SHARP

Be Original.

110th ANNIVERSARY

Sustainability Report 2022

Contents

Editorial Policy / Disclosure System

Editorial Policy / Disclosure System

Policy on Information Disclosure:

The Sharp Sustainability Report 2022 discloses information on Sharp's corporate social responsibility (CSR) efforts, which contribute to creating a sustainable society.

< Non-Financial Information (ESG Information) >

Sustainability

Sustainability Report 2022

Sustainability Report
(This report)

・ Sustainability Report
・ Green Procurement
・ CSR Procurement
・ For Suppliers
・ Environmental and Social activities
　performance Data

etc.

> Sustainability

ESG Information (Excerpt)

< Financial / Non-Financial Information >

Investor Relations

Annual Report 2021
For the fiscal year ended March 31, 2021

Annual Report
(Integrated report)

・ Annual Report (Integrated Report)
・ Consolidated Financial Results
・ Fact Book
・ Corporate Governance

etc.

> Investor Relations

Period Covered: :

Fiscal 2021 (April 2021 to March 2022)

However, some actual facts prior to and after this period, as well as subsequent policies, objectives, and plans, are also included.

Coverage:

Sharp Corporation, along with its domestic and overseas subsidiaries and affiliates.

Referenced Guidelines:

● GRI Sustainability Reporting Standards (GRI Standards), Global Reporting Initiative (GRI)

● Environmental Reporting Guidelines (2018 Version), Ministry of the Environment, Japan

Content indexes between this report and the following guidelines and principles are disclosed on Sharp's official website together with related information.

> GRI Standards Content Index

> United Nations Global Compact content Index

> ISO26000 Content Index

Environmental and Social Activities Performance Data:

We share detailed environmental data on greenhouse gases, waste, water and social activities data on percentage of female managers, OHS related data and more on the Sharp Corporation website.

> Environmental and Social Activities Performance Data

Scheduled Publication Date for Next Report:

October, 2023 (published annually since 1999)

Inquiries:

ESG Promotion Division, New Business Development Group, Sharp Corporation
ssr-info@sharp.co.jp

Philosophy, Policy and Management

Business Philosophy and Business Creed

Sharp Will Continue to Fulfill Its Social Responsibility through Its Business Activities

Business Philosophy

We do not seek merely to expand our business volume. Rather, we are dedicated to the use of our unique, innovative technology to contribute to the culture, benefits and welfare of people throughout the world.

It is the intention of our corporation to grow hand-in-hand with our employees, encouraging and aiding them to reach their full potential and improve their standard of living.

Our future prosperity is directly linked to the prosperity of our customers, dealers and shareholders ...indeed, the entire Sharp family.

Business Creed

Sharp Corporation is dedicated to two principal ideals:

"Sincerity and Creativity"

By committing ourselves to these ideals, we can derive genuine satisfaction from our work, while making a meaningful contribution to society.

Sincerity is a virtue fundamental to humanity ... always be sincere.

Harmony brings strength ... trust each other and work together.

Politeness is a merit ... always be courteous and respectful.

Creativity promotes progress ... remain constantly aware of the need to innovate and improve.

Courage is the basis of a rewarding life ... accept every challenge with a positive attitude.

"Make products that others want to imitate. "These words, spoken by Sharp founder Tokuji Hayakawa, exemplify his management concept of contributing to society through the company's technologies and manufacturing. This concept is realized by being the first to make products that meet the needs of a new era and by becoming a corporation that is known and trusted by society. In1973, Sharp articulated this spirit in the company's business philosophy and business creed. This spirit has been passed down continuously over the generations, ever since the company's founding over a hundred years ago.

The business philosophy represents the image that Sharp aims to present. As stated in the words "contributing to the culture, benefits and welfare of people throughout the world, "Sharp has always strived for mutual prosperity with society and stakeholders, ever since its founding. This philosophy is the foundation of CSR* today.

The business creed represents the beliefs and attitudes that all employees must hold fast to in order to realize the business philosophy. Sharp is dedicated to the two principal ideals of "Sincerity and Creativity." These ideals, which form the foundation of Sharp, involve thoroughly maintaining a customer's perspective and bringing forth inventive products.

Sharp will remain committed to fulfilling its social responsibility and to being a company that is known and trusted throughout society through business activities that abide by its business philosophy and business creed.

*Corporate Social Responsibility

"Be Original." Corporate Motto

In November 2016, Sharp announced its "Be Original." corporate motto. "Be Original." is Sharp's promise to our customers around the world that we will remain a brand that creates value that is rich in originality and that is uniquely Sharp.

We have infused two meanings into the word "original."
1. Tokuji Hayakawa, Sharp's founder, left us with a spirit of "Sincerity and Creativity." This spirit will forever be with us and it will remain unchanged as the original foundation of the work we do.
2. Sharp is a company that is always there for people and that constantly creates new value. By offering various products and services that are uniquely Sharp, we are continuously creating "original products just for you"
— products and services that enable all of our customers to fulfill their wishes and dreams.

The period at the end represents our firm commitment to taking on challenges and initiatives with a strong sense of purpose.

Message from the President & CEO

We will execute management emphasizing on ESG and aim to quickly establish a strong brand company "SHARP"

I'm Robert Wu, the new president and CEO since April 2022.

This year marks the 110th anniversary of Sharp's founding in September 1912. I thank all of our stakeholders who have supported us over the years.

Since 2019, the world has plunged into an unprecedented crisis caused by the Covid-19 pandemic. Thanks to progress in many areas—vaccination rates, changes in behavior, and the accelerated use of IT in various fields—we are seeing new ways of life in which we coexist with the virus. Yet there are still many problems the global community must unite to resolve, such as climate change, human rights, and geopolitical issues.
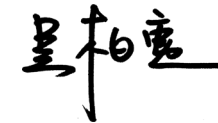
Against this backdrop, Sharp will place further emphasis on ESG in our corporate management. And by helping to tackle important issues, we will raise Sharp's social value and brand value so that we can quickly establish a strong brand company "SHARP."

Specifically, under its business vision of "Changing the World with 8K+5G and AIoT[*1]," Sharp is working to create innovative services and solutions in eight priority business areas—smart homes, smart offices, healthcare, entertainment, education, industry, security, and mobility. Going forward, we will further accelerate our efforts to strengthen our healthcare-related business and contribute to carbon neutrality.

In addition, we will implement HITO-based management to create a young and lively corporate culture. We will also speed up management reforms from a global perspective to grow Sharp into a true global company that meets the needs of people not only in Japan but around the world.

*1 AIoT is a word coined by Sharp, combining the words AI (artificial intelligence) and IoT (Internet of things). AIoT is a vision of how products and services will connect to artificial intelligence via the cloud and become a people-oriented existence. AIoT is a registered trademark of Sharp.

Robert Wu
President & Chief Executive Officer

Execute **Management emphasizing on ESG** in addition to current management policy

Sustainable growth

Raise social value
Raise brand value

Management Emphasizing on ESG
(1) Further strengthen healthcare related business
(2) Contribute to Carbon Neutral
(3) HITO-based Management
(4) True Global Company

Create surplus / stable profit

Establish foundation for future
- Establish business structure centering brand businesses
- Realize "Changing the World with 8K+5G and AIoT"
- Strengthen financial basis and return to corporate bond market

ongoing

Fiscal 2016 ~ 2021 | **Fiscal 2022 and on**

Message from the President & CEO

We will execute management emphasizing on ESG and aim to quickly establish a strong brand company "SHARP"

At the same time, we recognize that various social issues represent a major risk to the sustained development of our business. That is why we will continue our efforts to strengthen sustainability.

Specifically, in July 2022, we established the ESG Promotion Division, which plays a central role in company-wide sustainability and GX (green transformation) strategies. We have formulated new medium-term environmental goals for 2030 and 2035 to realize our SHARP Eco Vision 2050 long-term environmental vision. We have also declared support for the TCFD[2] recommendations, and we will expand climate change-related information disclosure in accordance with the framework set by the TCFD.

As a signatory to the United Nations Global Compact since 2009, Sharp continues to support the 10 Principles in the areas of human rights, labor, the environment, and anti-corruption. We also share the vision and mission of the RBA[3], which we joined in 2021, throughout the entire Sharp Group. In this way, we will accelerate our efforts to effectively resolve global social issues.

Sharp's business philosophy states, "Our future prosperity is directly linked to the prosperity of our customers, dealers, and shareholders…". With this in mind, we will continue working with all stakeholders to provide solutions to social issues through business and mitigate impacts on society and the environment. Doing so will enable us to achieve the SDGs and thereby help realize a sustainable and better world where no one on Earth is left behind.

October, 2022

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[2] The Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board (FSB), an organization promoting international financial stability. In 2017 the TCFD released recommendations for companies to disclose information on the risks and opportunities of climate change.

[3] RBA: Responsible Business Alliance—a nonprofit organization that pursues social responsibility across the global supply chain. The RBA formulated and announced the RBA Code of Conduct.

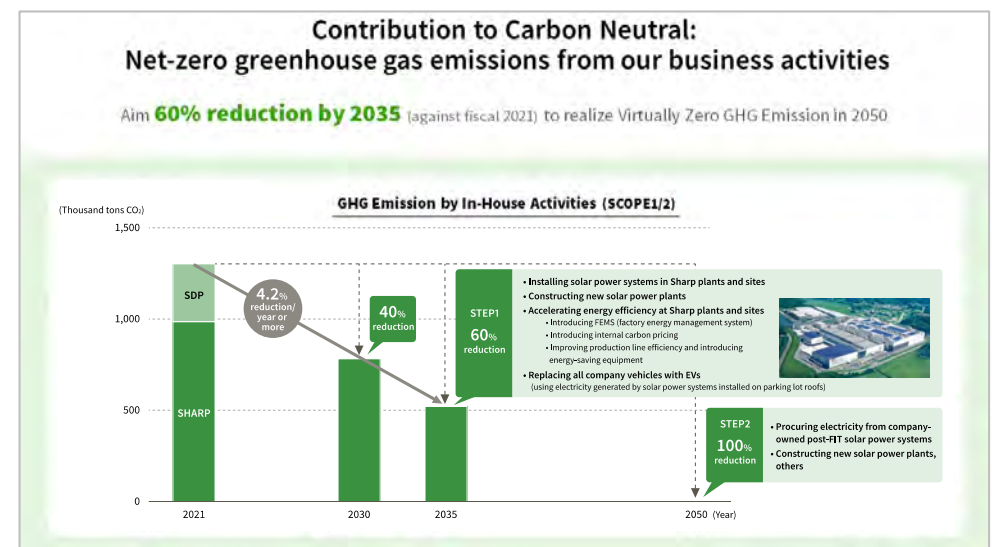# Steps toward Strong Brand Company "SHARP"

Management emphasizing on ESG

1. Further strengthen healthcare related business

Due to the impact of the global pandemic, aging populations, and other issues, people around the world are becoming increasingly concerned about health and hygiene. The Sharp Group has already created numerous home appliances that not only bring convenience to people's lives, but also help them live in a healthier way. Our appliances include Plasmacluster products and the Healsio superheated steam oven. Sharp will continue to promote health by developing unique products and services that improve the quality of air, food, and water.

Along with home appliances, the Sharp Group offers a wide range of other products that play an important part in people's lives, such as TVs, mobile devices, and office equipment. We therefore have many points of contact with our customers. We will further expand these points of contact by creating new devices and collaborating with other companies. We will also build a system that measures people's health data unobtrusively in various settings and provides individualized solutions. This system will promote naturally healthier lifestyles.

2. Contribute to Carbon Neutral - Net-zero greenhouse gas emissions from our business activities -

Realizing a decarbonized society has become one of the most pressing issues facing the global community. In our long-term environmental vision, SHARP Eco Vision 2050—which was formulated in February 2019—we set a target to achieve net-zero greenhouse gas emissions from our business activities by 2050. To achieve our long-term environmental vision, we have also set a new medium-term environmental goal—a 60% reduction* in greenhouse gas emissions by 2035.

Going forward, Sharp will continue to steadily reduce CO_2 emissions by installing solar power systems in our plants and other sites, saving energy, building new solar power plants, and converting the company fleet to electric vehicles (EVs).

Further strengthen healthcare related business (Digital Healthcare)

Contribution to Carbon Neutral: Net-zero greenhouse gas emissions from our business activities

SHARP Sustainability Report 2022

Steps toward Strong Brand Company "SHARP"

Management emphasizing on ESG

2. Contribute to Carbon Neutral – Accelerate the transformation of the energy solutions business -
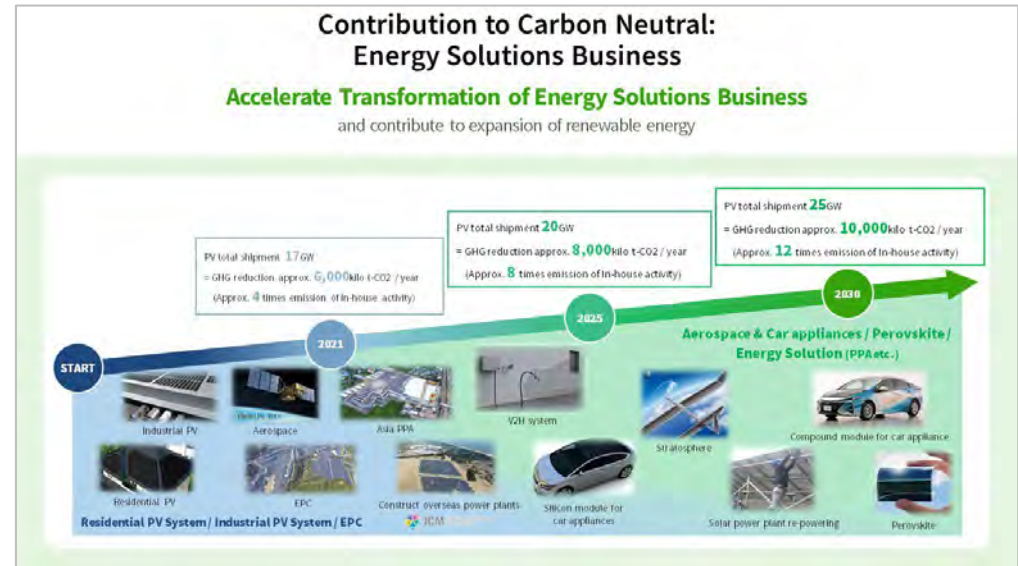
Sharp's achievements in solar power systems begin with the words of founder Tokuji Hayakawa: "If we could find a way of generating electricity from limitless solar heat and light, that would benefit humankind to an extent we can scarcely imagine." In 1959 we succeeded in developing a prototype solar cell, and in 1963 we launched mass production.

Since then, for over 60 years, the Sharp Group has led the growth of the solar power market and contributed to the spread of renewable energy through residential PV systems, industrial PV systems, and solar power plant EPC (engineering, procurement, and construction) projects.

As of 2021, Sharp's cumulative shipments of PV systems equate to 17 GW of power. This translates into annual avoided greenhouse gas emissions of about six million tons-CO_2—or roughly four times the emissions from Sharp's business activities.

In the future, we will shift our business from the previous installation-type systems to systems for use in vehicles or in outer space. We will also expand the PPA (power purchase agreement) business and accelerate the practical application of solar cells made with perovskite, a new material.

Through these efforts, we will further expand our energy solutions business. Our aim is to achieve 12 times more avoided greenhouse gas emissions than the emissions from our business activities, thereby contributing to the decarbonization of society.


Contribution to Carbon Neutral: Energy Solutions Business

Accelerate Transformation of Energy Solutions Business and contribute to expansion of renewable energy

Steps toward Strong Brand Company "SHARP"

Management emphasizing on ESG

3. HITO-based Management

The Sharp Group believes that people ("hito" in Japanese) drive a company's sustainable growth. That is why we are further reforming our HR system to pursue management that gets the best of our people. This reform is based on the four perspectives of HITO: fostering Hybrid individuals with multiple specialties; creating an environment and corporate culture conducive to Innovation; placing the right people in the right jobs to make full use of employee Talent; and providing growth Opportunities for talented individuals.

Specifically, we will improve the performance-based compensation system to encourage young employees and build a system of employee conditions and benefits that will be appealing to future personnel. We will also enhance the system for supporting employee growth, rejuvenate the organization, and speed up decision-making. The aim is to create a youthful and vibrant corporate culture—in other words, be a company where every employee is unafraid of failure and ready to take on bold challenges.
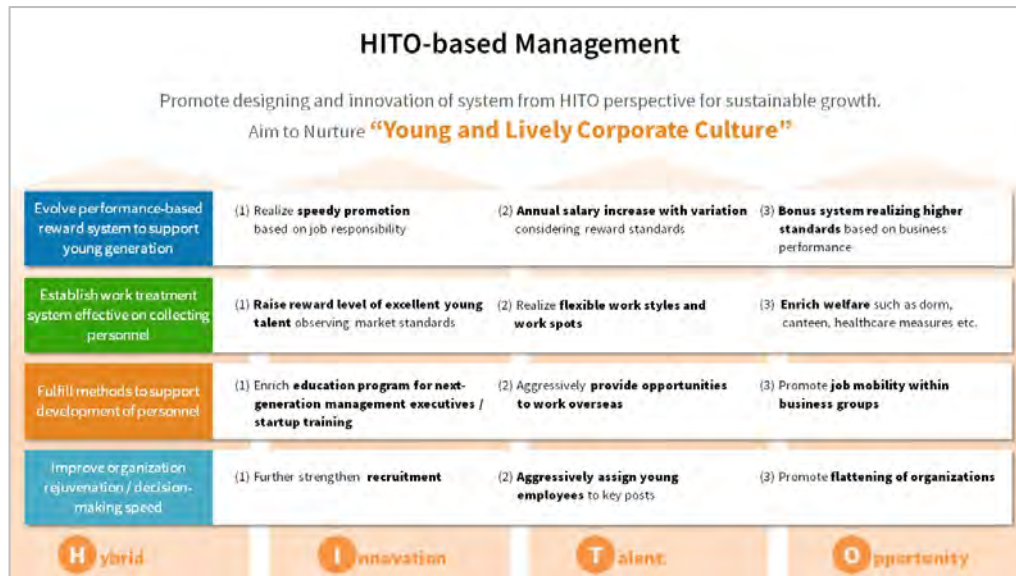
4. True Global Company

The Sharp Group is currently aggressively expanding its overseas business. Our aim is to quickly raise the ratio of overseas sales to 80% (from 67.2% in fiscal 2021). To this end, we will strengthen sales strategies in each overseas region and pursue management reform from a global perspective.

Specifically, we will strengthen the development of—and streamline the management of—overseas personnel, bolster the head office departments' overseas support functions, accelerate alliances and M&A with overseas companies, and improve corporate branding. In addition, we will pursue the simultaneous global rollout of new products incorporating cutting-edge technologies and strengthen the development of products and services catering to the lifestyles of each region. In this way, we will enhance Sharp's presence around the world.

HITO-based Management

Promote designing and innovation of system from HITO perspective for sustainable growth.
Aim to Nurture "Young and Lively Corporate Culture"

True Global Company

Management: Sustainability Management

Basic Policy on Sustainability

It has been Sharp's business philosophy since its founding to "contribute to the culture, benefits and welfare of people throughout the world" and to understand that "our future prosperity is directly linked to the prosperity of our customers, dealers and shareholders." Based on this business philosophy Sharp has continued to meet the expectations and requirements of society and its stakeholders, and these aspirations for sustained mutual growth of the company and society are maintained as Sharp's basic philosophy on sustainability.

