Ltd. Matsusaka Plant	87	Chromium and chromium(III) compounds	0	0	0	→	32
	53	Ethyl benzene	39000	0	0	→	0
Central Glass Fiber Co., Ltd. Matsusaka Plant	80	Xylene	45000	0	0	↘	0
	232	N,N-Dimethylformamide	0	0	0	→	430
	296	1,2,4-Trimethylbenzene	1600	0	0	↘	0
	354	Di-n-butyl phthalate	0	0	0	→	530
	405	Boron compounds	950	0	0	↘	3300
	411	Formaldehyde	0	0	0	→	0
Central Glass Fiber Co., Ltd. Kasugai Plant	349	Phenol	230	0	0	↘	640
	405	Boron compounds	0	0	0	→	0
	411	Formaldehyde	1000	0	0	→	1600
Central Chemical Co., Ltd. Ube Plant	277	Triethylamine	8400	0	0	↘	1300
	30	Linear alkylbenzene sulfonic acid and its salt	0	0	0	→	0
Ube Plant	33	Asbestos	0	0	0	→	13000
	448	Methylenebis (4,1-phenylene) = diisocyanate	0	0	0	→	0

Quantities emitted, discharged, or transported are listed for Class I Designated Chemical Substances handled annually in amounts exceeding 1,000 kg (500 kg for Specific Class I Designated Chemical Substances). Dioxins are excluded.

* The number of chemical substances subject to notification increased in FY2020 because the mirror business of Mie Glass Industry Co., Ltd. transferred to Central Glass Plant Services Co., Ltd. (Central Japan).

Providing Reliable Products and Services to Our Customers

The Central Glass Group will always work toward its goal of establishing a truly prosperous society through the spirit of *Monozukuri*. We will also emphasize quality control initiatives that place customer satisfaction first. In addition to complying with laws and regulations, our Group takes customer feedback sincerely in order to provide reliable products and services loved by customers.

Quality Management

Clause 2 of the Code of Conduct and the Quality Guidelines

- Code of Conduct and the Quality Guidelines
We formulated the Quality Guidelines as a blueprint for executing our commitment to “Place our highest priority on the quality and safety of our products and continue to meet customer needs” as per the second clause of our Code of Conduct based on the Central Glass Group Corporate Philosophy. The Quality Guidelines form a framework to Prevent, Detect, and Respond to quality issues, which are vital aspects of compliance.

Quality Management System

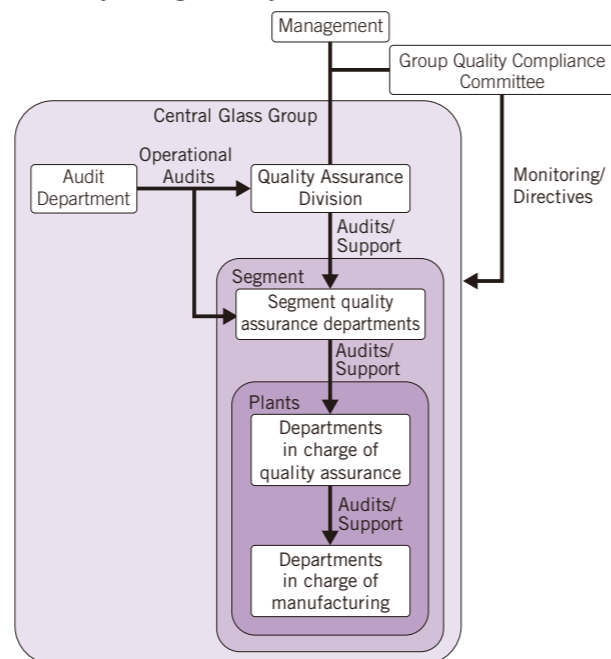
We have been promoting quality control activities through the Quality Management System enhanced during the last fiscal year.

- Group Quality Compliance Committee
The Group Quality Compliance Committee serves as a cross-functional organization to further strengthen the quality management system of the entire Central Glass Group.
- Multilayered audits
We incorporated the concept of multilayered audits into internal audits. The Company implemented a three-layered auditing system comprised of voluntary audits by quality assurance departments at the plants, audits of each plant by Glass or Chemicals Segment quality assurance departments, and audits of the segment quality assurance departments by the Quality Assurance Division.
- Reporting procedure for quality issues
We established a reporting line to rapidly respond to quality issues by quickly receiving information on various quality issues discovered by customers or at manufacturing sites and reporting to the appropriate department in charge. This reporting procedure also provides a system to quickly report serious quality issues to management in order to take emergency measures without any delay.

Quality Guidelines

Item	Description
Prevent	Cultivate a culture of quality Provide high quality and reliable products by ensuring compliance with laws and regulations, clients' requirements, and social responsibilities.
	Perform continuous improvements Continuously implement quality improvement activities, as well as encourage employees to enhance their awareness and abilities throughout the entire supply chain to keep developing the quality and safety of our products.
	Update and enforce policies and procedures Comply with each policy and procedure and update them as needed.
	Improve organizational structures Ensure the independence and authority of quality control and quality assurance departments so that they can fully exercise their respective duties.
	Invest in human resources and facilities Invest appropriately in human resources and facilities that are essential to achieving our quality objectives.
Detect	Strengthen audit systems Detect problems quickly through layered audits conducted by the plants, quality assurance departments, and audit departments.
	Streamline reporting systems Clarify reporting procedures and reporting guidelines to ensure quick responses to quality issues.
Respond	Respond to problems with corrective and preventive actions Prevent recurrences of quality problems by identifying and analyzing the causes, in addition to taking necessary measures such as prompt information disclosure.

Quality Management System



Quality Audits

The Central Glass Group systematically conducts quality audits at all levels at its plants as well as at domestic and overseas affiliates.

Auditing and Support Through the Segment Quality Assurance Departments

In FY2020, the Glass Quality Assurance Department and the Chemicals Quality Assurance Department conducted audits at 20 departments of 13 companies including the head office, plants, and affiliate companies (7 glass departments at 4 companies; 13 chemical departments at 9 companies) based on the annual plan. We provided assistance until any corrective actions or improvements requested during these audits were implemented. By expanding the multilayered audit system to ensure nothing is overlooked in the future, we will work to improve the level of quality initiatives at each business site.