Related Information: > Business Philosophy and Business Creed

Participation in International Frameworks and Organizations

As a member of the global community, Sharp conducts business in way that respects international guidelines and norms. Since September 2009, Sharp has been a signatory to the UN Global Compact. In December 2021, we joined the RBA*, an alliance of companies that pursue social responsibility across the global supply chain. We endorse the RBA vision and mission.
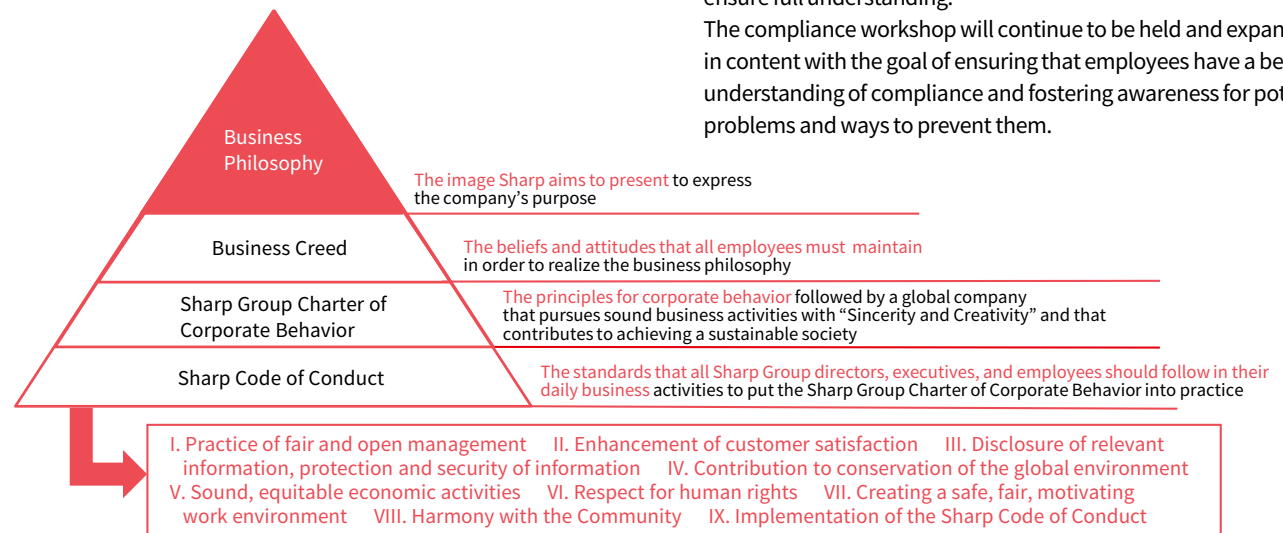
* RBA: Responsible Business Alliance—a nonprofit organization that pursues social responsibility across the global supply chain. The RBA, formerly the Electronic Industry Citizenship Coalition (EICC), has a code of conduct covering the social, environmental, and ethical responsibilities in the global supply chain of its members in the electronics and a wide range of other industries.

Related information: > United Nations Global Compact
Responsible Business Alliance
Sharp Group Charter of Corporate Behavior, Sharp Code of Conduct

Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct

To concretize its business philosophy and business creed, the company has set out the Sharp Group Charter of Corporate Behavior to serve as the principles of behavior for Sharp Group companies, and the Sharp Code of Conduct to serve as a standard for all directors and employees. Sharp works to ensure that these guidelines permeate the Group as fundamental sustainability policies, and that the Group takes appropriate and sincere action in all of its business endeavors with a high ethical standard and full compliance with the law. Resolutions and revisions regarding the adoption of the Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct are issued by the boards of directors of Sharp Corporation and its main subsidiaries and affiliate companies in Japan and overseas. At overseas subsidiaries and affiliates, these documents are translated into local languages so that employees can fully understand and comply with them.

To deepen understanding of the Sharp Code of Conduct and ensure that all executives and employees act in accordance with it, an e-learning compliance workshop based on the Sharp Code of Conduct is held every year. In fiscal 2021, Sharp carried out the Sharp Code of Conduct compliance workshop for eligible employees at Sharp Corporation and affiliate companies in Japan, as well as eligible labor union members. This online workshop saw participation by about 19,800 employees. The training covered a range of areas and how to deal with issues related to them, including conducting business activities in line with the Sharp Code of Conduct, the whistleblowing system, labor and human rights issues such as the prevention of child labor and the protection of student workers and young workers, competition laws, bribery and corruption, personal information protection, compliance with the Act against Unjustifiable Premiums and Misleading Representations, and information security. We also translated our e-learning materials and distributed them to overseas bases to ensure full understanding.

The compliance workshop will continue to be held and expanded in content with the goal of ensuring that employees have a better understanding of compliance and fostering awareness for potential problems and ways to prevent them.

Business Philosophy — The image Sharp aims to present to express the company's purpose

Business Creed — The beliefs and attitudes that all employees must maintain in order to realize the business philosophy

Sharp Group Charter of Corporate Behavior — The principles for corporate behavior followed by a global company that pursues sound business activities with "Sincerity and Creativity" and that contributes to achieving a sustainable society

Sharp Code of Conduct — The standards that all Sharp Group directors, executives, and employees should follow in their daily business activities to put the Sharp Group Charter of Corporate Behavior into practice

I. Practice of fair and open management   II. Enhancement of customer satisfaction   III. Disclosure of relevant information, protection and security of information   IV. Contribution to conservation of the global environment   V. Sound, equitable economic activities   VI. Respect for human rights   VII. Creating a safe, fair, motivating work environment   VIII. Harmony with the Community   IX. Implementation of the Sharp Code of Conduct

Management: Sustainability Management

Sustainability Policy and Implementation System

In line with Sharp's basic philosophy and policy towards sustainability and amidst its efforts spanning a broad scope, Sharp defined the topics considered particularly important in mitigating impacts on society and the environment as its SER (Social and Environmental Responsibility) and formulated its SER Policy in August 2016.

SER Policy

1. **Value the rights of employees and ensure their health and safety.**
2. **Fulfill environmental responsibilities in business activities and manufacturing processes.**
3. **Build and operate an SER management system based on international standards, regulations, and client requests.**

Furthermore, beginning in fiscal 2018, Sharp has positioned its role to contribute to the achievement of the Sustainable Development Goals (SDGs)—adopted by the UN in September 2015 with major expectations placed on corporations—in its medium- to long-term vision, and is moving forward with those efforts.

In fiscal 2020, Sharp accelerated its efforts towards this medium-to long-term vision through a two-pronged approach of creating solutions to social problems through business and technological innovation, and reducing the social and environmental toll of its business activities through actionable SER measures in line with the SER Policy. Sharp is making efforts through a fundamental strategy of proceeding with sustainable management aimed at the achievement of the SDGs.

To execute these policies and manage them in a PDCA cycle, the company launched the Sharp Global SER Committee (SGSC), which is chaired by the president of Sharp and comprises members of top management, Head Office divisions such as environment, personnel, and procurement, business units, and subsidiaries. The SGSC engrains policies and visions into the Sharp Group, discusses crucial measures, and shares the latest trends in social issues.

With the appointment of a new CEO, starting in fiscal 2022 we plan to further strengthen structures and efforts in order to implement "Management Emphasizing on ESG" while maintaining previous policies.

Sharp will continue to step up its efforts in the SDGs and ESG and improve its ESG rating, while at the same time building a solid management foundation to support sustainable growth and contributing to the realization of a sustainable society.

＜**Organization** for Sustainability **Management**＞

As of March 2022
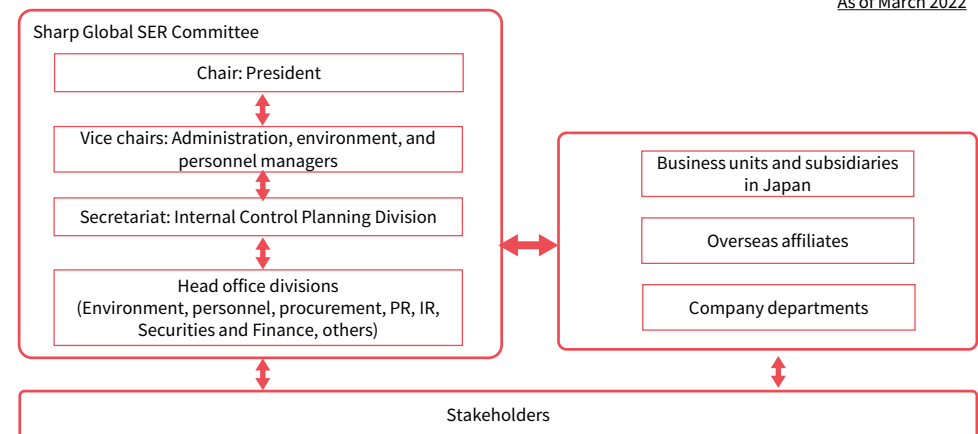
Management: Material Issues

Identifying Material Issues

A spate of international long-term goals that seek solutions for social issues at the global level, such as the Sustainable Development Goals (SDGs) and the Paris Agreement[1], have been announced, and there is a growing interest in human rights issues such as forced labor in global supply chains. As such, expectations continue to grow for companies to put forth an effort to address these goals and issues.

Against this backdrop, Sharp is identifying material issues as they pertain to solving global-level social issues and achieving medium- to long-term growth for the Sharp Group. We are also carrying out initiatives for sustainable management.

In identifying the material issues, the more crucial issues were selected after reviewing management policy, business strategy, the SDGs, and international guidelines and principles such as the UN Global Compact and the RBA[2] vision and mission. We also considered the opinions and expectations of various stakeholders, the effect of Sharp's business activities on those stakeholders, and the results of assessments by ESG research and rating institutions.

The major CSR themes selected were mapped along the two axes of "importance to society (level of stakeholder expectations)" and "level of importance to the Sharp Group." Sharp prioritized the following four themes under the new CEO's policy of ESG-focused management: 1. Further strengthen healthcare-related business; 2. Contribute to carbon neutrality; 3. Pursue HITO-based management; and 4. Become a truly global company.

[1] An international framework for the prevention of global warming agreed on at the 21st yearly session of the Conference of the Parties to the 1992 United Nations Framework Convention on Climate Change (COP21), held in Paris in 2015. The agreement was to hold the increase in the global average temperature to well below 2℃ above pre-industrial levels.
[2] RBA: Responsible Business Alliance—a nonprofit organization that pursues social responsibility across the global supply chain. The RBA, formerly the Electronic Industry Citizenship Coalition (EICC), has a code of conduct covering the social, environmental, and ethical responsibilities in the global supply chain of its members in the electronics and a wide range of other industries.

Related information: > United Nations Global Compact

Management policy, business
• Business Philosophy, Business Creed
• "Be Original." corporate motto   • Business vision
• Medium-Term Management Plan, others

International guidelines and principles
• UN Global Compact (signed in June 2009)   • SDGs
• RBA[2] vision and mission (joined the RBA in December 2021)
• ISO 26000   • Universal Declaration of Human Rights
• United Nations Guiding Principles on Business and Human Rights
• OECD Guidelines for Multinational Enterprises, OECD Due Diligence Guidance for Responsible Business Conduct
• Other industry codes of conduct, others

Stakeholder expectations
• Stakeholder feedback/opinions gained through dialogue
• Evaluating the effects of business activities on stakeholders
• Survey results by ESG institutions, others

Identify material issues

Level of stakeholder expectations — High

Level of importance to the Sharp Group — High

Management Emphasizing on ESG

1. Further strengthen healthcare-related business (digital healthcare)

Measure health data unconsciously and provide solutions optimized for each person in order to realize a self-directing living toward health

2. Contribute to Carbon Neutral

• Aim 60% reduction by 2035 (against fiscal 2021) to realize Virtually Zero GHG Emission in 2050
• Accelerate Transformation of Energy Solutions Business and contribute to expansion of renewable energy

3. HITO-based Management

Promote designing and innovation of system from HITO* perspective for sustainable growth. Aim to Nurture "Young and Lively Corporate Culture."
*H: hybrid; I: innovation; T: talent; O: opportunity

4. True Global Company

Aim to become a truly global company in the areas of personnel, organization/function, and products/services

Management: Material Issues

Monitoring Material Issues

Themes related to Management Emphasizing on ESG that emerge through the process of identifying material issues are translated into actionable policies that are specific and measurable. These policies are then monitored in regular reports to the CEO and through other methods. Some themes emerge from the search for solutions to social issues through business and technological innovation. Other themes emerge from the effort to reduce the social and environmental impact of Sharp's business activities. These are the basic strategies of sustainable management. Based on the identified themes, each Sharp business unit and subsidiary has set targets toward achieving the SDGs.

When it comes to solutions to social issues through business and technological innovation, from fiscal 2020 each business unit and subsidiary has set a medium- to-long-term vision[1] for contributing to the achievement of the SDGs. Progress on this vision is reported and confirmed.

For the reduction of the social and environmental impact of Sharp's business activities, each year Sharp formulates company-wide SER priority policy guidelines. Each business unit and subsidiary selects priority measures that are crucial to their operations, sets SER measures (including goals, KPIs, scope, and action plans), makes efforts to achieve them, and conducts self-assessments every six months.

The Sharp Global SER Committee performs ongoing follow-ups on the progress of implementation of the medium- to long-term vision and SER measures for each business unit and subsidiary. Company-wide progress is shared and evaluated. The fiscal 2021 SER measures progressed largely as planned in all business units and subsidiaries. However, the topics with remaining issues and the measures to be taken for improvement are being reviewed.

Strengthening fundamental governance is the basis for all corporate activities. Progress on each topic is reported at company-wide meetings and elsewhere. The responsible division for each topic sets and pushes forward with annual goals. These goals and achievements are disclosed on the relevant pages of the "Governance" section[3] of the Sharp Sustainability Report.

Solutions to social issues through business and technological innovation

Reducing the social and environmental impact of Sharp's business activities

Labor and human rights
- Ensuring the health and safety of employees
- Respect for human rights

Environment

Efforts towards SHARP Eco Vision 2050 long-term environmental vision[2]
- Climate change (achieving a carbon-free society)
- Resource recycling (achieving a circular economy)
- Safety and security (thorough management of chemicals)

Supply chain management
- ESG risk management across the supply chain
- Responsible mineral procurement

Strengthening fundamental governance

Corporate governance, risk management, compliance, information security, others

■ Fiscal 2022 Company-Wide SER Priority Policy Guidelines

SER Measures	Scope	Related SDGs
Reduce greenhouse gas emissions associated with business activities	All Sharp sites	
Suppress greenhouse gas emissions associated with product use (Make products more energy-efficient)	Product-related business units	
Reduce and recycle waste	All Sharp sites	
Reduce the use of plastic and expand the use of recycled and biomass materials	All business units and affiliates	
Observe chemical substance regulations and properly manage chemicals	All business units	
Reduce SER-related risks at Sharp factories in and outside Japan	Production sites in Japan and consolidated production subsidiaries in and outside Japan	
Reduce ESG-related risks across the supply chain	All business units and suppliers of consolidated production subsidiaries in Japan	

Management: Material Issues

Risk Evaluation in Line with International Standards

Sharp believes that to ensure global business expansion is accompanied by the creation of a sustainable society, it is extremely important to conform to international standards.

Since fiscal 2015, the Sharp Group has been using the Sharp Supply-Chain CSR Deployment Guidebook, which was created in line with the RBA* Code of Conduct (an international standard), as the guideline for its activities. It has been carrying out ongoing self-assessment surveys of Sharp production sites in Japan and overseas.

These surveys are carried out based on the RBA's Self-Assessment Questionnaire and serve as a review and assessment of the status of activities at Sharp's production sites. Sharp uses the survey as a means of facilitating better understanding of international CSR standards among local managers.

In fiscal 2021, the survey was carried out at 28 plants in Japan and overseas. This time, in line with Sharp becoming an official member of the RBA, Sharp used the RBA-Online data management system, which allows input of the survey responses online. Following the survey, each plant was given an overall and area-specific evaluation on a scale of low to moderate to high risk, based on RBA criteria. Feedback is then provided to each site.

Survey responses from the bases are reviewed by head office functional divisions. If it is determined that a base's efforts are inadequate or latent risks exist, the base in question is interviewed and provided with guidance for undertaking necessary improvement activities.

As a result, the average score for all factories in fiscal 2021 was 90.6, showing continued generally favorable assessments.

The fiscal 2021 survey revealed low scores in some areas for new factories where a finalized management system had yet to be set up. However, Sharp has been in communication with these sites to help them implement improvement measures.

Sites that got a "low risk" overall evaluation score comprised 93% of the total. No problems have been identified that pose an immediate, large CSR risk for the Sharp Group as a whole.
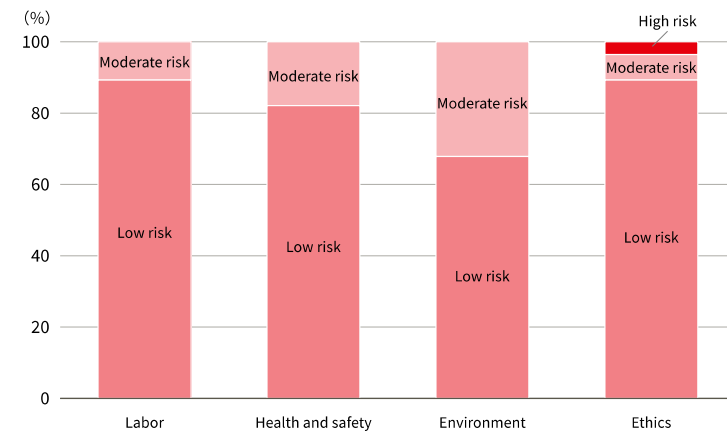
Surveys will again be conducted in fiscal 2022. Sharp will use the RBA's risk assessment mechanism to keep improving activities.

* RBA: Responsible Business Alliance—a nonprofit organization that pursues social responsibility across the global supply chain. The RBA, formerly the Electronic Industry Citizenship Coalition (EICC), has a code of conduct covering the social, environmental, and ethical responsibilities in the global supply chain of its members in the electronics and a wide range of other industries.

■ **Overall Assessment Ranking Ratio**

Moderate risk
7%
Low risk 93%
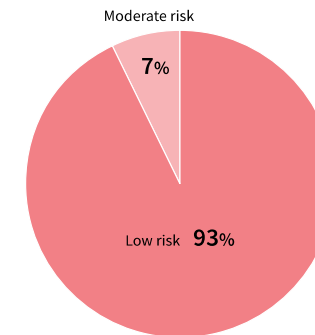
■ **Area-Specific Assessment Ranking Distribution**

(%)

High risk

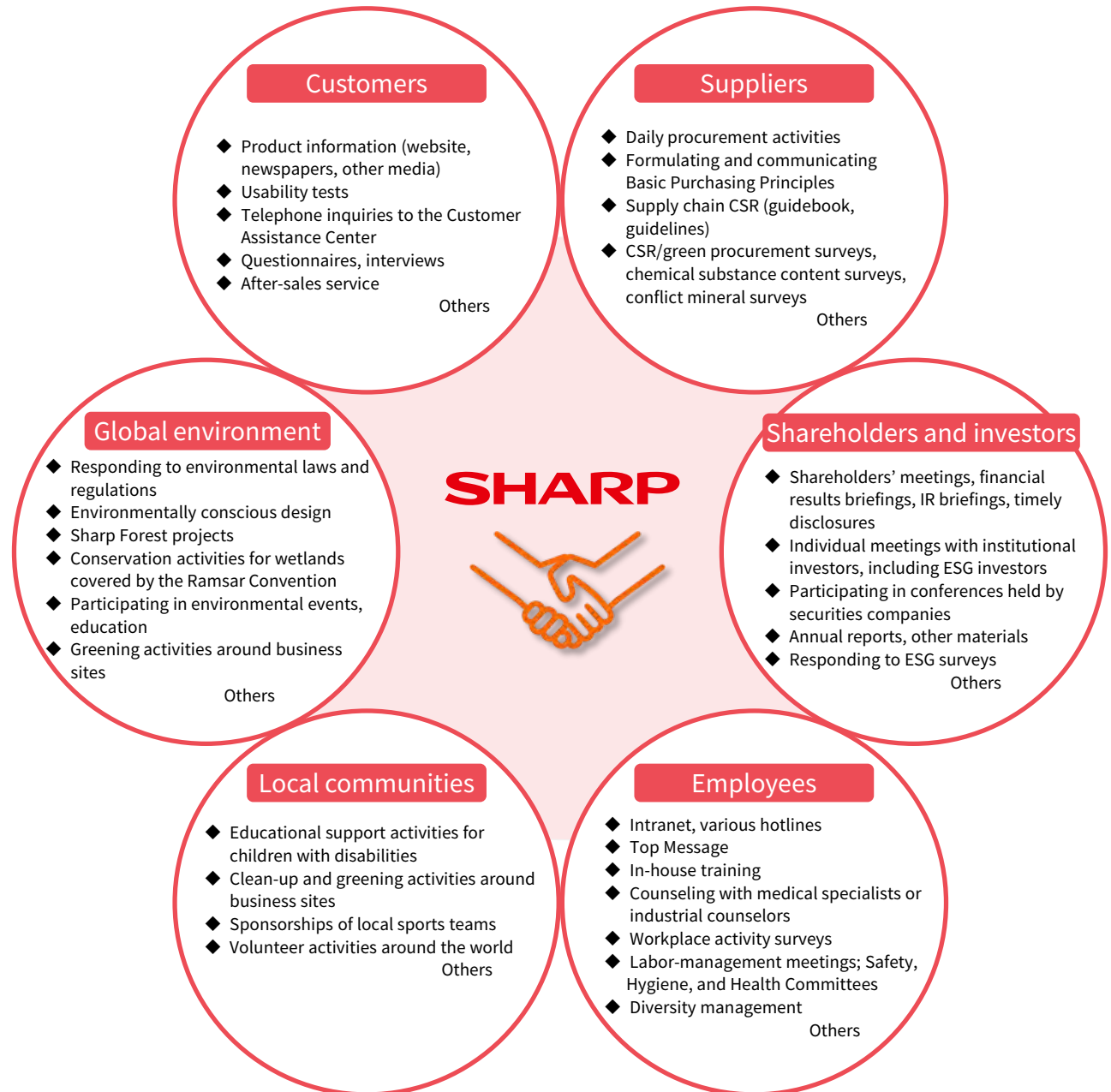|	Labor	Health and safety	Environment	Ethics
Moderate risk	Moderate risk	Moderate risk	Moderate risk	Moderate risk
Low risk	Low risk	Low risk	Low risk	Low risk

Management: Stakeholder Engagement

Stakeholder Engagement

In order to ensure that, "Our future prosperity is directly linked to the prosperity of our customers, dealers and shareholders," as stated in the company's Business Philosophy, Sharp suitably discloses information to the diversity of stakeholders that it serves, including customers, suppliers, and local communities. Also, amidst the increasing focus on ESG-related investment, Sharp seeks dialogue with shareholders and investors and opens various other channels of communication to verify that it is responding to their needs and expectations. Sharp then applies the feedback it receives to its corporate activities and, thereby, contribute where it can to addressing social issues. Sharp will continue to incorporate the voices of its stakeholders in making further improvements to its corporate activities.

Customers

◆ Product information (website, newspapers, other media)
◆ Usability tests
◆ Telephone inquiries to the Customer Assistance Center
◆ Questionnaires, interviews
◆ After-sales service

Others

Suppliers

◆ Daily procurement activities
◆ Formulating and communicating Basic Purchasing Principles
◆ Supply chain CSR (guidebook, guidelines)
◆ CSR/green procurement surveys, chemical substance content surveys, conflict mineral surveys

Others

Global environment

◆ Responding to environmental laws and regulations
◆ Environmentally conscious design
◆ Sharp Forest projects
◆ Conservation activities for wetlands covered by the Ramsar Convention
◆ Participating in environmental events, education
◆ Greening activities around business sites

Others

Shareholders and investors

◆ Shareholders' meetings, financial results briefings, IR briefings, timely disclosures
◆ Individual meetings with institutional investors, including ESG investors
◆ Participating in conferences held by securities companies
◆ Annual reports, other materials
◆ Responding to ESG surveys

Others

Local communities

◆ Educational support activities for children with disabilities
◆ Clean-up and greening activities around business sites
◆ Sponsorships of local sports teams
◆ Volunteer activities around the world

Others

Employees

◆ Intranet, various hotlines
◆ Top Message
◆ In-house training
◆ Counseling with medical specialists or industrial counselors
◆ Workplace activity surveys
◆ Labor-management meetings; Safety, Hygiene, and Health Committees
◆ Diversity management

Others

SHARP

SHARP and the SDGs

Sharp and the SDGs: Business Philosophy and the SDGs

In 1973, Sharp put into writing its business philosophy, which says the company will "contribute to the culture, benefits and welfare of people throughout the world" and that "our future prosperity is directly linked to the prosperity of our customers, dealers and shareholders." These and other vows of the business philosophy share the aims of the Sustainable Development Goals (SDGs), which the UN enacted in 2015.

Through its business philosophy, Sharp aims to contribute to the achievement of the SDGs both by providing solutions to social issues through its business and by reducing burdens on society and the environment through SER* measures, thus helping realize a better, more sustainable world in which no one on our Earth is left behind.

* SER: Social and environmental responsibility; see page 12.

Business Philosophy

We do not seek merely to expand our business volume. Rather, we are dedicated to the use of our unique, innovative technology to contribute to the culture, benefits and welfare of people throughout the world.

It is the intention of our corporation to grow hand-in-hand with our employees, encouraging and aiding them to reach their full potential and improve their standard of living.

Our future prosperity is directly linked to the prosperity of our customers, dealers and shareholders ...indeed, the entire Sharp family.
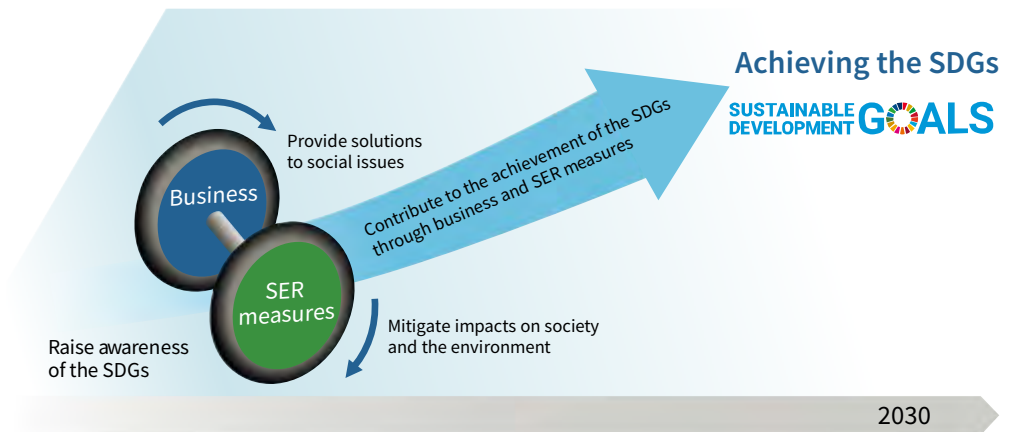
Sharp and the SDGs: Eight Priority Business Areas Focused on Addressing Social Issues

EDUCATION **ENTER-TAINMENT** **HEALTH-CARE** **INDUSTRY** **MOBILITY** **SECURITY** **SMART HOME** **SMART OFFICE**
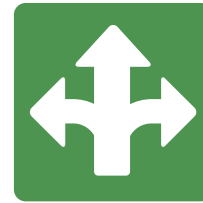
Changing the World with 8K+5G and AIoT

In line with its business vision of "Changing the world with 8K+5G and AIoT*," Sharp has worked to create an 8K+5G ecosystem, develop 5G-related business, expand its COCORO LIFE services, and strengthen its cloud services in order to move beyond business that revolves solely around hardware and devices and towards more innovative systems and solutions-focused business integrating hardware, software, and services. The aim of this business innovation is to offer the world new value as "One Sharp," which helps to address the issues facing the international community.

Each business unit and affiliated company is working to bolster Sharp's efforts not only in those business areas where it is already successfully established, namely smart homes, entertainment, and smart offices, but also in healthcare, education, security, industry, and mobility-related areas. In each of these areas, Sharp's business units and affiliated companies seek to balance business expansion with addressing social issues in such a way that will contribute to the achievement of the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015.

*AIoT is a word coined by Sharp, combining the words AI (artificial intelligence) and IoT (Internet of things). AIoT is a vision of how products and services will connect to artificial intelligence via the cloud and become a people-oriented existence.
 AIoT is a registered trademark of Sharp.

Sharp and the SDGs: Contributing to the SDGs through Business

	Business Unit / Subsidiaries*	Related SDGs
Brand Businesses — Smart Life	Smart Appliances & Solutions BU	3, 4, 6, 8, 9, 12, 13
	Sharp Energy Solutions Corporation (SESJ)	7, 11, 12, 13
	Corporate Research & Development BU	3, 4, 7, 8, 9, 11, 13
Brand Businesses — 8K Ecosystem	Smart Business Solutions BU	4, 7, 8, 9, 10, 12, 13, 16, 17
	Smart Display Systems BU and Global Brand-Products BU	3, 9, 11, 13
Brand Businesses — ICT	Mobile Communication BU	3, 4, 8, 9, 10, 12, 13
	Dynabook Inc.	3, 4, 7, 8, 9, 11, 12
Device Businesses — Display Devices	Sharp Display Technology Corporation	3, 4, 7, 9, 11
Device Businesses — Electronic Devices	Sharp Sensing Technology Corporation	4, 8, 9
	Sharp Fukuyama Laser Co., Ltd. (SFL)	4, 9, 11, 12, 13, 14
	Sharp Semiconductor Innovation Corporation	3, 7, 8, 9, 11, 12, 13

* Company name is current as of September 30, 2022

SHARP Sustainability Report 2022

< Smart Life >   Smart Appliances & Solutions BU

Offering support through AIoT[*1] for a safe, healthy, and comfortable lifestyle.
Yielding a smart life for the near future through people-oriented AIoT.

ENTER-TAINMENT   HEALTH-CARE   SMART HOME
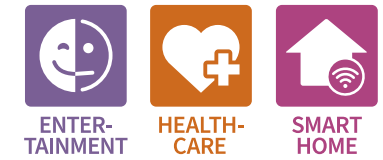
【Target Social Issues】

- Increasing health awareness
- Concern about the air environment
- Work-life balance
- Consideration for the environment
- Climate change mitigation
- Quality education

【SDGs We Aim to Contribute through Our Business】

3 GOOD HEALTH AND WELL-BEING | 4 QUALITY EDUCATION | 6 CLEAN WATER AND SANITATION | 8 DECENT WORK AND ECONOMIC GROWTH | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION

【Activity Status】

In our aim to help create a healthy and comfortable life, the Smart Appliances & Solutions BU supplies end consumers and B2B customers globally with a variety of appliances, such as air conditioners, refrigerators, washing machines, microwave ovens, and air purifiers.

We offer users a safe, healthy, and comfortable lifestyle in a variety of ways by applying AIoT to conventional household appliances to match lifestyles and preferences, such as proposing healthful food recipes, ensuring safe and comfortable indoor air environments, and helping make work more rewarding by reducing household chores. We also strive to realize smart homes that integrate AIoT and storage batteries that further the use of renewable energy. Further, we carry out ongoing eco-friendly practices at the development stage, such as the development of low-power-consumption technology, low-resource-use design, the active use of recycled plastics using our closed-loop material recycling technology[*2], in which products are recovered and their plastics are 100% recycled and reused multiple times in making new home appliances, and the development and sale of water-saving, hole-less tub washing machines. In the production stage, we establish numerical objectives for each factory and work to achieve them in an effort to reduce the consumption of electricity and gas by the factories and reduce the volume of waste produced.

Our electronic dictionaries contribute to goal 4 (quality education) of the SDGs.

【Major SDG Contribution Examples】

- Ongoing development of AIoT-compatible models
  - Japan: In fiscal 2021, we developed 119 AIoT-compatible models. They include the Stock Assist inventory control device, which helps smartphone owners in managing their inventory of food, daily necessities, and other goods, and the Plasmacluster air conditioner, which uses a dedicated app that sets the air conditioner and air purifier installation locations so that coordinated control of air volume and direction is achieved, thus providing optimal airflow for increased virus droplet capture.
  - Overseas: We are updating and expanding the range of services we offer that are tailored to the needs of overseas markets, including ASEAN, Taiwan, and North America.
- Increasing cloud connectivity of AIoT home appliances
  - The connection rate as of June 30, 2022 was just over 33%. In order to help increase connectivity, we are expanding and improving our recipe browsing and downloading service, which operates in conjunction with Sapporo Holdings Limited's Uchirepi recipe app.

Stock Assist
(underneath the eggs; trial sales)

Built-in drawer-type microwave oven, an AIoT-connected cooking appliance for the US

【Awards and Honors】

- ECCJ Chairman's Prize at 2021 Energy Conservation Grand Prize for narrow-depth, large-capacity Plasmacluster refrigerator

[*1] AIoT is a word coined by Sharp, combining the words AI (artificial intelligence) and IoT (Internet of things). Sharp is pursuing a more people-oriented world through AIoT-driven devices and services.
[*2] See page 49.

< Smart Life > Sharp Energy Solutions Corporation (SESJ)

Providing eco-friendly, energy-producing solar power systems to countries around the world to help solve the pressing energy challenges we face. Making life easier with energy solutions (systems and services) that make smarter use of electricity.

INDUSTRY **SMART HOME**

【Target Social Issues】

- Resolution of energy issues
- Climate change mitigation
- Consideration for the environment
- Developing proper disposal and recycling mechanisms

【SDGs We Aim to Contribute through Our Business】

7 AFFORDABLE AND CLEAN ENERGY | 11 SUSTAINABLE CITIES AND COMMUNITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION

【Activity Status】

Sharp's history of achievements in solar power systems goes back more than six decades to 1959, beginning with the words of founder Tokuji Hayakawa: "If we could find a way of generating electricity from limitless solar heat and light, that would benefit humankind to an extent we can scarcely imagine."

SESJ has kept to these words and continues to work consistently from development to sales, installation, and after-sales service in its domestic and overseas energy solutions business to contribute to achieving the SDGs.

Specifically, the expansion of installations of solar power systems on rooftops of housing and factories and mega-solar projects help us achieve goals 7 (affordable and clean energy) and 13 (climate action) of the SDGs.

In an aim to promote the use of sustainable renewable energy sources, we also develop smart homes that integrate with people-oriented IoT home appliances. We are also creating new solutions, like self-consumption systems that smartly link solar power systems with storage batteries. These help us achieve goals 11 (sustainable cities and communities) and 12 (responsible consumption and production) of the SDGs.

【Major SDG Contribution Examples】

- Release of four models of BLACKSOLAR ZERO residential solar cell modules
  The flagship model, with its black design, has an appearance that beautifully harmonizes with roofs and provides high output capacity.

- On-site PPA[1] solar power system for large-scale commercial facility
  A 1.5 MW power generation system constructed as a joint venture in the city of Natori, Miyagi Prefecture, and representing a first step for the on-site PPA model, began operation on October 15, 2021. It is expected to generate around 1,388 MWh annually, thereby reducing greenhouse gas emissions by about 715 tons CO_2 per year.

(Joint venture with TEPCO Ventures, Inc. and Mitsubishi UFJ Trust and Banking Corporation. Installed at the Home Center Musashi store in Natori run by Arcland Sakamoto Co., Ltd.)

Solar power system installed at the Home Center Musashi store in Natori

- COCORO POWER[2] flat-rate PPA service launched for new homes
- Major Thai tire manufacturer orders installation of large-scale rooftop solar power system[3] for its factory

【Awards and Honors】

- 2021 Good Design Award for BLACKSOLAR ZERO and Roofit layout

[1] Power Purchase Agreement model.
[2] See page 44.
[3] See page 43.

Conceptual image of BLACKSOLAR ZERO and Roofit installation

< Smart Life >　Corporate Research & Development BU[1]

By using society-changing, proprietary, world-first, and world's-best technology to build entirely new ecosystems and create and expand new businesses, we are contributing to a sustainable society.

HEALTH-CARE　INDUSTRY　SMART HOME　SMART OFFICE

【Target Social Issues】
- Accelerating the social implementation of digital healthcare technologies
- Encouraging social adoption of IoT using next-generation communications infrastructure
- Promoting DX (digital transformation) in industry
- Realizing carbon neutrality

【SDGs We Aim to Contribute through Our Business】

【Activity Status】

In addition to the 8K+5G Ecosystem and AIoT World, the Corporate Research & Development BU, which serves as Sharp's corporate R&D department, is pursuing the creation of digital healthcare solutions, carbon-neutral technologies, and infrastructure DX solutions by combining the proprietary technologies for digital healthcare and green DX with key devices that support Sharp's unique products.

- **Initiatives in digital healthcare**
  By developing devices with bio-sensing functionality and creating solutions that can monitor people's state of health, Sharp is working to develop vital sign detection algorithms that can be used in health management based on sensed data.
- **Initiatives in infrastructure DX solutions**
  Utilizing 8K+5G technologies, Sharp provides automatic inspection DX solutions and infrastructure maintenance and inspection solutions using high-definition image detection technology for the construction and civil engineering fields. We also contribute to the resolution of social issues with DX solutions in a range of industries.
- **Initiatives in next-generation communications technologies**
  Sharp holds a total of more than 6,000 patents in more than 50 countries. These patents play an essential role in communications standards including 5G, and Sharp is using them to develop a licensing business. Going forward, as part of the Beyond 5G initiative, we will work actively to develop new technologies for next-generation communications in an effort to realize a fusion of the cyber and physical domains characterized by faster speeds, shorter delays, and increased communications capacity.

[1] Company name is current as of September 30, 2022.
[2] As of June 2022. Based on findings from a third-party institute.
[3] Gallium nitride: A material that is attracting attention as a next-generation semiconductor with high conversion efficiency thanks to electrical and physical properties that are superior to those of silicon, the material that is traditionally used in such applications.

【Major SDG Contribution Examples】
- Contact and non-contact vital sensing solutions
  Sharp is developing systems that combine bio-sensors with vital sign detection algorithms in order to make it possible to measure health data in everyday life without users being aware of the fact they're being measured.
- TEKIjuN, a material that can regulate humidity in closed spaces
  Sharp is applying TEKIjuN in a range of areas, including managing humidity and preventing condensation in residential spaces and reducing food and material wastage.
- Contributing to carbon neutrality by reducing server power use
  Sharp is developing high-efficiency server power supplies that minimize power loss.
- Accelerating the DX solution business for industry
  Sharp is putting into practical use a real-time automatic rebar arrangement inspection system, a sewerage inspection support system, and drone inspection solutions. We are also trialing remote monitoring at construction sites and expanding applications of 8K video transmission.
- Licensing patents that are essential to 5G standards
  Sharp holds 1,708 patent families under the licensing declaration for 5G wireless communication standards (ranked first in Japan, 11th in the world[2]) as we strengthen our licensing business.

Contactless vital sensing　　TEKIjuN beads and sheets　　Real-time automatic rebar arrangement inspection system

【Awards and Honors】
- A total of six awards for the real-time automatic rebar arrangement inspection system, including the Minister of Land, Infrastructure, Transport and Tourism Award at the 4th Japan Open Innovation Prize and a prize at the 23rd National Land Technology Development Awards
- Chairman's Prize for Outstanding Enterprises, the most prestigious award of the Fiscal 2021 NEDO Energy-saving Technology Development Awards , for a high-efficiency server power supply that uses GaN[3] power devices

< 8K Ecosystem >   Smart Business Solutions BU

By strengthening B2B solution proposals built on the customer's perspective, we are contributing to the resolution of business and social issues by providing safe, secure environments that let people concentrate on their jobs no matter when or where they are.

INDUSTRY SECURITY SMART OFFICE

【Target Social Issues】

- Environmentally friendly products
- Reduction of environmental impacts
- Reduction of greenhouse gas emissions
- Changing workstyles
- Aging of the population and labor shortages
- Rapidly rising distribution volume

- Prevention of environmental pollution
- Prevention of resource scarcity
- Compliance with legal requirements
- Environmental and community service activities

【SDGs We Aim to Contribute through Our Business】

4 QUALITY EDUCATION | 7 AFFORDABLE AND CLEAN ENERGY | 8 DECENT WORK AND ECONOMIC GROWTH | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 10 REDUCED INEQUALITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION | 16 PEACE, JUSTICE AND STRONG INSTITUTIONS | 17 PARTNERSHIPS FOR THE GOALS
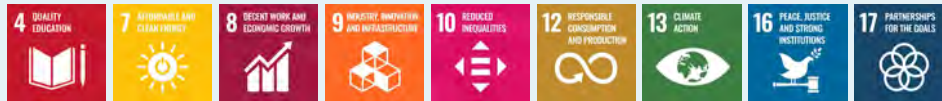
【Activity Status】

As changes in the social environment drive demand for a variety of reforms in the workplace, the Smart Business Solutions BU has worked to solve a variety of issues facing customers and society by fostering business transformations through eight solutions that combine technologies, products, and services. Going forward, we will continue to contribute to the resolution of social issues by providing unique products, services, and solutions based on Sharp's business creed of "Sincerity and Creativity" and the SDGs policies described below as we strive to realize a sustainable society.

We will contribute to the resolution of business and social issues by realizing three Xs (transformations) through eight solution domains.

DX
DIGITAL TRANSFORMATION

UX
USER EXPERIENCE

GX
GREEN TRANSFORMATION

Eight solution domains for resolving issues
(1) Smart offices/IT services   (2) Environment   (3) Public   (4) Digital imaging
(5) Security   (6) Retail   (7) Smart factories   (8) Logistics

【Major SDG Contribution Examples】

Sharp continues to develop technologies for reducing environmental impacts. We are working to reduce TEC values* with the low-melting-point Mycrostoner and low-temperature fusing technology. In addition, we have enhanced the controller control technology on the latest MFP (multi-function printer) model, the BP-70C26 series, to realize power consumption of 0.3 W during network standby, significantly improving the TEC value compared to the 2018 model and reducing greenhouse gas emissions. Reflecting efforts such as remanufacturing consumables and reducing waste by extending the service life of maintenance parts, we have earned a variety of environmental certification labels through compliance with environmental regulations and standards in countries worldwide.

In 2022, Sharp marked the 50th anniversary of its document business. Going forward, we will continue environmentally friendly product development throughout the product life cycle.

* TEC: typical electricity consumption . TEC values are derived using measurement methods defined by the international ENERGY STAR program version 3.0 requirements.