Auditing and Support by the Quality Assurance Division

The Quality Assurance Division executed audits of the Glass Quality Assurance Department and Chemical Quality Assurance Department. We provided assistance until any corrective actions or improvements found during the audits were implemented.

Quality and Product Safety Education

The Central Glass Group systematically conducts Education for Career Development and *Monozukuri* Education for human resource development. The Education for Career Development program consists of structured quality control education provided as follow-up training for new employees, training for newly appointed assistant managers and training for newly appointed managers.

35 employees took part in the follow-up training for new employees on June 30, 2020 centered upon the promotion system for quality initiatives. Every participant learned about the overall quality control initiatives at the Central Glass Group as well as gained basic knowledge on quality and its impact.

17 employees participated in the training for newly appointed assistant managers focusing on quality and product safety laws and regulations on September 8, 2020 with 11 more taking part on October 22, 2020. In particular, this training program emphasized teaching each participant about product safety.

16 employees took part in Total Quality Management (TQM) training for newly appointed managers on August 20, 2020 to learn about TQM as well as the promotion

system for quality initiatives.

Our training and education programs this fiscal year were held online (via Microsoft Teams) due to the COVID-19 pandemic.

We will continue to provide education for career development to help our employees grow.

The knowledge gained through these various education programs aids in Group quality initiatives that prioritize quality and safety.



Monozukuri Education

Lectures on Quality

We invited an outside instructor to provide a Quality Compliance lecture on November 13, 2020 as part of the groupwide quality education. Due to the COVID-19 pandemic this fiscal year, the lecture was held online (Microsoft Teams live event) for an audience of roughly 250 people.

Groupwide QC Circle Conference

We hold a groupwide QC Circle Conference every November at the Career Creation Center.

Unfortunately, this conference had to be canceled due to the spread of COVID-19 in FY2020. However, we did present special awards to teams ("Circles") nominated by each plant and affiliate company for their active daily work in QC Circle activities.

Special Awards (7 Circles)

Territory	Business Site	Business Site Department	Circle Name	Theme
Ube	Ube Plant	Chemicals Production Section	Burutoppin	Reduction of the amount of nitrogen used by hydrolysis and shortening catalyst drying time
Ube	Ube Plant	Organic Fine Chemicals Section	8 Man	Modification of the T-261A/B activated carbon replacement (input) method
Ube	Central Chemical Co., Ltd.	Production Sec.	Za Gattsu D	Reduction of product type changeover maintenance time at the Chemical Fertilizer Plant
Matsusaka	Matsusaka Plant	Production Sec. - 1	Challenger	Phaseout of iron orifice in grinding process
Matsusaka	Mie Glass Industry Co., Ltd.	Safety Glass Production - 1	DBX-α	Reduction of the defect rate due to rollers
Kawasaki	Kawasaki Plant	Speciality Chemicals Section - 3	Legend	Prevention of omissions of labeling on products
Kawasaki	Kawasaki Plant	Speciality Chemicals Section - 3	B-Dash	Reduction of hazardous gas generation in containers of filtrate cake

Supplier Initiatives

We always engage in activities to provide reliable Central Glass products and services as well as continually carry out quality initiatives with our business partners.

Supplier Audits

Central Glass Co., Ltd. audits its suppliers including contractors as a measure to improve quality.

In FY2020, we audited 36 suppliers with their understanding and cooperation either on-site, online, or through submission of documents. We also provided assistance until any corrective actions or improvements requested during these audits were implemented.

Conflict Mineral Surveys

Central Glass Co., Ltd. purchases materials from smelting companies certified through audits by the Responsible Minerals Initiative (RMI) in accordance with the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (Section 1502) regarding the procurement of conflict minerals (tantalum, tin, tungsten and gold) to prevent any complicity in conflicts caused by armed groups or antisocial forces, human rights violations, or environmental destruction.

In FY2020, thanks to their understanding and cooperation, we regularly conducted surveys of all of our procurement partners handling conflict minerals and verified that they were certified under the RMI.

Green Procurement Surveys

The Central Glass Group established Green Procurement Guidelines to comply with legal and regulatory requirements and prioritize procurement of raw materials, building materials and other goods with a lower environmental impact.

In FY2020, we conducted a survey based on our Green Procurement Guidelines checking that procured goods do not contain chemical substances restricted by the law, and thanks to the understanding and cooperation of our business partners, we verified that there were no problems found in our procurement activities.

The Central Glass Group will continue to promote legal and regulatory compliance as well as activities to reduce the environmental impact throughout its entire supply chain.



Green Procurement Guidelines

FY2020 Targets and Performance Results (Glass Segment)

[Broad policy] Build uncompromising quality assurance systems

Guidelines	(Plan) FY2020 Targets	(Do) FY2020 Performance Results	(Check) Ratings	(Act) FY2021 Initiatives
Prevent	Cultivate a culture of quality	Fully comply with all legal, public and internal standards (A).	△	Fully comply with all legal, public and internal standards (A).
	Perform continuous improvements	Increase work observation.	○	Increase work observation.
	Update and enforce policies and procedures	Clarify and thoroughly implement rules (B).	○	Clarify and thoroughly implement rules (B).
	Improve organizational structures	Strengthen the authority of quality-related departments (systems allowing such departments to say no) (A).	○	Strengthen the authority of quality-related departments (systems allowing such departments to say no) (B).
Detect	Invest in human resources and facilities	Educate and train qualified staff.	○	Educate and train qualified staff.
	Strengthen audit systems	Improve auditing procedures and develop and use auditing tools (B).	△	Strengthen multilayered audits (A).
Respond	Streamline reporting systems	Create reporting rules and databases.	△	Properly implement reporting rules and databases.
	Respond to problems with corrective and preventive actions	Improve the capabilities for finding root causes to prevent recurrence.	○	Improve the capabilities for finding root causes to prevent recurrence.