BP-70C26/60C26/40C26

COCORO OFFICE

ENERGY STAR

グリーン購入法 適合商品

TEC value* (power consumption)

kWh/week

0.40	
0.30	
0.20	
0.10	
0.00	

0.40 kWh/week — MX-2661 2018 model

0.28 kWh/week — BP-70C26 2021 model

TEC value: Reduced by about 30%

Reducing greenhouse gas emissions
- **Developing low-temperature fusing technology**
  Mycrostoner series
  New low-temperature fusing system
- **Network standby power consumption of 0.3 W**
  New controller control

Resource conservation and recycling
- **Longer service life for maintenance parts**
- **Remanufacturing of consumables**

< 8K Ecosystem > Smart Display Systems BU and Global Brand-Products BU

Establish an 8K+5G Ecosystem and AIoT World through the development and expanded sales of AV products and pursue ESG initiatives to propose more convenient and comfortable lifestyles.

EDUCATION | **ENTER-TAINMENT** | **INDUSTRY** | **SMART HOME** | **SMART OFFICE**

【Target Social Issues】

- Measures to prevent infectious disease, including new viruses
- Rising healthy life expectancy
- Aging society and shrinking population
- Climate change mitigation
- Work-style reforms
- Consideration for the environment

【SDGs We Aim to Contribute through Our Business】

3 GOOD HEALTH AND WELL-BEING | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 11 SUSTAINABLE CITIES AND COMMUNITIES | 13 CLIMATE ACTION

【Activity Status】

The Smart Display Systems BU is expanding the potential of AV devices, including by pioneering the development and introduction of uniquely featured products, for example LCD TVs and 1-bit audio devices, and by releasing the world's first[1] TV with a built-in 8K tuner.
In fiscal 2021, we released the AQUOS XLED, which incorporated a mini LED backlight and quantum dot color filter to deliver higher brightness, higher contrast, and a wider color gamut than previous models by combining the best features of LCD and OLED TVs.
In addition, we are working to develop products that accommodate the demands of the current extended pandemic and accompanying new normal and to propose how they can be used, including:

- Enriching time spent at home:
  Android TVs capable of accessing numerous video-on-demand (VOD) services
- Supporting remote work:
  Sound Partner, a product that can be used for extended periods of time as a pair of microphone-equipped headphones that do not block the ears
- Preventing infection:
  A microphone-equipped speaker system for use in reception work to aid workers' ability to communicate smoothly across a partition

In addition to resolving social issues by pursing the potential of AV devices that connect directly to the senses of sight and hearing, which among the five senses encounter the most information, we will provide solutions for more convenient, comfortable lifestyles.

[1] For TVs capable of receiving 8K BS broadcasts, which first became available in Japan in December 2018.

【Major SDG Contribution Examples】

- Equipping large-screen TVs with games designed to train users' cognitive functions[2]
  These games let viewers train their cognitive functions while having fun using the TV's large screen and simple remote control operations, for example by memorizing card patterns or trying to stop a stopwatch precisely at a specified number of seconds.

Onscreen image ("Today's game") | Stopping the indicator at the specified number of seconds in "Stopwatch" | Memorizing card patterns in "Card Memory"

[2] Developed by customizing CogEvo, a series of cognitive function training activities provided by Total Brain Care Co. Ltd., for use with COCORO VISION.

【Awards and Honors】

- 3rd Japan Child Care Advocate Grand Prize 2022[3] for Sound Partner
  Households with children had high praise for the ability to hear a child calling or crying while enjoying music or TV with Sound Partner, which doesn't block the ears.

AN-SS2 Sound Partner

【Evaluation criteria】
① Safety and peace of mind
② Convenience, workload reduction, advice
③ Child growth
④ Parent-child communication
⑤ Comfort (in realizing an enjoyable child care experience)

[3] Organized by the Japan Child & Family-Support Association to recognize products and services that are beneficial for child care.

＜ICT＞　Mobile Communication BU

Using communication technology to build a society where everyone has an equal opportunity to find decent quality of life, work, and education.

EDUCATION　　**HEALTH-CARE**　　**SMART HOME**　　**SMART OFFICE**
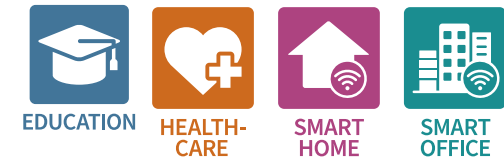
【Target Social Issues】

- Equal education, working environment
- Remote, non-contact
- Low birthrate and aging population, diminishing workforce
- Environmental challenges
- Health challenges

【SDGs We Aim to Contribute through Our Business】

3 GOOD HEALTH AND WELL-BEING | 4 QUALITY EDUCATION | 8 DECENT WORK AND ECONOMIC GROWTH | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 10 REDUCED INEQUALITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION

【Activity Status】

The Mobile Communication BU aspires to be a business unit that leverages communication technology to keep on producing new value. By developing diverse networked devices like smartphones and creating solutions, we provide products and services that inspire people to live more joyful lives.

Modern society is facing a variety of challenges and changes: a diminishing workforce due to low birthrates and an aging population, diversifying work styles to accommodate birth, childcare, and family care needs, and a changing social environment brought on by the pandemic. These are facilitating ongoing work style reforms made possible by telecommuting, remote and non-contact solutions, and the growth of DX. On the education front, Japan is moving toward greater ICT utilization, as exemplified by the GIGA School Program. In addition, as the population grows increasingly older, there is also heightened interest in healthy life expectancy.

At the same time, however, environmental efforts related to global warming, carbon neutrality, plastic waste reduction, and other challenges are beginning to pick up speed worldwide.

In the Mobile Communication BU, we will continue to apply the technology and know-how our business has cultivated over the years to pursue new developments in communication networks, such as 5G, so that we can continue to provide products and solutions that help address these social and environmental challenges.

【Major SDG Contribution Examples】

- Release of Dynabook Chromebook C1 Wi-Fi model
  We added a Wi-Fi model to our built-in LTE model and released it for sale to education institutions.
- Release of Medical Listening Plug in-the-ear hearing aid
  Helps in the realization of an "ageless society" by giving users better hearing for longer.
- Release of the Inforia for Hotel in-room information service
  Facilitates non-contact/non-face-to-face customer reception and better operational efficiency.
- Release of "home 5G" router through NTT Docomo
  With simple installation that requires only a power outlet to plug it into, this router turns users' homes into an ultra-high-speed Wi-Fi environment convenient for telework and online learning.
- Release of AQUOS "wish" series of 5G smartphones
  The casing is 35% recycled plastic. This environmental-mindedness extends to the slim packaging that cuts down on paper usage.

Dynabook Chromebook C1

Medical Listening Plug

Inforia for Hotel

home 5G

AQUOS wish series

【Awards and Honors】

- Elemental Technologies/Devices Category Grand Prix at CEATEC Award 2021 for Medical Listening Plug in-the-ear hearing aid

＜ICT＞　Dynabook Inc.

Dynabook is making people's lives and society better by "changing the world through computing and services," developing "true computing that reflects real needs and that supports communities," and offering "new added value and services developed from the user's standpoint."

EDUCATION | **HEALTH-CARE** | **INDUSTRY** | **SMART HOME** | **SMART OFFICE**

【Target Social Issues】

- Contributing to preservation of the global environment
- Promoting modern work styles
- Developing ICT environment for school education
- Building a foundation for technological innovation
- Providing health management services

【SDGs We Aim to Contribute through Our Business】

[SDG icons: 3 GOOD HEALTH AND WELL-BEING, 4 QUALITY EDUCATION, 7 AFFORDABLE AND CLEAN ENERGY, 8 DECENT WORK AND ECONOMIC GROWTH, 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE, 11 SUSTAINABLE CITIES AND COMMUNITIES, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION]

【Activity Status】

Dynabook is a business corporation that develops, manufactures, sells, supports, and services personal computers and system solutions products. With the vision "Changing the world through computing and services," we are pursuing the fusion of hardware ("dynabook as a Computing") and services ("dynabook as a Service") and strengthening the technology that supports this endeavor as we expand our business globally.

Our manufacture of PCs with built-in, long-life batteries, made possible through the application of energy-saving technology and various other design technologies, and our environmentally focused production activities are contributing to goals 7 (affordable and clean energy), 11 (sustainable cities and communities), and 12 (responsible consumption and production) of the SDGs.

We are also working toward goals 8 (decent work and economic growth) and 9 (industry, innovation and infrastructure) with the development of PCs and telework solutions adapted to diverse, modern work styles.

In the area of culture and education, we help with the development of, and services for, ICT-driven school education environments, with the aim of facilitating realization of the Ministry of Education, Culture, Sports, Science and Technology's GIGA School Program, thereby working toward goal 4 (quality education).

Also, in the realm of digital healthcare, our Job Canvas work style visualization solution is being used to facilitate health management functionality, thereby contributing to goal 3 (good health and well-being) and, thus, achieving a sustainable society.

【Major SDG Contribution Examples】

- PCs
  - Introduction of a new, faster, lighter, stronger model with a built-in long-life battery
  - Faster processing and greater convenience and usability thanks to Dynabook's proprietary "empower" technology
- Stronger solutions (telework, education, on-site, healthcare)
  - Telework: Stronger sales of cloud environment creation support services tailored to modern work styles that allow users to work anywhere at any time
  - Education: Provision of student learning improvement-focused PCs and environments/services
  - On-site: Advancement in work techniques and quality through application of Edge AI*
  - Healthcare: Support for healthy work styles by managing PC operation time with Job Canvas
- New concept computing
  Utilization of cloud-based platforms for all business to strengthen data mining, Edge AI, and consultation/environmental development/maintenance services in the fields of telematics, on-site services, and telework.

14-inch laptop for hybrid work styles

dynaEdge solutions for tackling on-site challenges

* Technology that involves incorporating AI into IoT devices, sensors and other terminal devices to enable those devices to perform analysis.

< Display Devices > Sharp Display Technology Corporation

Using display technology to build an 8K+5G Ecosystem and AIoT World.
～Offering solutions—through high-definition, energy-efficient, environmental durability, high-speed drive technology—to the social challenges of healthcare, education, infrastructure, and self-driving, as they evolve in an AIoT society. ～

EDUCATION **HEALTH-CARE** **INDUSTRY** **MOBILITY** **SMART HOME**

【Target Social Issues】

- Contributing to better healthcare technology/human resources and a pandemic-free world that has control over infectious disease
- Realizing a society offering comprehensive access to education and job training information, from beginner to advanced
- Improving energy utilization efficiency to achieve an energy-efficient society
- Applying science and technology to industry creation to facilitate the expansion of a business ecosystem society
- Building smart cities to enable society to more functionally and efficiently operate infrastructure

【SDGs We Aim to Contribute through Our Business】

3 GOOD HEALTH AND WELL-BEING | 4 QUALITY EDUCATION | 7 AFFORDABLE AND CLEAN ENERGY | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 11 SUSTAINABLE CITIES AND COMMUNITIES

【Activity Status】

Sharp Display Technology currently develops, manufactures, and sells display modules for a variety of uses. Among these, an LCD[1] that utilizes IGZO[2], an oxide semiconductor that we were the first in the world to successfully mass produce, is notably characterized by its 1) high definition, 2) high-speed drive, 3) low power consumption, and 4) versatility in design. This LCD technology has found wide applications.

Ever since the start of the worldwide Covid-19 pandemic in early 2020, our routines have adapted to what is being called the new normal. People are using IT networks for daily life as we work, study, and get medical care online. Amidst this new wave, displays are taking on increasingly crucial roles.

In its quest to build an 8K+5G Ecosystem and AIoT World, the Sharp Group is continuously advancing technologies that meet the world's needs and giving new value to displays and display application technologies. These efforts are aimed at building an ESG-based, prosperous society where everyone can live safely and securely and at advancing a variety of business fields towards achievement of the SDGs.

【Major SDG Contribution Examples】

- Development of ultra-low power displays
  - Expanded sales of reflective displays for smart bus stops, digital signage, tablets for education, and other applications
  - Expanded sales of smart watches (memory LCD) to meet demand for greater visibility outdoors and longer-lasting use

Smart bus stop   Digital signage   Tablet for education   Smart watch

- Contribution to medical and healthcare fields
  - Development of 8K displays for healthcare that can detect minute abnormalities
  - Helping to protect against various infectious diseases for the sake of realizing a society where everyone can live in health and safety
- Moth Eye technology
  - Developing applications for our proprietary antiviral Moth Eye technology, which has been proven to be highly effective at inactivating[3] SARS-CoV-2 viral particles that come into contact with it

Medical display (diagnostic monitor)   Sharp Crystal face mask   Antiviral Moth Eye technology (electron microscope photo of Moth Eye structure)
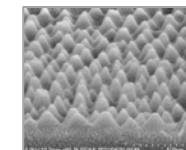
【Awards and Honors】

●The Japanese Liquid Crystal Society 2021 Technology Development Award for technological development and practical application of a high-performance reflective LCD panel

[1] Mass produced since March 2012 through joint development with Semiconductor Energy Laboratory Co., Ltd.
[2] An oxide semiconductor comprising indium, gallium, zinc, and oxygen
[3] Having the effect of causing a virus to lose its infectiousness.

< Electronic Devices >   Sharp Sensing Technology Corporation

From imaging to sensing, business growth driven by camera module component technology

ENTER-TAINMENT   INDUSTRY   SMART HOME   SMART OFFICE

【Target Social Issues】

- Improvement in the quality of communication through higher camera picture quality and resolution
- Sensing module-driven AR/VR technological innovation aimed at the Metaverse* market

【SDGs We Aim to Contribute through Our Business】

4 QUALITY EDUCATION

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

【Activity Status】

Sharp Sensing Technology develops, manufactures, and markets camera modules for smartphones, tablets, and other IT equipment. In 2000 Sharp released the world's first mobile phone with a camera, which was equipped with a camera module developed by Sharp Sensing Technology.

The camera module we developed at that time had a resolution of only 0.11 megapixels. We pursued higher and higher image quality and eventually came out with a camera module with a 1-inch, 20.2-megapixel sensor in 2021, followed by a camera module equipped with a 47.2-megapixel sensor in 2022. This gave image quality equivalent to that of a single-lens-reflex camera and let users easily take high-resolution photographs.

We are also working on camera module component and 3D sensing technology applications, including development of miniature sensing modules useful for enhancing the immersiveness and immediacy of VR (virtual reality) terminals. With a view towards business expansion into the Metaverse market, we are developing and producing AR (augmented reality) and MR (mixed reality) sensing modules, all of which will contribute to further expansion in imaging technology innovation.

* A newly coined word combing the words meta ("beyond") and universe. It is used to refer generally to virtual space constructed within networks and the services that run in that space.

【Major SDG Contribution Examples】

- Smartphone equipped with a 1-inch sensor high-speed AF camera module offering a sense of high-resolution immediacy

Smartphone with 1-inch sensor camera module

- Provision of miniature sensing modules suited to VR headsets and AR glasses

■Examples of miniature sensing module-equipped products

VR headset   AR glasses
Note: The product images are for illustrative purposes only.

< Electronic Devices >   Sharp Fukuyama Laser Co., Ltd. (SFL)

Semiconductor business: Aggressively expand production capacity in order to contribute to the growth of a semiconductor industry that sustainably supports the foundations of society.
Laser business: Create novel laser devices focused on those technologies, such as 5G, EV, and AR/VR, essential to the society of tomorrow.

INDUSTRY　**MOBILITY**　**SMART HOME**　**SMART OFFICE**

【Target Social Issues】
- Digitalization of education
- Resolving the global semiconductor shortage
- Realization of smart cities providing a higher quality of life
- Efficient resource usage and recycling
- Efficient energy usage
- Discharge of safe water

【SDGs We Aim to Contribute through Our Business】

4 QUALITY EDUCATION | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 11 SUSTAINABLE CITIES AND COMMUNITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION | 14 LIFE BELOW WATER

【Activity Status】

SFL contributes to the creation of numerous products by developing and manufacturing laser devices and modules and carrying out semiconductor wafer foundry business.
Semiconductor business: As a wafer foundry manufacturer, SFL develops production processes and expands manufacturing capacity for LCD driver ICs[1] and power supply ICs[2] that make electronic products more energy efficient. In the process, SFL contributes to the growth of a semiconductor industry that sustainably supports the foundations of society.
Laser business: As a manufacturer offering a broad spectrum of semiconductor lasers, from visible to infrared light, SFL contributes to the creation of new lifestyles by developing and manufacturing lasers used in the processing of FPC[3] substrates, which are indispensable to 5G and its accelerating effect on IoT, and to lightening wire harnesses used for EVs[4].
These businesses drive industrial and technological innovation, and through the contributions we make to building a healthy and comfortable society for all, we are working to improve the social value of our company.

[1] Integrated circuits that send the electrical signals that operate LCDs
[2] Integrated circuits responsible for controlling power supply in electrical appliances.
[3] FPC: Flexible printed circuit
[4] EV: Electric vehicle

【Major SDG Contribution Examples】
- Expansion in production of the semiconductors upon which society depends
  - Contributing to a more stable supply of LCD driver ICs and power supply ICs by increasing production capacity (20% increase in production volume compared with 2020)
  - Developing next-generation manufacturing processes for power supply ICs in order to achieve greater power savings
- Development and manufacture of high-power processing lasers
  Developing and manufacturing a processing laser for use in making FPC substrates for 5G and EVs.
- Promotion of safety awareness and risk communication through plant wastewater sampling and analyses conducted jointly by local residents, government, and Sharp.
- Plant wastewater sampling and analyses by three parties (local residents, government, and Sharp)
- Opening of the Sharp Fukuyama Academy Farm
  A comprehensive farming experience, from soil cultivation to crop harvesting, which promotes good health and mental and physical refreshment among employees and their families.

Semiconductor plant in Fukuyama

High-power processing laser

Plant wastewater sampling and analyses by three parties (local residents, government, and Sharp)

A family trying their hand at soil cultivation (furrowing)

Participating employees, their families, and work colleagues

< Electronic Devices >   Sharp Semiconductor Innovation Corporation

Contributing to a sustainable society by developing devices that impact society in a positive way while creating and expanding new businesses with the potential to form new ecosystems.

HEALTH-CARE   **INDUSTRY**   **SMART HOME**   **SMART OFFICE**

【Target Social Issues】

- Assessment of people's state of health in all countries
- Resolution of energy issues
- Achievement of a high level of economic productivity
- Development of next-generation infrastructure
- Consideration for the environment
- Sustainable management and efficient use of natural resources
- Climate change mitigation

【SDGs We Aim to Contribute through Our Business】

3 GOOD HEALTH AND WELL-BEING | 7 AFFORDABLE AND CLEAN ENERGY | 8 DECENT WORK AND ECONOMIC GROWTH | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 11 SUSTAINABLE CITIES AND COMMUNITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION

【Activity Status】

Sharp Semiconductor Innovation creates the various key devices that underpin Sharp's unique products. Currently, we are developing and selling devices and modules that will serve as technological infrastructure for DX and digital healthcare solutions utilizing 8K+5G and AIoT.

- We are making possible health support in a variety of situations by utilizing sensors that apply existing optoelectronics technology to develop devices with bio-sensing functionality and building solutions that can monitor people's state of health.
- We will contribute to the development of society through industry DX solutions by bringing IoT communications devices developed for personal use to infrastructure, construction, and, rail applications.
- As a Sharp Group company, we will contribute to the digital healthcare field by developing care devices for in-house use, including key devices for Plasmacluster technology, a unique feature of Sharp products.
- The resulting expansion in the range of unique, proprietary devices, particularly for major global corporations, can be expected to spur reforms in a variety of lifestyle settings and improve both social activities and quality of life.
- We will contribute to the development of our communications-based society by creating new technologies (Beyond 5G SoCs) for next-generation communications.

【Major SDG Contribution Examples】

- Providing IoT communication modules for infrastructure applications
  We will realize continuous, interruption-free IoT service using IoT adapters as an alternative to non-mobile communications infrastructure (ADSL/ISDN).
- Rolling out new opto-device products in new fields
  We will facilitate the evolution of new products, including ToF[1] ranging sensors for robot vacuum cleaners, photointerrupters for smart water meters, and proximity sensors for TWS[2] earphones.
- Starting contract R&D work for development of a Beyond 5G SoC
  We were selected to carry out work under the R&D of Beyond 5G (B5G) IoT, SoC, and IoT Solution Building Platforms Enabling Continuous Evolution, a program of the National Institute of Information and Communications Technology (NICT). We are working to accelerate establishment of next-generation technologies to replace current 5G communications in Japan.

IoT communication module

Various sensors (optical sensor, others)

[1] ToF: Time of flight. A method for measuring distance from a target object by measuring how long it takes light from an optical source to reflect off the target and return to a sensor (optical detector).
[2] TWS: True wireless stereo

Environmental Initiatives

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

0.50%

Final Landfill Disposal Rate

Environmental Initiatives: Environmental Vision

SHARP Eco Vision 2050 Long-Term Environmental Vision

SHARP Eco Vision 2050

Create more clean energy than all the energy consumed in our supply chain

Minimize the environmental impact of our business activities

Climate Change   **Resource Recycling**   **Safety and Security**

To accelerate our efforts toward the long-term environmental vision, Sharp is formulating medium-term environmental goals that define specific activities and quantitative targets in each field. To address climate change, Sharp aims to achieve net zero CO_2 emissions from its business activities by 2050, with interim reduction targets of 40% by 2030 and 60% by 2035[5].

Sharp is aiming to solve social problems and continuously boost corporate value by deepening ties with stakeholders through business activities and environmental conservation efforts.

[1] Adopted by the United Nations in 2015, the SDGs are a set of 17 development goals for the world to achieve by 2030 in order for society to realize sustainable development.

[2] Subtracting the amount of absorption from the amount of greenhouse gas emissions, so that the total is effectively zero.

[3] An economic system aimed at eliminating wastes and circulating resources. Waste products and raw materials are considered new resources and are thus recycled.

[4] The Paris Agreement sets forth the long-term targets of keeping the rise in global average temperature well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C.

[5] See page 35.

The international community has recognized the urgent need to address increasingly serious environmental problems, such as climate change, resource depletion, and plastic pollution. This awareness is accelerating global action to solve these social problems, including efforts associated with the achievement of the Sustainable Development Goals (SDGs)[1] and carbon neutrality[2], and the creation of a circular economy[3].

In 2019 Sharp formulated SHARP Eco Vision 2050, a long-term environmental vision based on its Basic Environmental Policy of "Creating an Environmentally Conscious Company with Sincerity and Creativity," which was established in 1992. Sharp is working toward realizing a sustainable global environment by pursuing long-term goals set in three fields of action with 2050 as the target year: climate change, resource recycling, and safety and security.

In the field of climate change, while keeping in mind the 1.5°C target[4] stipulated in the Paris Agreement, Sharp aims to become carbon neutral in its business activities. It also seeks to broaden and disseminate clean energy-related products and services and to reduce greenhouse gas emissions from its products and services.

In the resource recycling field, Sharp pursues a circular economy by endeavoring to use recycled materials in all product parts and to reduce waste from its business activities. In the safety and security field, Sharp strictly manages chemical substances that may affect people's health, the natural environment, and ecosystems and restricts their use to eliminate the risk of negative effects.

Environmental Initiatives: Environmental Vision

Long-Term Environmental Goals

To bring about SHARP Eco Vision 2050, we have stipulated long-term goals in three fields of action. In pursuing these goals, we will strive to create more clean energy than the total amount of energy consumed in Sharp's entire supply chain, while minimizing the environmental impact of our business activities.

Climate Change

Sharp has up to now striven to use less energy in its business activities and to make products that are increasingly more energy efficient so as to reduce the amount of energy consumed by households and society as a whole.
We began developing solar cells after founder Tokuji Hayakawa said, "All the products we make use electricity. As our company grows, we will need more electricity, so why don't we make electricity ourselves?" Since then, we have spent more than half a century working to spread solar power generation.

It is precisely because Sharp makes products that use electricity that we have a responsibility to reduce the environmental impacts resulting from this electricity use.

By promoting the world goal of carbon neutrality, Sharp is taking on the challenge of achieving the following two goals by 2050 and thus becoming carbon-free throughout its supply chain, including its own business activities.

Goal
- Achieve net zero CO_2 emissions in Sharp business activities.
- Create more clean energy than the total amount of energy consumed in Sharp's entire supply chain.

Resource Recycling

Sharp has up to now provided the world with all kinds of value through the creation of new products. At the same time, we have used many resources to do so.

Sharp should continue to provide its stakeholders with all kinds of value by making the most efficient use of finite resources around the globe.

By making more efficient use of resources and continuing to offer maximum value with minimal resources, Sharp is taking on the challenge of achieving the following two goals by 2050 and thus building a circular economy and realizing a recycling-oriented society.

Goal
- Use no newly extracted resources[*] for making products.
- Achieve zero final disposal to landfill of waste generated in Sharp business activities.

[*] Excludes those not suitable for recycling from an environmental standpoint.

Safety and Security

Sharp uses various chemicals in production processes in its factories, and the products themselves contain various chemicals. Such chemicals must be strictly managed because some of them can have negative effects on people's health, the natural environment, or ecosystems.

Sharp's business activities must not have a negative effect on people's health, the natural environment, or ecosystems.

As well as complying with current international standards, Sharp has established its own even stricter in-house standards. Under these far-sighted standards, we thoroughly manage relevant chemicals with the goal of eliminating any negative effects that chemicals may have on people's health, the natural environment, or ecosystems.

Goal
- Properly manage chemicals in order to protect people's health, the natural environment, and ecosystems.

Environmental Initiatives: ◎ Climate Change

Sharp's Stance on Climate Change

Medium-term Environmental Goals

Climate change is the most pressing and important issue currently facing humanity. It is driving an increase in natural disaster severity that significantly impacts, both directly and indirectly, not only our daily life but business as well. Sharp recognizes that climate change is a material management issue and is working to address this issue through its long-term environmental vision, SHARP Eco Vision 2050, which was created in 2019 and which encompasses a goal to "Achieve net zero CO_2 emissions in Sharp business activities." To achieve our long-term environmental vision, we have also set new medium-term environmental goals—a 40% reduction in CO_2 emissions by 2030 and a 60% reduction by 2035*.

Going forward, Sharp will continue to steadily reduce CO_2 emissions by installing solar power systems in our plants and other sites, saving energy, building new solar power plants, and converting the company fleet to electric vehicles (EVs).

* Compared with fiscal 2021. Includes emissions from fiscal 2021 onwards from Sakai Display Products Corporation, which became a wholly owned subsidiary of Sharp Corporation in June 2022.

■ Medium-term Environmental Goals for Achieving Net Zero CO_2 Emissions from Corporate Activities

(Thousand tons CO_2)

4.2% reduction/year or more

40% reduction

STEP1 — 60% reduction
- Installing solar power systems in Sharp plants and sites
- Constructing new solar power plants
- Accelerating energy efficiency at Sharp plants and sites
  - Introducing FEMS (factory energy management system)
  - Introducing internal carbon pricing
  - Improving production line efficiency and introducing energy-saving equipment
- Replacing all company vehicles with EVs
  (using electricity generated by solar power systems installed on parking lot roofs)

STEP2 — 100% reduction
- Procuring electricity from company-owned post-FIT solar power systems
- Constructing new solar power plants, others

SDP / SHARP

2021　2030　2035　2050 (Year)

Environmental Initiatives: 🌐 Climate Change

Sharp's Stance on Climate Change

Reducing Environmental Impact Associated with Product Usage

When greenhouse gas emissions for the entire Sharp value chain are calculated and analyzed, the results show that more than 80% of emissions are associated with the use of sold products. Based on this fact, Sharp has identified reducing environmental impact associated with product usage by customers (i.e., improving product energy efficiency) and Sharp business activities (i.e., manufacturing) as material issues in addressing climate change.

■ **Breakdown for Sharp Greenhouse Gas Emissions (Fiscal 2021)**

Sharp business activities (Scope 1 + 2)[1]
3%

Materials procurement, shipping, etc. (Scope 3)[2]
13%

Product use (Scope 3)
84%
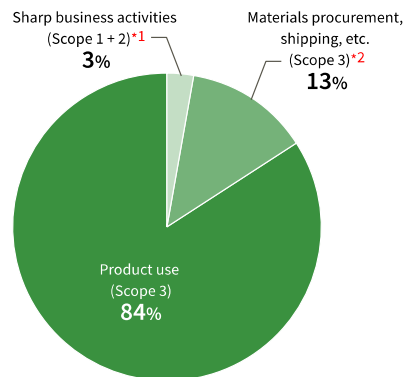
[1] Direct GHG emissions from business activities
[2] Indirect GHG emissions from energy usage in business activities

Sharp's main approaches to resolving material issues related to climate change are the following.

Reducing GHG emissions by curbing energy consumption in business activities

- Quantifying and analyzing energy consumption and GHG emissions from business activities

- Reducing GHG emissions through productivity improvements and energy cost reductions at factories

- Reducing GHG emissions by using renewable energy

- Reducing GHG emissions during transportation by switching to more eco-friendly transportation modes

Participation in International Initiatives and Other Efforts

Sharp participates in the Science Based Targets initiative (SBTi)[3], which is focused on pursuing action that will achieve real and reliable results in the fight against climate change. Sharp has submitted its GHG reduction targets to the SBTi team, and they have certified them as being scientifically based and in conformance with the Paris Agreement.

In Japan, Sharp participates in the Liaison Group of Japanese Electrical and Electronics Industries for Global Warming Prevention[4], which is a group focused on further accelerating the pace of industry-wide climate change-related action. The members of this group share information about cutting-edge energy-saving initiatives being implemented in factories, and they engage in discussion related to policy recommendations. Sharp also endorses the GX League[5] Basic Concept announced by the Japanese Ministry of Economy, Trade and Industry.

SBTi GHG Emissions Reduction Targets
- Scope 1 + 2: By fiscal 2031, reduce GHG emissions by 33% compared with fiscal 2018
- Scope 3: By fiscal 2031, reduce GHG emissions by 33% compared with fiscal 2018(category 11)

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

[3] This climate change-related initiative is a collaborative effort of the United Nations Global Compact (UNGC), the CDP (formerly Carbon Disclosure Project), World Resources Institute (WRI), and the World Wide Fund for Nature (WWF). The SBTi promotes the establishment of science-based GHG emissions reduction targets in conformance with the Paris Agreement.

[4] A group comprised of representatives from Japan's electrical and electronics industries, such as the Japan Electrical Manufacturers' Association (JEMA) and the Japan Electronics and Information Technology Industries Association (JEITA). It promotes industry-wide efforts aimed at preventing global warming, such as the adoption of action plans for establishing a low-carbon society.

[5] GX stands for 'green transformation'—the transformation of the entire economic and social system toward an early shift to carbon neutrality. The GX League is a forum where companies pursuing GX collaborate with representatives from governmental, academic, and economic spheres to discuss the transformation of the economic and social system and the creation of new markets.

Environmental Initiatives: 🌐 Climate Change

Disclosure of Climate-Related Information

Action on the TCFD Recommendations

The Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board (FSB), an organization promoting international financial stability. In 2017 the TCFD released recommendations for companies to disclose information on the risks and opportunities of climate change. Sharp has declared support for the TCFD recommendations and is expanding disclosure of climate-related information in accordance with the framework set by the TCFD.

TCFD TASK FORCE ON CLIMATE–RELATED FINANCIAL DISCLOSURES

1. Governance

Climate-related issues are monitored and countermeasures supervised by the President & CEO, who chairs the Sharp Global SER Committee[1]. The committee includes vice chairs (persons in charge of environmental affairs, administration, and human resources) and committee members (general managers of each business unit and the presidents of subsidiaries). Members of relevant Head Office departments serve as the support team for the committee. The committee deliberates issues related to ESG, such as climate change, the thorough implementation of policies and visions, and important measures. The committee also oversees social issues, including climate change by confirming and reviewing the measures taken by each business unit and subsidiary.

2. Strategy

Sharp is implementing environmental initiatives based on SHARP Eco Vision 2050, a long-term environmental vision formulated with the goal of realizing a sustainable global environment. With regard to climate change, we are steadily undertaking measures to achieve newly established medium-term environmental targets[2] for 2035.

In addition, to boost resilience in the face of a future made increasingly uncertain by climate change, Sharp has identified climate-related risks and opportunities based on multiple scenarios, including the SSP1-1.9 scenario[3] and the SSP5-8.5

scenario[4] set forth in the 6th Assessment Report by the Intergovernmental Panel on Climate Change (IPCC). The following page provides detailed information about those risks and opportunities, along with a summary of associated measures.

3. Risk Management

Sharp identifies and assesses climate-related risks in accordance with the Rules of Business Risk Management[5], in which the basic approach to risk management has been established. Specifically, Sharp identifies climate-related risks that are highly likely to occur based on its analysis of climate scenarios forecast for the future. Sharp reports its findings as necessary to the Internal Control Planning Division, which serves as the risk management secretariat, and senior executives. It also facilitates necessary improvement measures in partnership with involved departments.

4. Metrics and Targets

Sharp has established medium- and long-term environmental targets for reducing CO_2 emissions across the entire supply chain. In January 2020, these targets were certified by the Science Based Targets initiative (SBTi) as being scientifically based and in conformance with the Paris Agreement. Sharp aims to reduce both CO_2 emissions from business activities (Scope 1 + 2) and indirect CO_2 emissions from non-business activities (Scope 3) by 33% compared with fiscal 2018.

In addition, in June 2022, Sharp announced the target of reducing CO_2 emissions by 60%[6] by 2035. This target, which is based on the SBT 1.5°C target, reflects our aim of reducing annual CO_2 emissions by at least 4.2%. Sharp also established the medium-term target of reducing emissions by 16.8%[6] by 2025.

[1] See page 12.   [2] See page 35.   [3] A scenario in which the increase in temperature is limited to 1.5°C or less against the backdrop of sustainable growth.
[4] The scenario with the greatest emissions, in which climate measures are not introduced and fossil fuel-dependent growth continues.   [5] See page 122.
[6] Compared with fiscal 2021. Includes emissions from fiscal 2021 onwards from Sakai Display Products Corporation, which became a wholly owned subsidiary of Sharp Corporation in June 2022.

■ Progress towards Science Based Targets (Fiscal 2021 Results)

Category	Base Year (fiscal 2018 results)	Fiscal 2031 Target (33% reduction compared with fiscal 2018)	Fiscal 2021 Results	Base Year Comparison
Scope 1 + 2	1,077 thousand tons CO_2	722 thousand tons CO_2	985 thousand tons CO_2	9% reduction
Scope 3 (Category 11)	27,489 thousand tons CO_2	18,418 thousand tons CO_2	28,010 thousand tons CO_2	2% increase

Environmental Initiatives: 🌐 Climate Change

Disclosure of Climate-Related Information

■ Sharp Business Risks and Opportunities

	1.5°C scenario SSP1-1.9						4°C scenario SSP5-8.5		
Analysis results	A large number of countries, whether advanced, emerging, or developing, introduce more ambitious emissions regulations. Production methods and other structures will be subject to significant restrictions due to those regulations. Reflecting the soaring cost of conventional power, for example electricity derived from fossil fuels, the cost of renewable energy begins to fall compared to conventional generating methods thanks to policy incentives.						Worldwide decarbonization initiatives make only slow progress in advanced nations, and none at all in developing nations. Extreme weather events occur frequently worldwide. Global average sea level is anticipated to rise by at least 1 meter, and urban infrastructure and distribution systems experience striking declines in efficiency due to the effects of environmental change.		
Climate change drivers	Introduction of policies such as carbon pricing to limit greenhouse gas emissions	Adoption of renewable energy as a principal source of power	Transition in consumer purchasing behavior towards socially and environmentally responsible products	Pressure to reduce greenhouse gas emissions throughout the supply chain	Rising energy costs	Accelerating introduction and strengthening of energy-saving regulations targeting products and other measures in countries worldwide	Frequent flooding and reduced water consumption due to factors including melting of glaciers	Increased human heat-related morbidity and mortality due to extreme weather in many areas	Instability of logistics networks as infrastructure is damaged by rising sea levels
Business risks	**Transition risk (policies)** New burdens in the form of carbon taxes imposed in response to greenhouse gas emissions	**Transition risk (technologies)** Increased cost of introducing renewable energy	**Transition risk (reputation)** Increased capital investment and research costs in order to accommodate pressure from customer companies to reduce greenhouse gases	**Transition risk (markets)** Increased costs due to pressure to adopt environmental measures from climate change-conscious customers	**Transition risk (markets)** Increased cost of production and operations based on conventional energy	**Transition risk (regulations)** Discontinuation of sales or declines in revenue in the event of unsatisfactory environmental measures	**Physical risk (acute)** Halts in the operation of factories due to drought or flooding	**Physical risk (acute/chronic)** Halts in the operation of factories as developments impact employee health	**Physical risk (chronic)** Increase in operating costs due to delays in production recovery and delivery caused by interruptions in the supply of parts from suppliers
Time frame	Short to long term	Short to medium term	Medium to long term	Short to medium term	Short to long term	Short to long term	Medium to long term	Short to medium term	Medium to long term
Business opportunities	**Resource efficiency** Ability to establish competitive advantages by reducing carbon tax expenditures	**Products and services** Increase in sales of solar power systems to companies looking to convert their energy source	**Products and services** Growth in the number of customer companies as a result of supplying environmentally friendly products	**Markets** Establishment of competitive advantages by quickly accommodating customers' environmental requirements	**Energy** Increase in sales of solar power systems to companies looking to convert their energy source	**Resilience** Increase in sales opportunities for energy-saving products that will help build a decarbonized society	**Products and services** Increase in sales opportunities for products with water-saving features	**Products and services** Increase in demand for air-conditioning equipment as a result of global warming	**Resilience** Establishment of competitive advantages through pursuit of supply chain resilience
Principal measures to address risks and opportunities	Systematically reducing greenhouse gas emissions by establishing science-based emissions reduction targets	Continuing long-term investments in solar power technologies, and expanding the use of solar power in EVs and other applications	Requiring the upstream supply chain to reduce greenhouse gas emissions and providing appropriate support	Strengthening structures for reducing greenhouse gas emissions across the organization	Pursuing investments in environmental equipment and actively purchasing and using advanced generating equipment for in-house production by introducing carbon pricing structures	Standardizing the design of environmentally friendly products by creating a dedicated team to assess changes in environmental regulations in countries worldwide	Introducing water recycling systems at factories and developing products with water-saving features	Implementing measures based on the Rules of Business Risk Management	Formulating, maintaining, and improving the Sharp Group Business Continuity Plan

Environmental Initiatives: ⊕ Climate Change

Greenhouse Gas Emissions Based on the GHG Protocol Initiative

Sharp calculates greenhouse gas emissions based on the GHG Protocol[*1] and then works to limit those emissions resulting from customer use of Sharp products and from Sharp's business activities, including those in the supply chain.

[*1] The GHG Protocol is an international standard for calculating greenhouse gas (GHG) emissions. It was jointly established by the World Business Council for Sustainable Development (WBCSD), a coalition of the world's leading companies, and the World Resources Institute (WRI), a United States-based think tank.
[*2] Flat-panel TV, air conditioners, refrigerators, washing machines, air purifiers, microwave ovens, copiers/MFPs, solar cells
[*3] Annual power consumption of each product × number of units sold × product life × CO_2 emission coefficient
[*4] TVs (CRT TVs, flat-panel TVs), air conditioners, refrigerators/freezers, washing machines/dryers

■ Greenhouse Gas Emissions by Scope 1/2/3 Categories Based on the GHG Protocol Initiative (Fiscal 2021)

Category		Emissions (Thousand Tons CO_2)	Notes
Scope 1 (direct GHG emissions from business activities)		279	Emissions from combustion of fuel, etc.
Scope 2 (indirect GHG emissions from energy usage in business activities)		706	Emissions from the use of electricity
Total of Scope 1 and Scope 2		985	
Scope 3 (indirect GHG emissions from outside the scope of business activities)	1. Purchased goods and services	3,559	Emissions from the manufacture of materials procured for products in the 8 major categories[*2] that the Sharp Group sold in the reporting year
	2. Capital goods	141	Emissions from the construction, manufacture, and transportation of Sharp Group capital goods (such as equipment, machinery, buildings, facilities, and vehicles)
	3. Fuel- and energy-related activities (not included in Scope 1 or 2)	157	Emissions from the procurement of fuels (natural resource extraction, manufacture, and transportation) consumed in the generation of electricity and heat the Sharp Group procures from other companies
	4. Upstream transportation and distribution	215	Emissions from the transportation of Sharp Group parts and materials and products manufactured
	5. Waste generated in operations	2	Emissions from waste disposal and treatment by the Sharp Group
	6. Business travel	2	Emissions from business travel by all employees of Sharp Corporation
	7. Employee commuting	5	Emissions from commuting by all employees of Sharp Corporation
	8. Upstream leased assets	—	Included in Scope 1 and 2 CO_2 emissions
	9. Downstream transportation and distribution	33	Emissions from the transportation (from retailers to end consumers) of products in the 8 major categories[*2] that the Sharp Group sold in the reporting year
	10. Processing of sold products	265	Emissions from processing at destination of Sharp Group products
	11. Use of sold products	28,010	Emissions[*3] from the use of products in the 8 major categories[*2] that the Sharp Group sold in the reporting year
	12. End-of-life treatment of sold products	3	Emissions from recycling 4 types of appliances[*4] that Sharp Corporation sold in Japan
	13. Downstream leased assets	—	Not applicable
	14. Franchises	—	Not applicable
	15. Investments	—	Not applicable
Scope 3 total		32,392	
Scope 1 + 2 +3 total		33,377	

Environmental Initiatives: ◎ Climate Change

Curbing Business Activity-Linked Greenhouse Gas Emissions

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2025
■ Energy intensity: Improve by 25% (baseline year: fiscal 2012)	■ Improved by 17% (baseline year: fiscal 2012)	★	■ Reduce greenhouse gas emissions by 16.8%[*1]

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Sharp Group Activities to Control Greenhouse Gas Emissions

Under SHARP Eco Vision 2050—our long-term environmental vision—Sharp is aiming to achieve net-zero CO_2 emissions in its business activities. The Sharp Group's GHG emissions from business activities in fiscal 2021 increased by 3.6% to 985,000 tons CO_2 compared to the previous fiscal year. This increase was due to the launch of full-scale operations at newly acquired production sites, among other factors. The improvement rate of energy intensity remained at 17%, compared to the baseline year of fiscal 2012.