Rating: ○...Achieved target △...Achieved most targets but not all ×...Additional measures required —...Not applicable A: First priority B: Second priority

FY2020 Targets and Performance Results (Chemical Segment)

Guidelines	(Plan) FY2020 Targets	(Do) FY2020 Performance Results	(Check) Ratings	(Act) FY2021 Initiatives
Prevent	Cultivate a culture of quality	Heighten awareness about quality compliance. Thoroughly comply with laws and regulations as well as contractual terms and conditions.	△	Audit compliance with public standards. Inspect compliance with contractual requirements.
	Perform continuous improvements	Identify risks and execute risk response according to each workplace. Reduce defects caused by outsourcing and procurement sources.	○	Establish a quality assurance system in the quality assurance department for new products. Verify the quality assurance system for new manufacturing lines through pre-production inspections. Continue to provide support to overseas energy materials-related sites.
	Update and enforce policies and procedures	Review and revise rules in accordance with amendments to laws and regulations as well as changes to contractual terms and conditions. Thoroughly implement a QMS.	○	Revise the segment QMS.
	Improve organizational structures	Revise rules in accordance with quality-related restructuring at plants.	○	Check quality management tasks for products subject to quality assurance.
Detect	Invest in human resources and facilities	Consider automation and renewal of equipment to reduce quality issues. Conduct training and strengthen measures to prevent human error.	○	Improve auditing skills through auditor training. Provide training to enhance knowledge about GMP.
	Strengthen audit systems	Promote multilayer audits to prevent quality defects before they happen. Systematically audit suppliers.	○	Conduct internal segment audits and second-layer audits. Systematically select and audit suppliers.
Respond	Streamline reporting systems	Properly implement a new system for reporting quality issues.	○	Properly implement a system for reporting quality issues.
	Respond to problems with corrective and preventive actions	Conduct rapid and adequate response when quality issues arise.	○	Follow up on countermeasures for defects caused in-house.

Rating: ○...Achieved target △...Achieved most targets but not all ×...Additional measures required —...Not applicable

Monozukuri Is About Hitozukuri

Central Glass Co., Ltd. is a *Monozukuri* company that has continually provided superior products with higher added value in order to enrich people's lives. We focus on *Hitozukuri* (developing human resources) as the foundation of our corporate growth and strive to enhance our human resource development and HR programs with the aim of building an environment where each individual can demonstrate his or her capabilities and skills to the utmost.



Promoting Work-Life Balance

Central Glass Co., Ltd. has built systems surpassing those mandated by law as an initiative to strike a better work-life balance for people raising children or caring for family members. The law has required companies to offer nursing care leave for children as well as time off for nursing care in hourly increments since January 2021. As a result of our efforts to encourage employees to use these programs, the number of people taking advantage of these systems is gradually growing.

Not only our female employees have been using our maternity and parental leave programs; the number of male employees using these programs is also growing annually. In the future, we will work to publicize these programs and revise policies to actively encourage employees to use these programs.

Childcare and Nursing Care Programs

Childbirth preparation leave*	Two days off per month for hospital visits, etc. during pregnancy.
Maternity leave	Legally mandated leave before and after childbirth.
Childbirth leave*	Three days off within a one-month period around the expected delivery date.
Parental leave	Legally mandated childcare leave. Childcare leave is available to employees with children between the ages of one year and six months to two years old. Up to five days of paid leave from the first day of leave.*
Parental leave*	One day off per month for childcare.
Nursing care leave for children	36 days off per year for nursing care for children.* Employees can take leave in hour increments.
Shortened working hours during childcare*	Shortening of working hours by a maximum of two hours per day.
Staggered working hours during childcare	One-hour postponement of the start of the workday for staggered working hours during childcare.
Nursing care leave*	Total of 365 days of leave, which can be divided into up to three periods.
Time off for nursing care	Ten days off per year for nursing care and to attend to family members.* Employees can take leave in hour increments.
Shortened working hours for nursing care	Shortening of working hours by one hour per day.
(Upcoming) Re-employment policy*	Anyone who resigns due to pregnancy, childbirth, raising children, marriage, a spouse's work transfer, or caring for family shall be prioritized for re-employment for up to five years.

* An asterisk indicates a program surpassing that mandated by law (the program itself, the length of time, etc.)

Promotion of Diversity

In addition to re-employing people who have retired and actively recruiting women, we are also working to leverage the experience of diverse human resources with different values and cultures by hiring people of different nationalities to contribute to the globalization of our company.

Moreover, the percentage of employees with disabilities at the end of FY2020 was 2.17%, up from the previous fiscal year. Unfortunately, we were unable to reach the statutory employment rate of 2.2% (2.3% as of March 2021). Central Glass Co., Ltd. will continue to actively recruit people with disabilities.

Central Glass Co., Ltd. will continue to work to employ and develop diverse human resources regardless of gender, nationality, age, ability or disability while further cultivating a company culture where each and every employee can work enthusiastically.

Employment Status Data

Item	FY2018	FY2019	FY2020
(1) Number of Employees (Female Employees)	1,633	1,631	1,671
(2) Number of new recruits (Female Employees)	170	178	180
(3) Average age	36.3 years old	36.4 years old	36.6 years old
(4) Average years of continuous employment	14.7 years	14.9 years	15.1 years
(5) Number of non-Japanese employees	10	11	13
(6) Number of employees taking parental leave (Male Employees)	15	16	22
(7) Number of employees on shortened or staggered working hours during childcare	3	7	8
(8) Number of employees on shortened or staggered working hours during childcare	22	33	30
(9) Number of employees taking nursing care leave	0	1	1
(9) Percentage of persons with disabilities	2.14%	2.16%	2.17%
(10) Number of people who are re-employed after retirement	165	179	164

* (1)(2)(3)(4): Non-consolidated, full-time employees only; (5) to (10): Includes temporary dispatched employees

Applicable Periods for Childcare Support System (from Pregnancy to Child-raising)

Program	Pregnancy	6 weeks	8 weeks	After 1 year	1 year and 6 months	After 2 years	Before elementary school enrollment	First grade	Elementary school graduation
Childbirth preparation leave	Delivery date								
Maternity leave	Childbirth leave (3 days)								
Parental leave	Leave can be extended until the child is one year and six months or until two years old								
Childcare leave									
Staggered working hours during childcare									
Shortened working hours during childcare									
Nursing care leave for children									

* Only female employees are eligible for maternity leave and shortened working hours for childcare while pregnant, and only male employees are eligible for childbirth leave; all other measures are open to both male and female employees.