Each Sharp production base is strengthening efforts involving all equipment and systems—ranging from production lines to utility systems for supplying electricity, gas, and water—to boost energy efficiency and reduce GHG emissions. In particular, at the LCD and electronic component plants, the production, engineering, and environmental departments work together to reduce consumption of base-load energy. Efforts include installing inverters[*1] and optimizing the air conditioning in clean rooms[*2].

Going forward, Sharp will aggressively aim to achieve its new medium-term environmental goals by installing solar power systems in our plants and other sites, introducing factory energy management systems, streamlining production lines, and installing energy-saving equipment.

[*1] Compared with fiscal 2021. Includes emissions from fiscal 2021 onwards from Sakai Display Products Corporation, which became a wholly owned subsidiary of Sharp Corporation in June 2022.
[*2] A device to control the number of motor rotations.
[*3] A room where the temperature, humidity, and cleanliness are kept at controlled levels.

■ **Amount of GHG Emissions**

(Thousand tons CO_2)

Fiscal year	CO₂ emissions from energy sources	PFCs emissions	Total
2017	844	96	940
2018	984	93	1,077
2019	880	94	974
2020	839	112	951
2021	848	137	985

■ CO_2 emissions from energy sources   ■ PFCs[*4] emissions
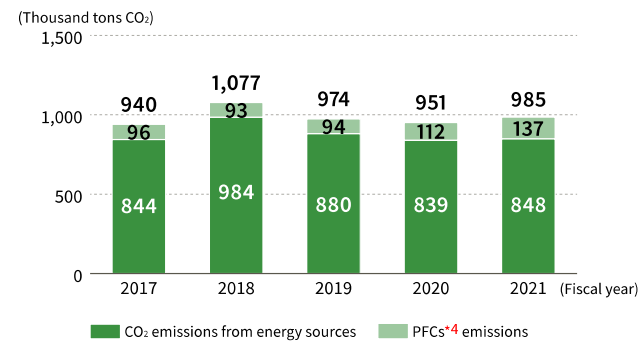
[*4] HFCs, PFCs, sulfur hexafluoride (SF_6), nitrogen trifluoride (NF_3)

■ **Energy Intensity (Baseline Year: Fiscal 2012)**

(%)

Fiscal year	Value
2017	73
2018	83
2019	83
2020	79
2021	83
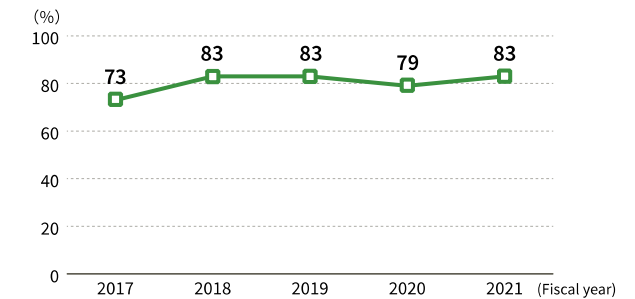
■ **GHG Emissions by Region (Fiscal 2021)**

- Europe 0.4%
- North and South America 0.1%
- Asia 11%
- China 13%
- Japan 76%
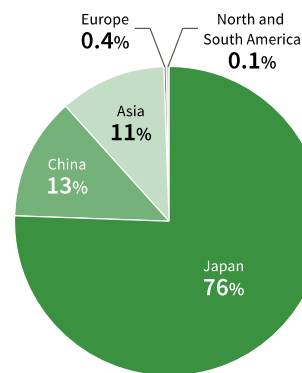
Environmental Initiatives: 🌐 Climate Change

Energy-Saving Products and Services

Case Study

Plasmacluster Refrigerator Wins ECCJ Chairman's Prize at 2021 Energy Conservation Grand Prize

Sharp's Plasmacluster refrigerator was awarded the ECCJ Chairman's Prize in the Products and Business Models category of Japan's 2021 Energy Conservation Grand Prize program. Organized by the Energy Conservation Center, Japan (ECCJ) and supported by the Ministry of Economy, Trade, and Industry (METI), this awards program recognizes outstanding energy conservation practices in Japan's industrial, business, and transportation sectors, while also recognizing advanced, highly energy-efficient products.

The Plasmacluster refrigerator boasts a narrow depth yet a large interior capacity. It employs a new cabinet whose vacuum insulation covers the maximum area of the interior and gives it one of the narrowest depths and highest space efficiencies in the industry[1]. And with technologies such as Sharp's proprietary 3-way valve, the highly efficient cooling system offers 37% greater energy efficiency[2] than Sharp's previous model and meets standards under the 2021 Energy Conservation Act[3]. This Plasmacluster refrigerator thus achieves the long-difficult goal of a large capacity in a compact space and greater energy efficiency. It also incorporates Sharp's proprietary AIoT[4] functions and Plasmacluster technology to keep food fresher longer and reduce the amount of food wasted. In addition, the design is environmentally friendly thanks to switching to using recyclable metal for the doors instead of difficult-to-recycle glass. These benefits earned the refrigerator high praise and the ECCJ Chairman's Prize.

From left: SJ-MF46H-H (dark metal)/-S (light metal)
SJ-MW46H-H (dark metal)/-S (light metal)

Energy Conservation Grand prize logo

[1] As of May 2022. For household freezer/refrigerators (451 to 500 liter class capacity) for the Japanese domestic market.
[2] Compared to the 2019 model SJ-F462E (420 kWh/year). (Measurement method for annual power consumption stipulated in JIS C 9801-3 : 2015.)
[3] 2021 energy efficiency standard achievement rate.
[4] AIoT is a word coined by Sharp, combining the words AI (artificial intelligence) and IoT(Internet of things). AIoT is a vision for making products and services more integral to people's lives by connecting them via the cloud using AI. AIoT is a registered trademark of Sharp.

Environmental Initiatives: ⊕ Climate Change

Product Life Cycle Assessment

Identifying and Reducing Environmental Impacts throughout the Life of Products

Sharp performs a life cycle[1] assessment (LCA) on its products to identify their impact on the environment throughout their service life and uses the results in product planning and development.

Consumer electronics generally have a large impact on the environment during use. Thus, by focusing on improving their energy savings, overall environmental impact can be effectively reduced. A decrease in the environmental impact of 8K[2] LCD TVs was achieved by improving energy efficiency and reducing the products' weight.

■ **LCA Data for 8K LCD TVs**

Disposal/recycling
-89
Distribution 21 — Manufacture 23

8T-C60AX1 (2018 model)
Use[3] 1,270 | Materials 672

Life cycle CO_2 emissions reduced by 18%

8T-C60DW1 (2021 model)
Use[3] 1,151 | Materials 410

Disposal/recycling
-57
Distribution 18 — Manufacture 24

-100 0   500   1,000   1,500   2,000 (kg-CO_2)
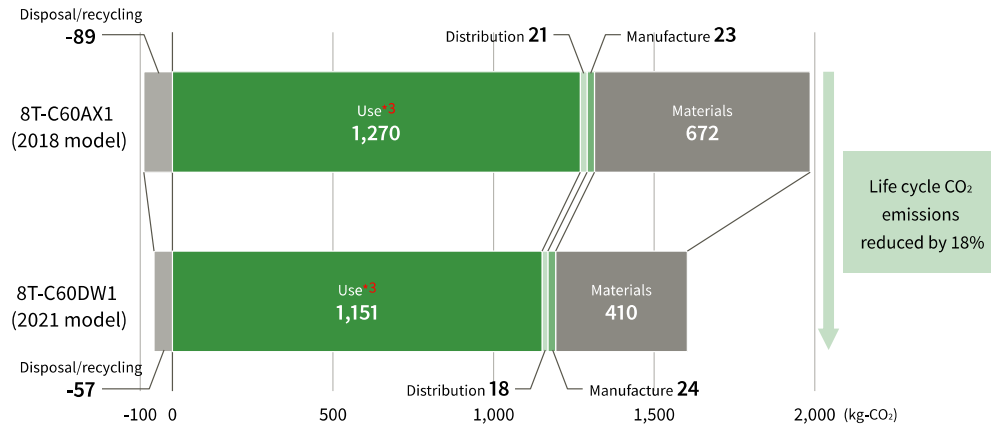
[1] The life of a product from materials and parts procurement to manufacture, distribution, use, disposal, and recycling.
[2] Ultra-high-definition, next-generation video standard with a resolution of 7,680 x 4,320 pixels (33.18 million pixels)—16 times the resolution of current 2K full high-definition broadcasts (1,920 x 1,080 pixels; 2.07 million pixels) and four times that of 4K (3,840 x 2,160 pixels; 8.29 million pixels).
[3] CO_2 emissions during use are calculated using a CO_2 emission coefficient (adjusted) announced by Japan's Electric Power Council for a Low Carbon Society (ELCS).

Utilizing Renewable Energy

Sharp has introduced the use of PV systems, green power, and other power sources to its domestic and overseas production bases and is advancing the use of renewables to do its part to create a decarbonized society. In fiscal 2021, Sharp generated 4.82 million kWh of electricity and purchased 3.45 million kWh of green power. This is equivalent to the annual energy consumption amount[4] of roughly 2,800 average households in Japan. Sharp will continue to expand the use of renewable energy sources.

[4] Calculated from data from the Federation of Electric Power Companies of Japan.

■ **Business Risks Facing Sharp**

Domestic bases	
No.	Name
1	Hiroshima
2	Fukuyama
3	Yao
4	Katsuragi
5	Nara
6	Tenri
7	Kameyama
8	Mie
9	Tochigi

Overseas bases	
No.	Name
10	SUKM (UK)
11	Pinghu (China)
12	NSEC (China)
13	SATL (Thailand)
14	SEID (Indonesia)
15	SMCA (US)
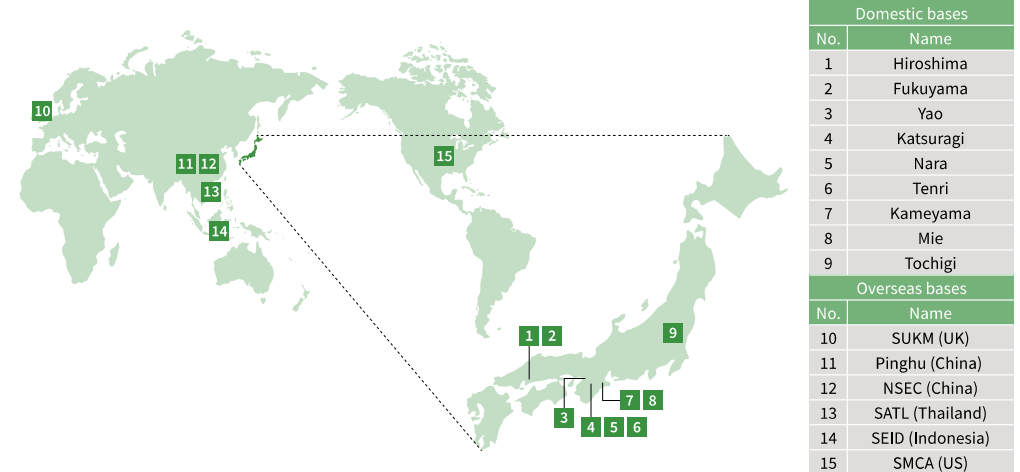
Solar power systems installed on the roofs of Sharp production bases (left: Kameyama Plant; right: NSEC in China)

Environmental Initiatives: Climate Change

Utilizing Renewable Energy

Case Study

Spreading the Use of Renewable Energy in Thailand

Sharp Energy Solutions Corporation (SESJ)[1] installed a roof-mounted solar power system at a plant of one of Thailand's major tire manufacturers, the Deestone Group[2]. With an output of approximately 4.99 MW-dc, it is one of the largest capacity[3] plant rooftop solar power installations that SESJ has built in Thailand.

The new solar power system was installed on the rooftop of a passenger vehicle tire plant of Svizz-One Corporation Ltd.[4], a manufacturing base of the Deestone Group located in Nakhon Pathom Province, central Thailand. SESJ handled the engineering, procurement, and construction of the system. The system's annual power generation capacity is estimated to be approximately 7,293 MWh. Using all of that generated electricity at the plant will equate to a reduction in greenhouse gases of roughly 2,326 t-CO_2/year.

SESJ remains committed to spreading the use of renewable energy around the world.

[1] SESJ is a subsidiary of Sharp Corporation, specializing in energy solutions such as the sales of PV systems and the installation of electrical equipment.
[2] A major Thai-owned tire manufacturer based in Thailand.
[3] As of May 31, 2021.
[4] Svizz-One manufactures radial tires for the Deestone Group.

Solar power systems installed on the roofs of the plant

Environmental Initiatives: Climate Change

Utilizing Renewable Energy

Case Study

COCORO POWER, a Flat-Rate PPA[*1] Service for New Homes (in Japan)

Sharp Energy Solutions Corporation (SESJ)[*2] teamed up with TRENDE Inc.[*3] in a collaboration[*4] to offer COCORO POWER, a flat-rate PPA service for new homes using a solar power system and storage battery. Customers can choose either the Solar Plan, in which a solar power system is installed, or the Solar Storage Plan, in which both a solar power system and storage battery are installed.

Under the Solar Plan, a solar power system is installed on the home's rooftop at no initial cost to the customer, who can use the electricity generated. At night or other times when the system is generating only a little or no power, electricity is supplied by the grid. The monthly electricity bill is fixed and the customer can use as much power as is needed from the solar power system (but they cannot use the power to charge a private storage battery[*5]). The fixed cost includes the basic fee for grid electricity and the electricity cost covering usage up to 140 kWh/month[*6]. This plan is recommended[*7] for households that use a lot of electricity in the daytime. After 10 years from the starting date, the customer receives the solar power system free of charge.

In the Solar Storage Plan, a solar power system and storage battery are installed at no initial cost to the customer. Electricity generated in the daytime is stored in the battery for use at night and other times. Sharp's COCORO ENERGY cloud HEMS service automatically and intelligently controls the charge and discharge of the storage battery so the customer can consume electricity efficiently. After 14 years

from the starting date, the customer receives the solar power system and storage battery free of charge. Besides being able to use renewable energy generated by the solar power system, in case of a power outage, customers can use the electricity generated to power things like lighting, TVs, refrigerators, and electric kettles.

*1 Power Purchase Agreement model. Also called TPO (third-party ownership) model.
*2 A Sharp Corporation subsidiary specializing in energy solutions such as the sales of PV systems and the installation of electrical equipment.
*3 Active in businesses including retail electricity, TRENDE develops retail electricity platforms that predict customer demand by utilizing AI.
*4 SESJ installs, owns, and operates the equipment. TRENDE handles the retail sale of electricity.
*5 Customers cannot use the electricity generated to charge storage batteries that they own themselves.
*6 If usage exceeds 140 kWh/month, users are charged extra.
*7 Note that depending on electricity usage, the monthly electricity bill with this service may be higher than without it.

Generated and consumed electricity
- Use electricity generated by solar power system
- Even if usage increases, price stays fixed

Purchased electricity
The fixed cost includes the basic fee for grid electricity and the electricity cost covering usage up to 140 kWh/month

Electricity produced by solar power

Electricity used by household

Purchased electricity

Generated and consumed electricity

Usage increases but price stays fixed

Purchased electricity

Nighttime | **Morning** | Daytime | **Sundown** | Nighttime

COCORO POWER

Solar Plan image

Environmental Initiatives: ◎ Climate Change

Reducing Logistics-Related Environmental Impact

Reducing the Environmental Impact of Logistics in Japan

Sharp observes a rule set forth in the Japanese Act on the Rational Use of Energy (Energy Conservation Act) that requires specified shippers to reduce energy intensity by 1% or greater per year. All Sharp Group companies in Japan are working to reduce the environmental impact and costs associated with logistics.

In fiscal 2021, Sharp Group greenhouse gas (GHG) emissions from shipping activities in Japan were up 7% from the previous fiscal year to 15,000 tons CO_2. For Sharp Corporation, energy intensity was improved by an average of 4.7% for the most recent five years (fiscal 2017 to 2021). Sharp is steadily implementing a modal shift[1], a change from conventional trucking to more environmentally friendly modes of transport, such as shipping (non-international coastal trading vessels) and rail (Japan Railways containers). And, by unloading imported goods at harbors chosen for their proximity to their main sales locations, Sharp is reducing re-transport between distribution centers. These efforts enable Sharp to reduce the environmental impact of its distribution activities. For shipments, Sharp has been certified with an Eco Rail Mark[2] by the Ministry of Land, Infrastructure, Transport, and Tourism and the Railway Freight Association.

[1] To shift freight transport from conventional trucking to more environmentally friendly modes of transport, such as rail and shipping.
[2] Products or companies that use a certain amount of rail transport for freight are given Eco Rail Mark certification. The mark is used on items such as product packaging and brochures to inform the public that a company uses environmentally friendly modes of transport.

■ **GHG Emissions from Freight Shipments (Japan)**

(Thousand tons CO_2)

Year	Value
2017	16
2018	19
2019	18
2020	14
2021	15

(Fiscal year)

Eco Rail Mark certification
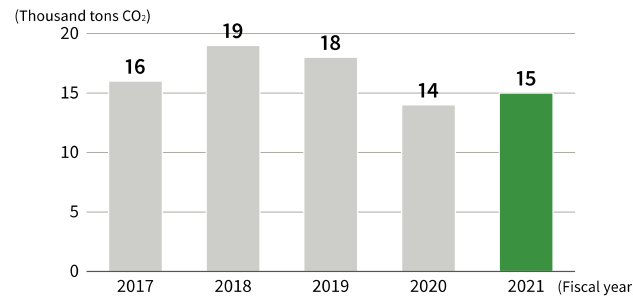
Reducing the Environmental Impact of International Logistics

Sharp has a wide range of initiatives to reduce the amount of GHGs that are emitted as a result of international shipping. The company is reducing airfreight volume as it switches to environmentally friendly modes of transport, and it is also improving load efficiency. Further, it is reviewing shipping routes and switching to harbors that are closer to the final destinations for products. Sharp is also switching to suppliers located closer to its factories. In fiscal 2021, Sharp's GHG emissions from international transport were 152 thousand tons CO_2.

Environmental Initiatives: Resource Recycling

Minimizing and Recycling Business Activity-Linked Waste

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Final landfill disposal rate of 0.5% or less	■ Final landfill disposal rate 0.50%	★★	■ Final landfill disposal rate of 0.5% or less

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Curbing the Amount of Waste, etc. Generated by the Sharp Group

Sharp has been working to reduce waste and to recycle as much of it as possible in an effort to contribute to building a circular economy. In fiscal 2021, the amount of waste, etc. generated by the Sharp Group increased by 16% compared to the previous fiscal year to 78,000 tons, due to disposal of old equipment and expansion of production. The amount of recycling increased by 12% from the previous fiscal year to 65,000 tons. The final landfill disposal rate was 0.50%, meeting our target. In Japan, as a result of continuously advancing efforts, such as recycling waste and waste liquids and turning them into valuable resources, the final landfill disposal rate was 0.03%, marking the 21st consecutive year of achieving zero discharge to landfills* since fiscal 2001. Going forward, Sharp will strengthen waste reduction efforts at overseas bases and aim to achieve zero discharge to landfill on a global scale.

* Sharp defines "zero discharge to landfill" as a final landfill disposal rate of less than 0.5%.
Final landfill disposal rate (%) = Amount of landfill disposal ÷ amount of waste, etc. generated x 100.

Appropriate Storage and Management of PCB Wastes

In Japan, Sharp properly stores and manages waste PCB (polychlorinated biphenyls) in accordance with the Act on Special Measures Concerning Promotion of Proper Treatment of PCB Wastes. Sharp is on track to finish treating PCB waste to make it harmless by the legally set March 31, 2027 deadline.