VOICE



Koichi Murayama

Quality Assurance Department, Kawasaki Plant

I took three days of childbirth leave and three weeks of parental leave after my first daughter was born to help my wife as much as possible with the housework and care for our new child.

I was worried about how taking time off to raise our child would impact my work, but the encouragement and support of my colleagues freed me to really focus on my kid. I would like to take this opportunity to thank all of them.

Parental leave allowed me to spend lots of time with my child, for which my wife was also grateful. By cradling the crying baby, I also learned how important it is to accurately understand needs. I will always keep in mind my work-life balance as I try to take advantage of this experience of raising my child to contribute to our company.

Creating a Healthy and Vibrant Corporate Culture

The Act on Promotion of Women's Participation and Advancement in the Workplace, which was enacted due to concerns about labor shortages by an aging population and a declining birthrate, required implementation of a 10-year Action Plan beginning in FY2016 to actively appoint female employees to managerial positions and expand the range of occupational fields for women.

With the aim of encouraging the active participation of diverse human resources, carrying out effective education, reviewing the working environment, and improving overall organizational performance, we used this as an opportunity to formulate the First Action Plan to Promote Female Workplace Participation ("First Action Plan") from FY2016 to FY2017 to grasp the current situation and analyze the

FY2020 Progress of Action Plan Initiatives

Second Action Plan to Promote Female Workplace Participation	(Plan) FY2020 Targets	(Do) FY2020 Performance Results	(Check) Ratings	(Act) FY2021 Initiatives
Target 1: Increase the female employee ratio (Numerical target: 11%)	Actively hire female employees and maintain an environment and system to enable their continued employment.	Achieved a 13.2% ratio of new female graduates.	○	Use positive outreach to recruit female candidates and take advantage of the (upcoming) re-employment policy.
Target 2: Raise awareness about work-style reforms	(1) Promote changing working style to finish work within the designated working hours.	Reflect on the emergency implementation of measures during the COVID-19 pandemic to grasp issues toward future institutionalization of such measures and investigate flexible work styles.	○	Investigate institutionalization of measures to facilitate flexible working hours and locations in anticipation of professional life after the COVID-19 pandemic.
	(2) Continue to implement Smart Day (days designated for leaving work on time), overtime applications and planned leave program.	Continue to implement applications for overtime and planned leave (Smart Day was temporarily suspended due to the initiatives in (1)).	○	Continue implementation and measure the effectiveness.
	(3) Encourage managers, including line managers, to change their attitudes regarding working style.	Develop specific content for training for managers.	—	Plan and implement training for managers about flexible work styles.
Target 3: Share child raising and nursing care information	Continue to publicize relevant regulations, policies, and model cases.	Shifted to a digital approval system for some applications and updated the internal corporate bulletin board regarding raising children.	△	Better utilize the internal bulletin board and continue to raise awareness. Investigate follow-up support for employees on parental leave.

Rating: ○...Achieved target △...Achieved most targets but not all ×...Additional measures required —...Not applicable

challenges. Our Second Action Plan to Promote Female Workplace Participation over four years from FY2018 to FY2021 incorporated the work-style reforms that we struggled with in particular during the first action plan. We were forced to revise our second action plan during its third year in FY2020 due to the COVID-19 pandemic. However, we successfully introduced temporary work-style reforms to flexibly adapt to measures for preventing the spread of the coronavirus infection, such as satellite offices, staggered shifts, and a telework program.

FY2021 is the last year of the Second Action Plan to Promote Female Workplace Participation. Central Glass Co., Ltd. will continue to emphasize work-life balance and diversity while striving to become a company where every employee can feel their growth and have both the desire and the ability to continue working for years by reviewing the current action plan and implementing plans in preparation for the third action plan from FY2022 to FY2025.

Mental Healthcare

Corporate mental health challenges include not only addressing the health and career of individuals suffering from mental health issues but also ensuring that these problems do not harm the atmosphere or productivity of the workplace. Mental healthcare has become one of the most important management challenges for modern companies.

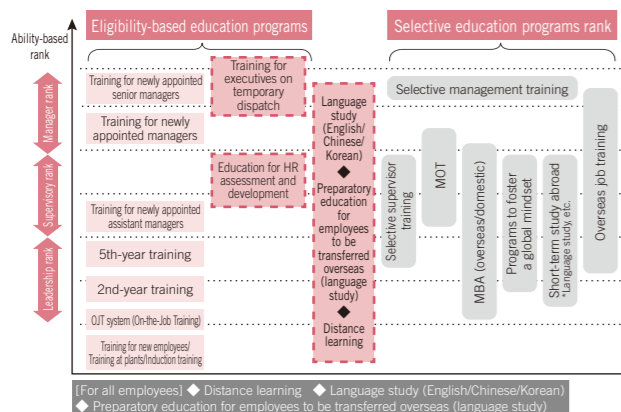
Central Glass Co., Ltd. provides annual stress checks to all Group employees to prevent and discover any mental health issues quickly. This fiscal year, we worked with specialized external bodies to provide workplace mental health training to every manager. We also encourage anyone with a high level of stress to see industrial physicians or consult with specialized agencies, and we have instituted procedures for investigating workplace improvements.

We have also put in place a Return to Work Support Program that organizes support for an employee absent from work due to mental illness, including information for their doctors and supervisors, to help them return to work.

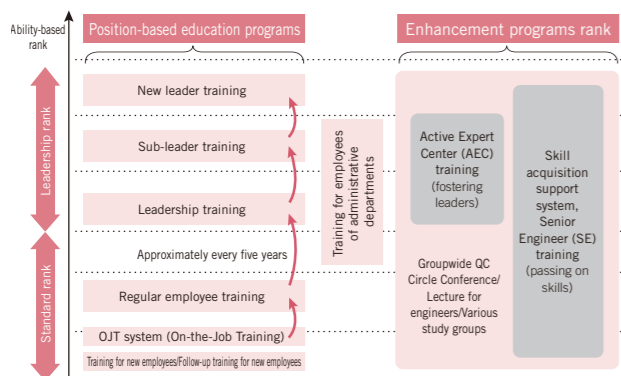
Central Glass's Education System

The education that Central Glass Co., Ltd. provides to employees has two systems: "education for career development" to foster global human resources and candidates for managerial positions, and "education about *Monozukuri*" to pass on and develop advanced techniques and skills. Both of these educational systems further training opportunities by offering programs for employees according to their ages and positions (eligibility-based education programs/position-based education programs) and programs for people selected according to their work duties and skills (selective education programs/enhancement programs).

Education for Career Development



Monozukuri Education



FY2020 Targets and Performance Results

Issues	(Plan) FY2020 Targets	(Do) FY2020 Performance Results	(Check) Ratings	(Act) FY2021 Initiatives
Cultivation of global human resources through education for career development	Improve systems to support language study.	<ul style="list-style-type: none"> Improved English conversation ability by providing tailored support to address the weaknesses of course takers' speaking skills. Improved language skills by providing English, Chinese and Korean language study programs. 	○	Continue to provide support for language study.
	Strengthen the management capabilities of managers.	<ul style="list-style-type: none"> Deployed research employees selected by Central Glass to MOT programs. Sent selected managers to external training courses. Implemented training for senior managers to strengthen management capabilities. 	○	Continue human resource development to cultivate candidates for managerial positions.
	Send trainees to overseas affiliates.	<ul style="list-style-type: none"> Stopped deploying employees as overseas trainees due to the spread of COVID-19. 	—	Continue human resource development to nurture employees with a global mindset.
Improvement of on-site capabilities through <i>Monozukuri</i> education	Continue to foster a new generation of leaders through Active Expert Center (AEC) trainee programs.	<ul style="list-style-type: none"> Improved problem-solving skills of selected trainees through basic education and activities based on given themes. 	○	Continue to develop a new generation of on-site leaders.
	Improve and implement position-based education programs.	<ul style="list-style-type: none"> Provided education to raise awareness about compliance in junior and mid-career employees taught by executive officers. Implemented position-based education programs to improve on-site capabilities. 	○	Continue position-based education programs.

Rating: ○...Achieved target △...Achieved most targets but not all ×...Additional measures required —...Not applicable

Language Study

Central Glass Co., Ltd. provides English, Chinese and Korean language study programs to improve the language skills of its employees as part of global human resource development.

We also provide an English Course to Develop Globally Minded Employees as an enhancement program, in which our employees are offered opportunities to join local on-site language schools or take intensive online lessons as a way to acquire more practical language abilities.

In FY2020, the English Course to Develop Globally Minded Employees identified areas where students had difficulty speaking, such as sentence structure, vocabulary, pronunciation and fluency, and offered tailored support to overcome these weaknesses. The students also created goal sheets to focus efforts on achieving particular objectives and then provided reports on their success at the end of each month. All three of the employees who took part in the 6-month English Course to Develop Globally Minded Employees clearly showed remarkable improvement in their English-speaking abilities in testing upon completion of the course. We will continue to support the language acquisition of our employees by not only offering this English course in FY2021, but also providing new courses to cultivate study habits in students with intermediate-level English skills as well as to improve TOEIC scores.

In addition, the Short-term Study Abroad Program offers opportunities to our employees to attend foreign language schools for three to six months in order to develop their practical business skills in a foreign language and foster their global mindset. Unfortunately, we were unable to deploy any students via this study abroad program in FY2020 to prevent the spread of COVID-19. Central Glass Co., Ltd. plans to continue to offer this opportunity to candidates in the future while confirming the state of travel into other countries. In FY2021, we will also support our employees who will transfer overseas in becoming better at adapting to different cultures and values by sending them to outside training programs which nurture a global mindset.

Develop candidates for managerial positions

Central Glass Co., Ltd. sends candidates to two-year MOT programs offered by graduate schools for the purpose of cultivating managers familiar with management of technology who can promote strategic research and technological development. One employee took part in an MOT program in FY2020 as part of our development of researchers and engineers who can effectively commercialize the success of research and technological development in order to improve sustainable corporate value.

In addition, we also put in place new management training in FY2020 for employees promoted to senior management that strives to enhance the skills of managers by emphasizing stronger skills in formulating strategies and vitalizing the organization.

Central Glass Co., Ltd. will continue to nurture human resources as candidates for managerial positions.

Compliance Education

Central Glass Co., Ltd. believes compliance is essential to fulfill its corporate social responsibility and conducts training to raise awareness about its importance.

As part of our training for junior and mid-career employees, executive officers taught compliance and engaged in dialogue with the employees in FY2020. We provided e-Learning on compliance as well to all employees, including those working at our main affiliate companies in an effort to raise awareness about compliance throughout the entire Central Glass Group.



Executive Officer Compliance Education

Fostering a New Generation of On-site Leaders

Central Glass Co., Ltd. has been conducting education for selected trainees at its Active Expert Centers (AECs), aiming to foster new generations of technology leaders at its plants. The AECs established at each plant are educational centers dedicated to passing on and developing technical skills. Each year, candidates for the next generation of leaders are selected from our manufacturing plants for one year of education as AEC trainees.

The trainees receive three months of fundamental education before being assigned a theme by the plant and repeatedly carrying out information gathering, analysis and discussion while visiting production sites. This practical education effort works to solve problems at these

manufacturing sites while investigating the root causes. In FY2020, eight trainees selected from each plant participated in the AEC trainee education. In FY2021, nine new employees selected as new trainees will continue this work as we further develop future on-site leaders.



Disassembly work to Learn the Structure of a Cylinder

VOICE



Tatsuya Hayasaka
Chemical Research Center

I studied in the MOT (Department of Management of Technology in the Graduate School of Management) at the Tokyo University of Science for two years starting in April 2019. The MOT at the Tokyo University of Science has students of all different ages and occupations. I was initially astounded by the active debate and amazing quality of education. The discussions between the faculty and students who all have diverse fields of expertise opened my eyes to so many things, which often lead to conclusions I never would have come to. I really felt that this process will directly connect to fostering innovation. We studied each specialized field after class a lot. I think the activities done outside of class are another fantastic part of the MOT.