■ **Amount of Waste, etc.**

(Thousand tons)

Fiscal year	Value
2017	73
2018	75
2019	68
2020	67
2021	78

■ **Amount of Recycling**

(Thousand tons)

Fiscal year	Value
2017	72
2018	71
2019	62
2020	58
2021	65
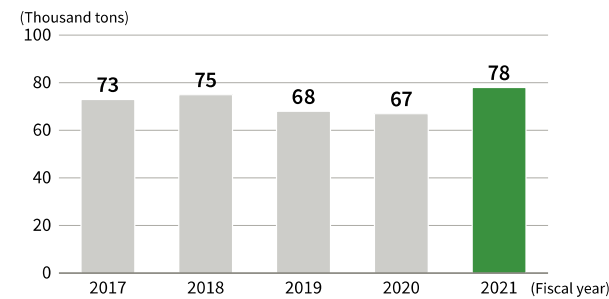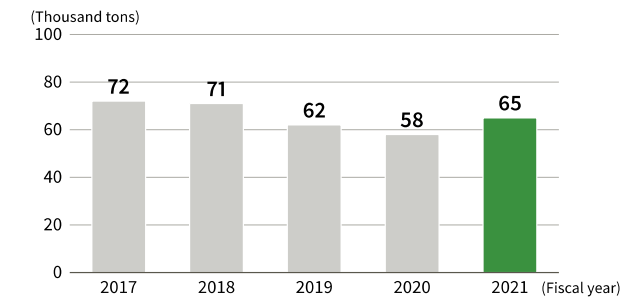
■ **Waste, etc. by Region (Fiscal 2021)**
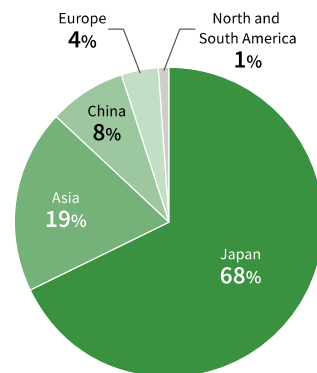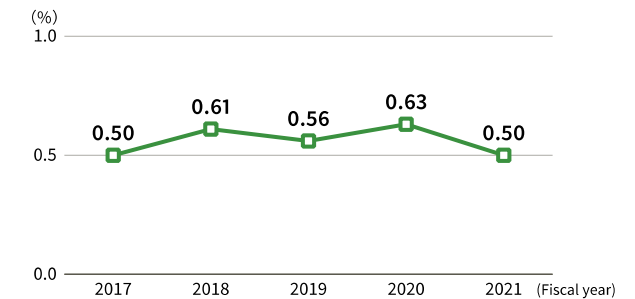
- Japan 68%
- Asia 19%
- China 8%
- Europe 4%
- North and South America 1%

■ **Final Landfill Disposal Rate**

(%)

Fiscal year	Value
2017	0.50
2018	0.61
2019	0.56
2020	0.63
2021	0.50

Environmental Initiatives: ⊚ Resource Recycling

Expanding the Recycling of Used Products

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Improve plastic recycling efficiency	■ Separating mixed plastic from urethane led to an increase in the amount of mixed plastic recovered	★★	■ Pursue recovery of motor core parts by material

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Recycling 4 Kinds of Home Appliances in Japan (Air Conditioners, TVs, Refrigerators, and Washing Machines)

As a member of the B Group[*1] for home appliance recycling, Sharp has constructed—and is operating—a highly efficient recycling system consisting of 18 recycling plants in Japan. In fiscal 2021, Sharp collected 2.345 million units (down 2% over the previous fiscal year) of the four types of appliances covered by the Home Appliance Recycling Act. The processed and recycled weight amounted to approximately 70,000 tons (down 1% over the previous fiscal year). For all four appliance types, Sharp's rate of recycling exceeded the legally stipulated levels.

*1 The B Group consists of Sharp Corporation, Sony Corporation, Hitachi Global Life Solutions, Inc., Fujitsu General Ltd., Mitsubishi Electric Corporation, and other companies.

Toward Making Better Use of Resources

Sharp and Kansai Recycling Systems Co., Ltd.[*2] have joined forces to make effective use of resources and to improve recycling efficiency. The urethane insulation material in refrigerators is shipped for use as fuel, but it contained plastic that had not been fully separated out. To address this, we introduced an additional air separator. By finely controlling wind power, we were able to sort and recover the plastic. This allowed more plastic to be recycled, boosting overall resource recycling. It also boosted the quality of the urethane used as fuel by minimizing impurities in it. In fiscal 2021, around 17% (by weight) of the recovered urethane was separated and collected as plastic.

*2 A consumer electronics recycling company established in Japan with joint investment from Sharp, Mitsubishi Materials Corporation, and four other companies.

■ Sharp Corporation's Recycling Results for 4 Home Appliance Types (Fiscal 2021)

Note: All figures are rounded down to the nearest whole number.

	Unit	Air Conditioners	CRT TVs	Flat-Panel TVs	Refrigerators/ Freezers	Washing Machines/ Dryers	Total
Units collected from designated collection sites	Thousand units	320	107	942	472	502	2,345
Processed and recycled units	Thousand units	322	110	970	482	510	2,397
Processed and recycled weight	Tons	13,144	2,455	15,742	27,994	20,196	79,531
Recycled weight	Tons	12,492	1,823	13,603	22,615	19,013	69,546
Recycling rate	%	95	74	86	80	94	—
Legally required recycling rate	%	80	55	74	70	82	—

Mixed plastic separated from recovered urethane

Environmental Initiatives: ⬡ Resource Recycling

Expanding the Recycling of Used Products

Reusing and Recycling Copiers and MFPs in Japan

Sharp is reusing and recycling copiers and MFPs collected both through Sharp distribution channels and through common industry channels. The company is also collecting used toner cartridges and remanufacturing them to the same quality standard of new products, thus assuring that customers will always get the same high quality. Sharp designs its toner cartridges for easy reuse and recycling. This ensures durability and reduces the amount of time needed to reprocess used cartridges.

Recycling Used Products Overseas
＜North America＞

In 2007, Sharp's American manufacturing and sales subsidiary SEC (based in New Jersey) established MRM[1] to manage recycling of AV products. Growing nationwide efforts have seen a total of 1,850 collection points established for used products. MRM operates in accordance with the laws and regulations of each state and recycled a total of 58,000 tons of used products in fiscal 2021.

[1] Electronic Manufacturers Recycling Management Company, LLC is a joint venture with Panasonic Corporation of North America and Toshiba America Consumer Electronics, LLC.

＜ Europe ＞

The EU WEEE Directive[2] (2012/19/EU) stipulates that the manufacturer is responsible for collecting and recycling products shipped within the EU. Each Sharp European sales company collaborates with established recycling entities in the EU sales region to meet this requirement. Efforts are also made to reduce the volume of landfill waste by taking into account regulations governing packaging materials and batteries.

[2] Waste Electrical and Electronic Equipment Directive

＜ Vietnam ＞

In Vietnam, the introduction of a recycling law in 2017 has obliged manufacturers and importers to establish a collection scheme for products sold within the country. Sharp's Vietnamese sales subsidiary SVN (based in Ho Chi Minh City) collects used products at collection points established in Vietnam and ensures they are processed appropriately by licensed recyclers for proper disposal.

＜ India ＞

India has recycling laws such as the E-Waste Management Rules and the Plastic Waste Management Rules. These laws impose extended producer responsibility (EPR) on manufacturers and others. All relevant parties—including manufacturers, importers, and regional governments—are required to cooperate in collecting and recycling used products and waste plastic packaging. SBI, Sharp's Indian sales subsidiary, has partnered with a local recycler, 3R Recycler, to carry out the recycling of used products. It also works with a local NGO, the Indian Pollution Control Association, to properly process waste plastic packaging.

Environmental Initiatives: ⊙ Resource Recycling

Environmental Technologies That Contribute to a Sustainable, Recycling-Based Society

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Practical application of recycled flame-retardant polypropylene	■ Developed recycled flame-retardant polypropylene that can be used in consumer durables such as home appliances	★	■ Practical application of recycled flame-retardant polypropylene ■ Basic development of environmentally friendly, halogen-free, flame-retardant recycled material

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Expanding Closed-Loop Plastic Material Recycling Technology

In recycling materials, such as when end-of-life plastic is reused to make new products, the open-loop material recycling scheme is commonly adopted. It involves reusing recycled materials to make things like daily necessities and sundries on the assumption that these goods are disposed of as municipal waste after use.

As opposed to this type of recycling, Sharp and Kansai Recycling Systems Co., Ltd.[1] jointly developed closed-loop plastic material recycling technology with a view to making better use of finite resources and reducing waste. This technology enables the repeated recovery of plastic from used consumer electronics products as well as the reuse of that plastic in parts of new consumer electronics products. The technology has been in practical use since fiscal 2001, when the Act on Recycling of Specified Kinds of Home Appliances (Home Appliance Recycling Act) was enacted in Japan.

Sharp has been striving to make more plastic recyclable through the development of new technologies. These include a technology for recovering high-purity PP (polypropylene) from mixed plastic parts and parts that contain metal; a technology for improving the properties of recovered PP/HIPS[2] and PC+ABS[3] materials so that their quality is on a par with that of virgin materials; a technology that gives materials added value by imparting properties such as flame retardancy, weather resistance, and an antibacterial property, with the aim of expanding applications for recycled plastic; and a quality-control technology for ensuring optimal quality. Thanks to the development and introduction of these technologies that integrate everything from recovery to quality control, Sharp has been able to establish closed-loop material recycling to produce high-grade recycled plastic.

The use of recycled plastic developed through Sharp's own closed-loop material recycling technology was extended to refrigerators, air conditioners, and washing machines released in fiscal 2021. In fiscal 2021, the cumulative total amount used since 2001 reached 20,000 tons.

■ Amount of Recycled Plastic Used (Cumulative)

(Thousand tons)
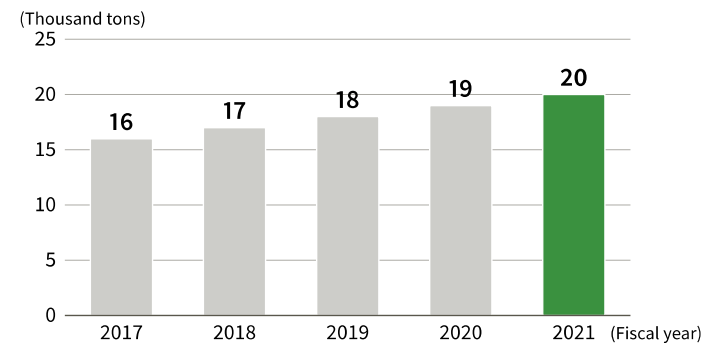
Related information: > Feature Article "Closed-Loop Plastic Material Recycling Technology"

[1] A consumer electronics recycling company established in Japan with joint investment from Sharp, Mitsubishi Materials Corporation, and four other companies.
[2] High-impact polystyrene (general-purpose polystyrene [GPPS] given impact resistance by adding rubber).
[3] A polymer alloy of polycarbonate and acrylonitrile, butadiene, and styrene (a resin given new properties as a result of mixing in several types of polymers).

Environmental Initiatives: Resource Recycling

Environmental Technologies That Contribute to a Sustainable, Recycling-Based Society

■ Recycling Plastic Recovered from the 4 Types of Home Appliances

Used home appliances (4 types)

Reuse in new products

Dismantling by hand → Single-ingredient materials (product in parentheses indicates material source)

PP (washing machine)　GPPS (refrigerator)　HIPS (TV)　PC+ABS (TV)

Coarse shredding → Mixed plastic

High-purity PP separation
Remove metals, different resins, and other foreign substances; separate and recover reusable PP

Formula for improving properties (mix with additives)
Make different resins compatible with one another*1, improve physical properties and durability

Formula for imparting new properties (mix with additives, blend resins)
Flame retardancy, weather resistance, etc., pigmentation (to make foreign particles hard to see), polymer-alloy*2

Quality control
Evaluate the amount of foreign particles mixed in, remaining life, etc.

Recycled plastic

Resource Recycling

*1 Blending multiple types of resins uniformly and finely dispersed into one another at the molecular level.
*2 A resin given new properties as a result of mixing in several types of resins.

■ Examples of Recycled Plastic Use

Refrigerator

Washing machine

Air Conditioner

Car Plasmacluster Ion generator

Handheld device (Handy Terminal) charger
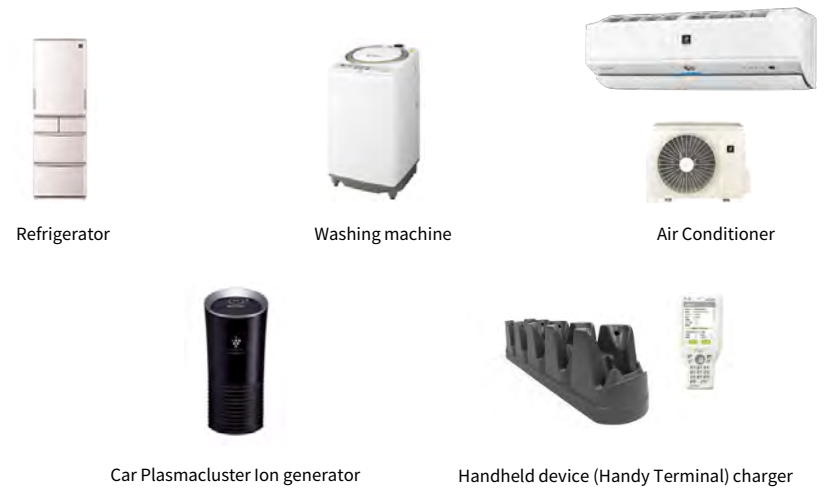
Product	Recycled Plastic	Part	Source
Refrigerator	PP	Divider	Refrigerator vegetable case
		Duct cover	Refrigerator vegetable case
		Handgrips	Washing machine top plate, outer cabinet, other
		Evaporator cover	Washing machine spin tub, balancer, other
	Flame-retardant PS	Electrical box	Flat-panel TV back cabinet + refrigerator tray
Washing machine	PP	Washing tub	Washing machine tub
Air Conditioner	PP	Condensation cover, motor holder	Washing machine spin tub, balancer, other
		Vertical louver, interlocking plate	Refrigerator vegetable case
	Flame-retardant PS	Substrate holder, substrate spacer	Flat-panel TV back cabinet + refrigerator tray
Car Plasmacluster Ion generator	Flame-retardant PC + ABS	Internal parts	Flat-panel TV back cabinet
Handheld device (Handy Terminal) charger	Flame-retardant PC + ABS	Charger	Flat-panel TV back cabinet

Environmental Initiatives: Resource Recycling

Environmental Technologies That Contribute to a Sustainable, Recycling-Based Society

Developing Recycled-Plastic Material with Added Value

In response to the increasing seriousness of pollution from used plastic, countries are enacting and enhancing various laws and regulations related to plastic recycling. There is a push to move away from the traditional linear economy, characterized by mass production, mass consumption, and mass disposal, and towards a circular economy, characterized by limited input and consumption of new resources and minimal waste production. In Japan, as well, society's attitude towards plastic usage has changed significantly, as evidenced by the enforcement of the Act on Promotion of Resource Circulation for Plastics*. The Act focuses on resource recycling across the entire life cycle of plastic products, making it increasingly important that plastic materials are properly disposed of and recycled.

Against this background, Sharp is pursuing greater recycling of used plastics, not only through horizontal recycling, in which used plastics are made as good as new material and incorporated into the same parts as they were originally used, but also through upgrade recycling, in which the recycled plastic is given added value with flame retardancy, weather resistance, or high stiffness.

In fiscal 2021, Sharp applied its own formulation technology to polypropylene recovered from used home appliances. The technology gives the polypropylene strong flame resistance and long-term durability while maintaining the physical properties demanded in home appliances. The resulting recycled flame-retardant polypropylene can be used in place of metal in parts that require a high level of safety, such as those used around power switches, control boards, and heaters. The practical application of this recycled plastic material holds promise for lighter and cheaper products, while also curbing the creation of waste plastic.

Sharp will expedite the practical application of recycled flame-retardant polypropylene. We will also develop plastic recycling technologies that can be applied to various products, thereby contributing to a circular economy.

* This law is focused on comprehensive plastic recycling across the entire life cycle of plastic-containing products, encompassing everything from manufacturer product design and production to waste disposal (effective as of April 1, 2022).

■ Used Plastic Recycling Method
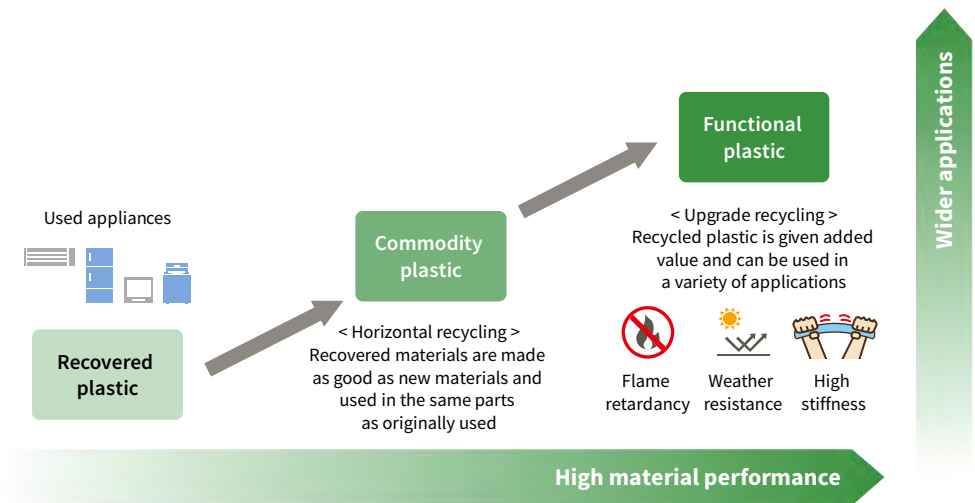
Recycled flame-retardant polypropylene

Environmental Initiatives: Resource Recycling

Effectively Using Water Resources

Sharp's Stance on Water Resources

Water resource problems are arising on a worldwide scale with the increase in the world's population, the economic growth of developing countries, climate change, and other factors. Sharp is striving to make effective use of water resources in line with the environmental conservation guidelines stipulated in Sharp's Basic Environmental Philosophy, the Sharp Group Charter of Corporate Behavior, and the Sharp Code of Conduct. In particular, Sharp recognizes that securing the water resources necessary for the production of LCDs and other electronic devices is a serious issue that could affect business continuity. That is why Sharp is pursuing the reduced use of new water and an increased use of recycled water.

Sharp Group Reducing the Amount of New Water Used and Using More Recycled Water

The volume of new water used by the Sharp Group in fiscal 2021 increased by 18% compared to the previous fiscal year to 10.6 million m3. This increase was due to the launch of full-scale operations at newly acquired production sites, among other factors. The improvement rate of water intensity was –2%, compared to the baseline year of fiscal 2012.

To minimize the effects on business continuity of the risk of water shortages, Sharp assesses water risk at its plants using the Aqueduct assessment tool developed by the World Resources Institute (WRI). SATL, Sharp's production base in Thailand, is located in an area of highest risk. It is therefore reducing its use of new water by recycling water discharged from the production process and other sources. The Kameyama Plant (Kameyama, Mie Prefecture, Japan) and the Mie Plant (Taki District, Mie Prefecture, Japan) require a large amount of water in the production process for LCDs and other products. All of the water discharged from the production process is collected and reused via a closed-loop recycling

system adopted at both plants. Through measures such as this, the Sharp Group is maintaining a recycling rate* of at least 60%. Looking ahead, Sharp will pursue further water-use efficiency worldwide and boost production efficiency in accordance with business expansion.