I worked as well as studied. I attended classes on Saturdays and one to three days during the week. I was extremely busy writing a large number of reports and didn't get much sleep, but the experience was worth it. I had to organize my thoughts to fit everything into the number of pages allowed for the report. The repetitive process ingrained the habit of really thinking about the topic at hand. I was disappointed when classes went online in the second year due to the COVID-19 pandemic because there was little chance to meet the other students, but I paid careful attention to get the most out of the online classes as well. Business administration study is like a compass that points you in the right direction. In the same way a compass does not eliminate all of the risks of sailing the seas, studying business administration does not assure business success. Business administration study becomes a fountain of ideas to leverage in practical situations, which gives you the strength to dig deeper into your ideas. This fountain of ideas also leads to new universal logic and becomes the knowledge base to take advantage of those ideas. I think MOT is a place to temper these skills and learn the power of the mind. I will use everything I learned at the MOT in my work from now on to contribute to our company.

Coexisting with Local Communities

Coexisting with local communities is essential for a company to survive. The Central Glass Group strives to not only coexist but also grow together with local communities as a member of society through social contribution activities.



Chiyoda Council Of Social Welfare Donation of Playground Equipment to the Kosodate Salon

The Central Glass Labor Union Head Office and Kawasaki Branch participates in a charity flea market as part of its social contribution activities. Various articles and goods donated by employees of the Central Glass Group are sold to collect revenue to use as funds for social welfare activities. In the past, the money that we raised was used to donate wheelchairs and reclining chairs.

In FY2020, the Central Glass Labor Union Head Office and Kawasaki Branch donated children's playground equipment to the Chiyoda Council Of Social Welfare's Kosodate Salon. Chiyoda Ward's child raising generation is known for having many single parents and double income families. Many face the challenge of feeling isolated. The Kosodate Salon is run by local residents, students and other volunteers as a place for families in this situation to interact.

Although we have not been able to visit the Kosodate Salon due to the impact of the COVID-19 pandemic, the Chiyoda Council Of Social Welfare held a reception ceremony at their offices in October of last year with community support staff from the local government office and social welfare workers who volunteer at Kosodate Salon in attendance.

As a union chapter, the Central Glass Labor Union Head Office and Kawasaki Branch will continue to actively take on social contribution activities as stated in our activity policy.



Reception Ceremony at the Chiyoda Council Of Social Welfare Office

Regular Cleanup of Harbor Roads

The Sakai Manufacturing Site and Central Glass Plant Services Co., Ltd. Sakai Plant regularly clean the harbor roads in front of the manufacturing site used to transport cargo with people from several other companies in the neighborhood according to the annual plan as an initiative based on the municipal law to promote the beautification of Sakai City—a city designated by government ordinance.

In FY2020, 20 to 30 people each from both companies took part in the cleanup activities that included pulling weeds and collecting trash on the sidewalks according to the annual plan for two cleanup efforts during the year.

We will also continue to work with local government agencies and neighboring companies in the Osaka Bay beach cleanup efforts, which was canceled in FY2020 to prevent the spread of the COVID-19.



Regular Cleanup of Harbor Roads

Road Gutter Cleanup Efforts

The Matsusaka Plant cleans out the gutters along the roads in the Chikko District as one local contribution activity.

Although this road gutter cleanup effort is a local activity held by the Chikko neighborhood association, the Matsusaka Plant sincerely recognizes the trouble caused by its raw material debris. That is why we take charge and offer to lend a hand in cleaning the roadside gutters in the district. This initiative also helps revitalize communication with the local residents. Patrols and various other tasks have allowed more information to be

shared than ever before, which has enabled us to better understand the expectations of the people in the community more quickly. The local Chikko neighborhood association has expressed their thanks for our participation in this cleanup effort.

To prevent the spread of COVID-19 in FY2020, the Matsusaka Plant coordinated with the local Chikko neighborhood association to adjust the schedule and clean the roadside gutters.

We will actively take part in these types of social contribution activities as such initiatives are vital to creating a hospitable living environment for the local community. In the future, we will continue to conduct environmental activities to ensure a community where everyone can live safely while aiming to better enhance communication.



Road Gutter Cleanup Efforts in the Chikko District

16th Regional Responsible Care Meeting in Ube District

Four plants of three chemical companies in the Ube District hold a Responsible Care meeting with the local residents once every two years. The 16th Regional Responsible Care Meeting in Ube District was held using an online format for the first time in November 2020. 64 people attended from government agencies, local NGOs, and the local community. First, the Japan Chemical Industry Association provided an explanation about Responsible Care (RC) activities and communication efforts. Next, the NPO Ube Kankyo Community described chemical emissions before the four plants of the three companies taking part in the meeting provided plant overviews and a description of environmental preservation and disaster prevention initiatives. The meeting concluded with an exchange of ideas on various topics, such as measures to combat climate change, chemical substance management as well as waste management. An energetic debate on each topic as well as a specific exchange of ideas about the environment fostered a truly meaningful Responsible Care meeting.

We will always remain steadfast in communicating with all of the local people to build safe and secure businesses together as a community. The Japan Chemical Industry Association even recognized our effort to hold the meeting in online format when faced with the COVID-19 pandemic through the JCIA RC Award.



16th Regional Responsible Care Online Meeting in Ube District

Other Regional Activities

Plant Name	Plant Name Activity Description
Ube Plant	<ul style="list-style-type: none"> Cleanup activities for city and prefectural roads on our plant-wide 5S Day (once a month) Cleanup activities in Tokiwa Park (once a year) Cleanup activities around Lake Ono (once a year) Protection and cultivation of the grasslands at Akiyoshidai Quasi-National Park (once a year) Forest maintenance activities to protect water resources (once a year) Cleaning of roads with road sweepers (every day)
Kawasaki Plant	<ul style="list-style-type: none"> Regular cleanups of roads around the plant Regular exchange of information concerning the environment and safety with neighboring plants in the Kawasaki Industrial Complex Participation in Tokyo Bay General Survey for Water Environment (Analysis of and report on water quality in Tokyo Bay near the plant) Participation in joint disaster drills with neighboring business sites in the Ukishima District
Matsusaka Plant	<ul style="list-style-type: none"> Invitation of local residents to the plant's summer festival (canceled due to the 2020 coronavirus pandemic) Participation in cleanup of waste drifting ashore at Toshijima Island, Toba City, organized by the Mie Prefecture Industrial Waste Countermeasures Promotion Council Participation in Matsunase beach cleanups, organized by Mie University's Mie Global Environment Center for Education & Research (canceled due to the 2020 coronavirus pandemic) Exhibition of Eco-Glass at the Matsusaka Environmental Fair held by the Matsusaka City Environmental Partnership Committee (canceled due to the 2020 coronavirus pandemic) Participation in voluntary cleanup activities at Matsunase Beach organized by the Matsusaka Taki District Workers' Welfare Council (attended by Matsusaka branch members of the Central Glass Labor Union) Participation in the Matsusaka Street Cleanup organized by Matsusaka City Lending of plant grounds to youth sports associations and other organizations free of charge "Ecocap" activities (plastic bottle cap collection) organized by the Matsusaka branch of the Central Glass Labor Union (canceled due to the 2020 coronavirus pandemic) Provision of company-owned land to neighboring local communities as temporary parking areas free of charge Deployment of staff to Matsusaka City as "External Matsusaka-EMS Environmental Auditors"
Matsusaka Plant Sakai Manufacturing Site	<ul style="list-style-type: none"> Contribution of various funds raised to social welfare activities Provision of support for a project conducted by the Osaka Port Cleanup Association in Sakai Semboku Port to ensure the safety of ships navigating through the port and protect the environment Deployment of employees as needed to support rescue, fire suppression and first aid in case of a large-scale disaster as a member of the Sakai Disaster Response Committee Blood donation drive at the Sakai Manufacturing Site Cleanups of coastal roads

Ensuring Community Safety and Security

“Creating a Better Future Through *Monozukuri*”— Each plant of the Central Glass Group strives to achieve this goal by carrying out production activities in a way that ensures a stable product supply based on around-the-clock safety and disaster prevention systems. The Central Glass Group will contribute to the establishment of a truly prosperous society through its products while always considering the environment in each region and communicating with the local people.



Ube Plant



Address 5253 Okube, Ube City, Yamaguchi Prefecture
 Number of Employees 653 (as of March 31, 2021)
 Major items produced Fluorine products, other chemicals
 Acquired certifications ISO 14001 (December 2000)
 ISO 9001 (December 1997)
 ISO 45001 (February 2020)

Message from the Plant Manager

Ube Plant, established in 1936 and located in the coastal industrial region of Ube along the Seto Inland Sea, began with soda production and expanded to production of fertilizers and fine chemical products. Today, the Ube Plant primarily manufactures fine chemicals containing organic and inorganic fluorine compounds from raw materials such as hydrofluoric acid. In particular, all the cleaning gas products for semiconductor processes developed by Central Glass are environmentally friendly with zero Global Warming Potential (GWP). We also manufacture non-CFC fluorocarbon products with a next-generation low GMP. Through this type of manufacturing, our plant is actively striving for eco-friendly businesses.

As plant initiatives to reduce greenhouse gases, we optimize the operation conditions of each factory, adopt high-efficiency equipment, and expand energy-saving by transitioning the fuel used from heavy oil to city gas.

As waste reduction initiatives, we have installed equipment to collect the raw material fluorite from the liquid waste of manufacturing processes, and to incinerate some of the waste oil from each factory. These efforts work to recycle resources and reduce the final disposed amount of waste.

In February 2020, we completed transitioning the occupational safety management system from OHSAS 18001 to ISO 45001 and have endeavored to build a safe, secure, and healthy working environment.



Isamu Mori
Plant Manager
Ube Plant

Kawasaki Plant



Address 10-2 Ukishima-cho, Kawasaki-ku, Kawasaki City, Kanagawa Prefecture
 Number of Employees 236 (as of March 31, 2021)
 Major items produced Inorganic chemicals, organic chemicals
 Acquired certifications ISO 14001 (May 2007)
 ISO 9001 (July 2001)

Message from the Plant Manager

Kawasaki Plant mainly produces fine chemical products, such as our next-generation low GWP fluorine-based foam blowing agent HFO-1233zd (E) and our next-generation fluorinated solvent HFO-1233zd (Z), which offers both excellent environmental performance and high cleaning performance; as well as pharmaceutical intermediates, photoresist materials, and lithium-ion battery electrolytes.

We actively promote 3R (Reduce, Reuse, and Recycle) activities for the byproducts produced during the manufacturing processes of these products by reclaiming or recycling flammable waste oil and recycling sludge. Kawasaki Plant has reduced the amount of final waste disposal by more than 90% compared to FY2000. Our environmental activities have been recognized by the city of Kawasaki, and Kawasaki Plant has been certified as a business site taking environmental action, as defined by the city's bylaws.

Kawasaki Plant is a business located in a petrochemical complex handling a wide range of hazardous materials that is stipulated as a special disaster prevention area. Therefore, we strive to prevent accident and disasters through security and disaster prevention activities, from specific disaster prevention drills at each business site to all-inclusive disaster prevention drills carried out with all related parties.

Considerations about the environment and safety will always be necessary. Kawasaki Plant will continue to strive in environmental and safety efforts in the future.



Shigeru Suenaga
Plant Manager
Kawasaki Plant

Kawasaki Plant is continuing groundwater purification treatment as a result of contamination from a leak of 1,2-dichloroethane in 1982.

Matsusaka Plant



Address 1521-2 Okuchi-cho, Matsusaka City, Mie Prefecture
 Number of Employees 236 (as of March 31, 2021)
 Major items produced Automotive glass
 Architectural and industrial float glass/fabricated glass
 Functional glass for electronic materials
 Acquired certifications ISO 14001 (April 2000)
 ISO 9001 (November 2003)
 IATF 16949 (June 2018)

Message from the Plant Manager

Matsusaka Plant manufactures flat glass using the world's only duplex equipment capable of employing a consecutive double-sided polishing method. We also manufacture fabricated glass for automotive and architectural applications.

Since the plant consumes a huge amount of energy and resources, we are always working to rigorously implement environmental conservation activities.

In order to conserve energy and power and reduce CO₂ emissions, we are working to reduce production loss, incorporate the introduction of equipment that conserves energy into large-scale renovations, and implement improvements to our operational technologies.

We continually aim to reach higher levels of waste reduction, as well as make efforts to recover valuable commodities from waste, one example of which is recycling almost all the waste glass we produce.

Matsusaka Plant has also installed equipment that processes wastewater and ensures concentrations far below the values set in local agreements to provide safety and security to the region.

Each of our employees is continually working to achieve growth and improvement, based on our philosophy, “Creating a Better Future Through *Monozukuri*.” We will continue to appreciate and contribute to local communities and work to make our plant safe and happy.



Masaaki Kawase
Plant Manager
Matsusaka Plant

Matsusaka Plant is continuing groundwater purification treatment after discovering groundwater containing arsenic and lead in 2002 and groundwater containing fluorine in March 2020.

Matsusaka Plant Sakai Manufacturing Site



Address 6 Chikko-Minamimachi, Sakai-ku, Sakai City, Osaka Prefecture
 Number of Employees 41 (as of March 31, 2021)
 Major items produced Architectural and residential flat glass
 Flat glass for electronic materials, architectural frosted glass
 Acquired certifications ISO 14001 (December 1999)
 ISO 9001 (February 1999)

Message from the Site Manager

The Sakai Manufacturing Site is located in the center of Sakai in Osaka Prefecture, and it has been manufacturing flat glass since 1959 as the birthplace of the glass business of Central Glass. In 1982, we adopted the float process as our manufacturing method.

The Site has been working to review the operational conditions of the glass melting furnace and improve productivity to further reduce the energy consumption rate. Furthermore, the Site has also been engaging in initiatives to not only recycle waste but also reclaim waste, which helps in waste reduction.

We will work to foster a safe and environmentally friendly plant in order to contribute to the establishment of a truly prosperous society through *Monozukuri* under the Basic Philosophy of “Creating a Better Future Through *Monozukuri*,” so that everyone in the community can live with peace of mind.



Nobuhisa Tanise
Site Manager
Sakai Manufacturing Site
Matsusaka Plant

55th Theme: Body Culture Club

Central Glass Co., Ltd. has held the Central Glass International Architectural Design Competition since 1966. We invite renowned professors in the field of architecture in Japan as judges and also gather students interested in architecture and architects at the forefront of the field from Japan and overseas. In 2020, judges selected the grand prize winner from among a total of 180 entries, of which 57 were from abroad.

We live in a time in which we need to pursue economic efficiency and rationality while simultaneously preserving the natural environment and protecting historical and traditional cultures. As a company that promotes architectural culture, we believe that it is highly meaningful for us to provide occasions to contemplate a desirable society and environment through this competition.

55th Grand Prize Winner

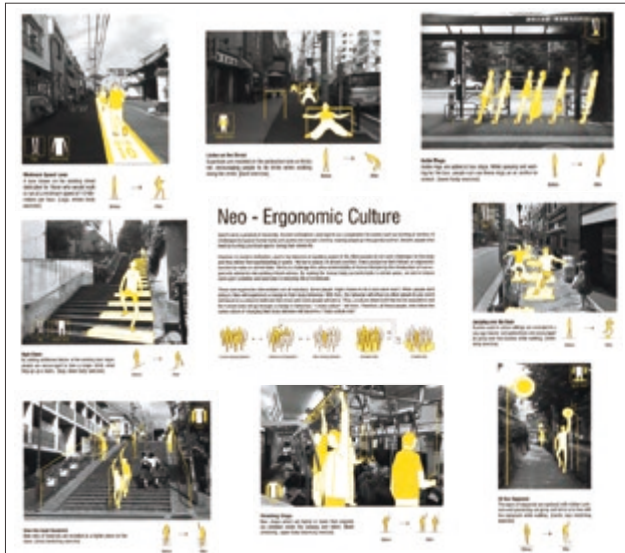
Boon Hau Lim (Freelance, Japan)

Pyaezone Aungsoe (Freelance, Japan)

Project Title

Neo-Ergonomic Culture

Central Glass International Architectural Design Competition Judges



Project Description

We try to challenge the ultra-comfortable lifestyle by the introduction of non-ergonomic elements into existing infrastructure. By making the human body uncomfortable in certain areas, we aim to induce semi-sport activities and exercises in the everyday life of individuals.

These non-ergonomic interventions are all voluntary. Some people might choose to do it and some won't. When people start doing it, they will experience a change in their body behavior. With time, this behavior will influence other people to join and it will become a culture in itself and then more and more people will join in.

Thus, a culture where both the human population and the human body will go through a change in behavior, "a body culture", will form. Therefore, all these people who follow the same culture of changing their body behavior will become a "body culture club."

Judging during the Coronavirus Pandemic



Remote Judging

In the past, judges have evaluated each project publicly at a large event hall and announced the winners at an award ceremony. However, the 55th Central Glass International Architectural Design Competition judged each project remotely in a screening process moderated by Shinkenchiku-Sha Co., Ltd. to prevent the spread of the COVID-19 pandemic. The selection of the grand prize winner, runner up, and honorable mentions was all streamed live online.



Chief Judge

Hiroshi Naito

Naito Architect & Associates



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Kengo Kuma

Kengo Kuma & Associates



Tadao Kamei

Nikken Sekkei Ltd.



©Masakazu Yoshiba

Jun Aoki

AS



Goichi Kamochi

Obayashi Corporation



Yoshiharu Tsukamoto

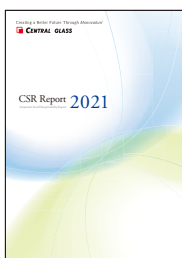
Atelier Bow-Wow



Yoshitada Makihata

Central Glass Co., Ltd.

Executive Managing Officer



Concept of the CSR Report 2021 Cover Page

The integration of glass and chemicals—core Central Glass businesses—gives way to new solutions. The birth and development of new businesses from the fusion of these different domains is illustrated visually with two colored arches blending together into a new color. The color harmony and soft shapes also demonstrate the close relationship between Central Glass and society.