* Recycling rate = Amount recycled ÷ (amount of new water + amount recycled)

■ **Volume of New Water Used**
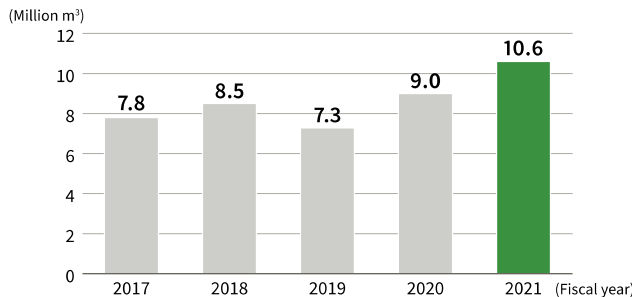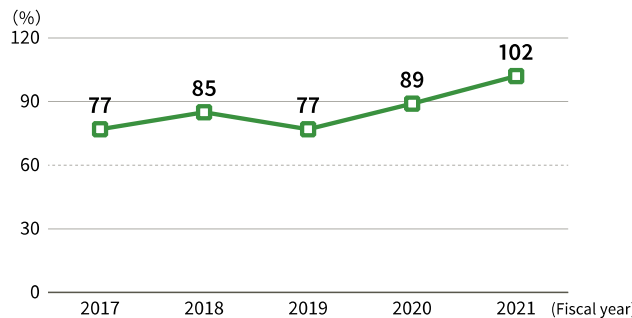
(Million m³)

Fiscal year	2017	2018	2019	2020	2021
	7.8	8.5	7.3	9.0	10.6

■ **Water Intensity (Baseline Year: Fiscal 2012)**

(%)

Fiscal year	2017	2018	2019	2020	2021
	77	85	77	89	102

■ **Water Recycling Rate**

(%)

Fiscal year	2017	2018	2019	2020	2021
	66	64	67	65	61

52
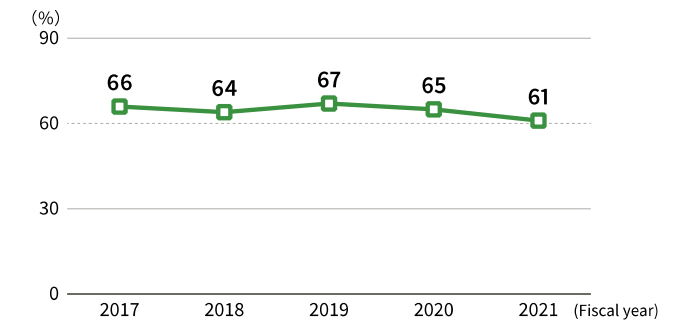
Environmental Initiatives: Resource Recycling

Effectively Using Water Resources

■ Water Used and Drainage by Region (Fiscal 2021)

(m³)

Region	Water withdrawal[1]			Effluent					Amount consumed[3]	Amount recycled
	Third-party water[2]	Groundwater	Total	Surface water	Sewerage	Seawater	Groundwater	Total		
Japan	7,242,830	769,214	8,012,044	4,236,896	336,111	1,822,598	0	6,395,605	1,616,439	16,027,410
Asia	937,043	13,254	950,297	112,598	505,440	0	0	618,038	332,259	95,800
China	1,632,688	4,583	1,637,271	0	1,353,038	0	0	1,353,038	284,233	279,588
North and South America	5,296	0	5,296	0	5,296	0	0	5,296	0	0
Europe	9,415	0	9,415	0	9,224	0	0	9,224	191	0
Total	9,827,272	787,051	10,614,323	4,349,494	2,209,109	1,822,598	0	8,381,201	2,233,122	16,402,798

*1 Surface water, seawater, and produced water was 0.
*2 Industrial-use water and tap water
*3 Water consumption = Water withdrawal – Effluent
*4 Under Aqueduct, each region is assigned a water stress score. There are five levels, from rank 1 (low risk) to rank 5 (high risk).
*5 Areas with an Aqueduct water stress score of rank 4 or higher

■ Volume of New Water Used by Water Stress Rank[4] (Fiscal 2021)

Rank 5 2%
Rank 1 0%
Rank 2 2%
Rank 4 8%
Rank 3 88%
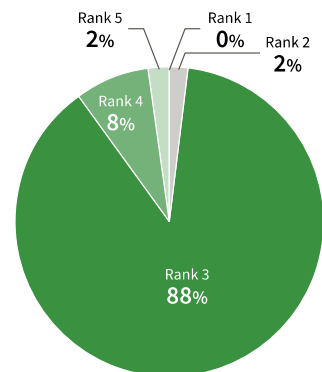
■ Volume of New Water Used in Water Stressed Regions[5] (Fiscal 2021)

(m³)

Region	Third-party water	Ground-water	Surface water	Seawater	Produced water	Total
Japan	22,212	0	0	0	0	22,212
Asia	834,523	0	0	0	0	834,523
China	207,779	0	0	0	0	207,779
North and South America	0	0	0	0	0	0
Europe	0	0	0	0	0	0
Total	1,064,514	0	0	0	0	1,064,514

Environmental Initiatives: ⟲ Resource Recycling

Effectively Using Water Resources

Case Study

Closed-Loop Water Recycling System

The Mie Plant (Taki District, Mie Prefecture) has adopted a closed-loop water recycling system to repeatedly recycle the large amount of water used for the production of displays. The water discharged from the production process contains chemicals that must not be released from the plant untreated. All of this water is collected and goes through steps such as biofiltration (the natural decomposition of chemicals using microorganisms) and filter filtration, before being purified with dedicated equipment. The resulting water is used repeatedly in production.

■ **Closed-Loop Water Recycling Flow**

Production process
Large amounts of water are used to wash chemicals off displays

Effluent

Pure water

Filtration/pure water production
The water goes through filters and is then purified using dedicated equipment

Recycled water

Effluent treatment
Microorganisms growing in tanks decompose the chemicals
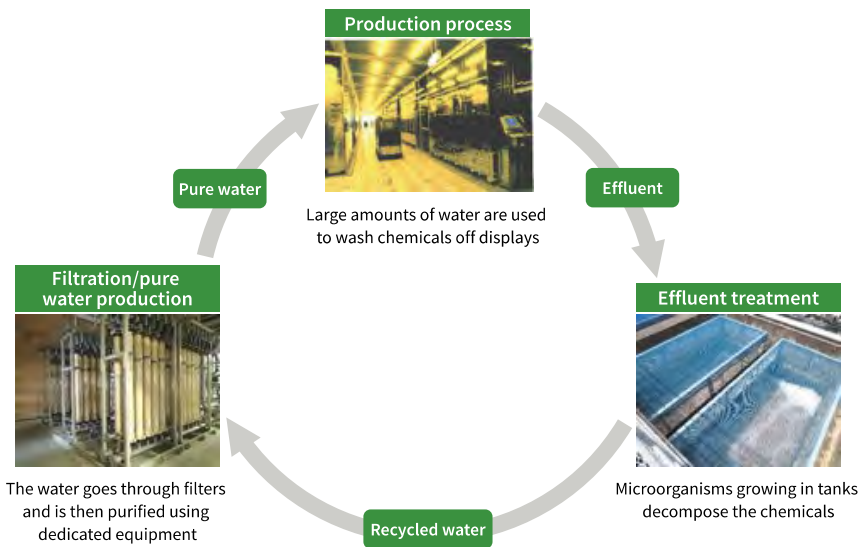
Case Study

Recycling Wastewater to Reduce the Amount of New Water Used

At SATL, a production base in Thailand, large volumes of water are discharged from the production process and restrooms. This water was previously released into a nearby river after being properly treated. But now SATL is using newly installed water recycling equipment to purify that water and use it in the production process. The greywater* generated by this recycling process is kept in storage tanks and used for restrooms and for watering the factory's green areas. Thanks to these efforts, SATL has been able to reduce the consumption of clean water by about 24% (71,000 m^3) per year.

* Water that is unfit for drinking but is not harmful to the human body or the environment.

■ **Recycling Flow**

Wastewater from the production process

Water recycling equipment

Treatment

Pure water

Production facilities

Effluent

Greywater

Storage tanks

Watering

Restrooms

Water recycling equipment

Greywater storage tanks
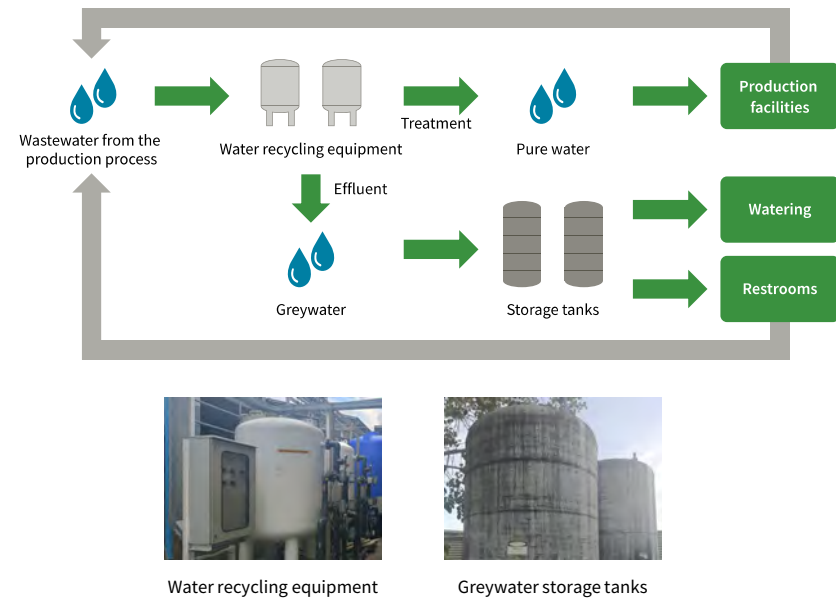
Environmental Initiatives: Safety and Security

Sharp's Stance on Management of Chemical Substances

Sharp's products are built from a plurality of parts and materials and contain wide-ranging chemical substances. Our production processes at factories also use chemical substances. Chemical substances are useful for enhancing the performance and quality of products, whereas some of them may have negative effects on the natural environment and human health. There were pollution and environmental problems caused by chemical substances in the past. Today, regulations to manage chemical substances are imposed in many countries. Some include prohibited or restricted use of specified chemical substances and labeling requirements, and others require the management of information on product content data, reporting of the amounts discharged into the atmosphere and water areas, management of the working environment, and occupational health management.

In accordance with our Basic Environmental Policy of "Creating an Environmentally Conscious Company with Sincerity and Creativity," the Sharp Code of Conduct stipulates the management of chemical substances as follows, on the precondition of compliance with applicable environmental laws, regulations, and regional agreements.

- We will work to compile information related to hazardous substances that might damage the environment or human health, and will not, as a matter of principle, make use of these hazardous substances in our products and services.

- We will ensure proper use and control, and also reduce our consumption of chemical substances in our business activities, including research, development, and manufacturing, at levels meeting or exceeding those stipulated by laws and regulations.

To "properly manage chemicals in order to protect people's health, the natural environment, and ecosystems" is another goal of Sharp. It is a long-term objective set in the SHARP Eco Vision 2050 long-term environmental vision in the safety and security field of action.
An example of our specific efforts to manage chemical substances in products is Delivered Goods Evaluation, in which we check chemical substances contained in components and materials delivered for our production in cooperation with our suppliers. It allows us to monitor and manage information on chemical substances contained in our products. At the factory-level, the process assessment system is in place. It is a preliminary assessment of new chemical substances to be used or equipment retrofitted or modified for handling chemical substances and is performed to check their safety and environmental impact.

■ **Chemical Substance Management System**
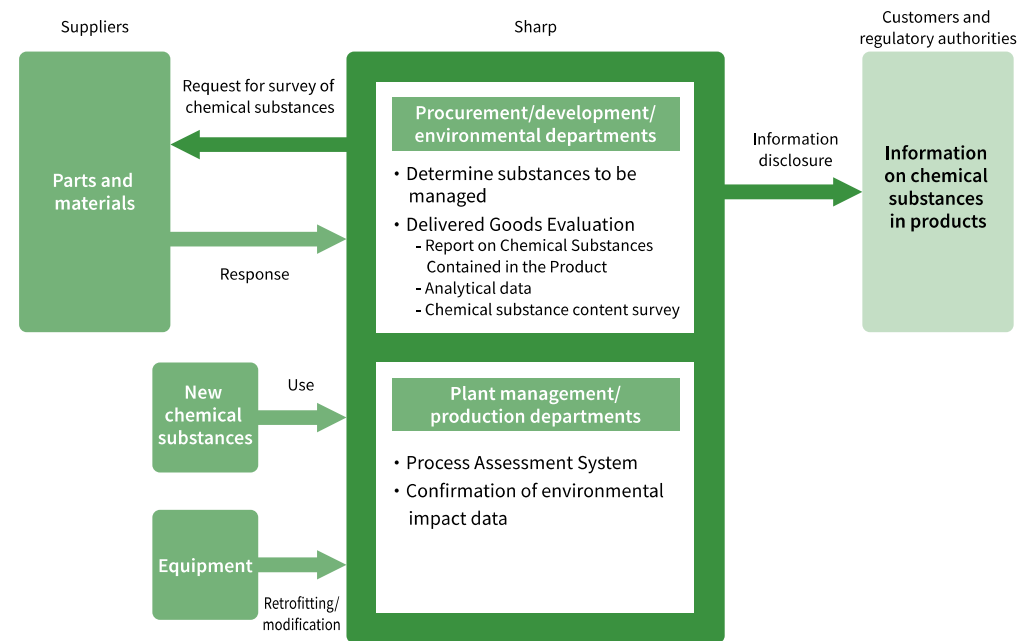
SHARP Sustainability Report 2022

Environmental Initiatives: ⊘ Safety and Security

Managing Chemical Substances Contained in Products

In order to reduce environmental impacts of its products and to comply with chemical substance regulations in relevant countries, Sharp manages chemical substances contained in its products in accordance with its own management categories that take into account applicable laws and regulations in relevant countries, voluntary standards set by industry groups, and even potential future regulations. We determine chemical substances that we should manage according to these categories, notify suppliers, and conduct a survey of chemical substances contained in products to obtain chemical substance content data.

Determining Which Chemical Substances to Manage

Sharp's Standard Manual for Management of Chemical Substances Contained in Parts and Materials is made available to the public to clarify the chemical substances it manages according to its own management categories. This manual divides the target chemical substances into three categories: banned substances, substances banned depending on the application, and managed substances. For each category, applications, criteria values, and the date of total abolition are defined.

■ **Management Categories of Chemical Substances**

Category	Description	Remarks
Banned substances	Substances that cannot be used for any purpose	● Substances whose inclusion in products is currently regulated or is expected to be regulated in the future under laws and regulations and on environmental labels in Japan or overseas
Substances banned depending on the application	Substances regarded as banned by Sharp depending on the application (excluded applications)	● Substances that Sharp regulates on its own initiative in advance of global trends because it is widely known that their environmental impact is high and alternative substances exist
Managed substances	Substances for which it is necessary to ascertain whether the specified substance is present, the amount contained, and so on	● Substances for which disclosure of information on their usage status in products is required, or is expected to be required in the future, under laws and regulations and on environmental labels in Japan or overseas ● Substances for which customers have requested, or for which there is a possibility of being requested, that their usage status information in products be disclosed

Related information: >
Standard Manual for Management of Chemical Substances Contained in Parts and Materials

Delivered Goods Evaluation

We conduct Delivered Goods Evaluation in cooperation with suppliers. Its purpose is to assess the chemical substances contained in parts and materials (materials, general components, finished and semi-finished products, indirect materials, others) sourced from suppliers according to the chemical substance management categories. Information obtained through the Delivered Goods Evaluation is used for understanding chemical substances contained in products and compiling information to be shared with our supply chain.

Report on Chemical Substances Contained in the Product and Analysis Data

Sharp's suppliers are required to submit a Report on Chemical Substances Contained in the Product before they deliver a new component or material for the first time. This is used to confirm their conformity with the regulations prohibiting the use of specific chemical substances in products in relevant countries. With this report, we check the presence of banned substances and decide whether to purchase the component or material.

Suppliers must also submit analysis data on the 10 substances regulated under the EU RoHS Directive[*] (lead, mercury, cadmium, hexavalent chromium, PBB, PBDE, DEHP, BBP, DBP, and DIBP) for confirmation of compliance with the regulatory requirements.

* An EU directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Related information: > Report on Chemical Substances Contained in the Product, Analysis Data

Environmental Initiatives: Safety and Security

Managing Chemical Substances Contained in Products

Chemical Substance Content Survey

The EU REACH regulations[1] and other legal requirements in countries around the world oblige companies to communicate and disclose information on chemical substances contained in their products throughout their supply chain. To meet these requirements, it is necessary to have a system through which all supply chain partners—whether supplying raw materials, materials, parts, or finished products—cooperate to gather, aggregate, and share information on chemical substances. Sharp's suppliers are asked to enter information on how much chemical substances are contained in their parts and materials, and where, in the Chemical Substance Content Survey System. This helps us gather information on chemical substances contained in our products, which is then used to manage and aggregate data on our chemical substance management system. For information collection, Sharp also utilizes chemSHERPA[2], an information sharing scheme compliant with the IEC 62474[3] international standard.

Sharp has also been registered with the SCIP[4] database since January 2021. SCIP is one of the EU's measures aimed at building a circular economy.

*1 An EU regulation mandating the registration, evaluation, authorization, and restriction of chemical substances manufactured or imported into the EU.
*2 An information sharing scheme developed under the leadership of the Japanese Ministry of Economy, Trade and Industry for the purpose of efficiently communicating information on chemical substances in products over the entire supply chain.
*3 An international standard on the procedures and details of information sharing in the supply chain for products and components in the electrical and electronics industry containing chemical substances.
*4 SCIP: Substances of Concern in articles as such or in complex objects (Products). A database for information on substances of very high concern (SVHCs) managed by the European Chemicals Agency.

■ Delivered Goods Evaluation (Evaluative Process for Newly Delivered Parts and Materials)

Environmental Initiatives: Safety and Security

Effective Management of Chemical Substances Used at Factories and Their Risk Management

Sharp strives to minimize the risk of environmental pollution and accidents associated with chemical substances and to properly meet chemical substance regulations. To this end, Sharp controls chemical substances used at, and released from, its production bases by implementing the process assessment system and the monitoring and risk management of chemical substances. To minimize the environmental impact and ensure occupational safety, workers handling chemical substances go through regular education and training. They also receive regular health checks.

Process Assessment System

The process assessment system is Sharp's in-house system for preliminarily assessing the hazards, safety measures, and other factors of chemical substances. This assessment applies when a new chemical substance is to be introduced or when the procedure for handling chemical substances needs to be changed, for example. The system ensures that chemical substances are properly managed at all stages from procurement to disposal and that safety measures are implemented for the equipment handling them. It is designed to review the appropriate disposal of waste chemical substances, the proper treatment of exhaust gas and wastewater, and safety procedures for workers handling chemical substances, and to evaluate and determine the conditions for the safe use of chemical substances. Chemical substances are grouped into four categories according to their gravity of impact on safety/health, hazard/explosion, and environmental conservation: legally banned substances, sensitive substances, managed substances, and registered substances. An appropriate management level is assigned to each category.

■ Chemical Substance Management Categories under the Process Assessment System

Category	Description
Legally banned substances	Chemical substances that are banned for production, etc. under laws and regulations. Substitutes for them need to be searched for.
Sensitive substances	Chemical substances that are not legally banned but are banned by Sharp for use due to their high levels of toxicity (acute toxicity/carcinogenicity) or hazards (explosiveness/flammability). Substitutes for them need to be searched for.
Managed substances	Chemical substances that have toxicity (corrosiveness/irritancy), hazards (combustibility/spontaneous combustibility), or other concerns but may be used under adequate control.
Registered substances	Chemical substances that have limited toxicity or hazards and thus may be used under specified control.

Monitoring and Risk Management of Chemical Substances

Sharp has established voluntary standards that are stricter than either the regulatory requirements or the levels agreed upon with local communities for chemical substances used at its production bases. These standards ensure the comprehensive monitoring and management of the target chemical substances released and transferred, as well as the concentrations and emissions of air and water pollutants.

Environmental Initiatives: Safety and Security

Release and Transfer of PRTR-listed Substances

Sharp monitors and reports the release and transfer of chemical substances covered by the Japanese PRTR[1] Act. Of these PRTR chemicals, 18 were handled in Japan and nine overseas[2] in quantities of 500 kg or more by one or more plants during fiscal 2021.

[1] PRTR: Pollutant Release and Transfer Register. A system that mandates the collection and dissemination of information, such as the amount of harmful chemicals discharged and transferred.
[2] Sharp defines target substances based on laws in Japan.

■ PRTR Data for Japan (Fiscal 2021)

(kg)

PRTR No.	Chemical	Amount Handled	Amount Discharged		Amount Transferred		Amount Consumed		Amount Removed
			Into Atmosphere	Into Public Water Areas	Into Sewerage	Into Waste, etc.	Contained in Products	Recycled	
1	Zinc compounds (water-soluble)	1,037	0	0	0	929	0	108	0
20	2-Aminoethanol	2,754,254	982	0	0	118,073	52	2,168,218	466,929
44	Indium and its compounds	16,489	0	0	0	4,452	494	11,543	0
71	Ferric chloride	53,111	0	0	0	0	0	35,498	17,613
80	Xylene	3,840	19	0	0	0	3,821	0	0
82	Silver and its water-soluble compounds	527	0	0	0	142	16	369	0
135	2-methoxyethyl acetate	289,000	730	0	0	0	0	236,350	51,920
232	N, N-dimethylformamide	29,187	0	0	0	0	0	0	29,187
272	Copper salts (water-soluble, except complex salts)	33,911	0	0	0	18,490	12,886	1,696	839
296	1,2,4-trimethylbenzene	19,621	26	0	0	725	5,094	13,776	0
297	1,3,5-trimethylbenzene	3,458	0	0	0	173	0	3,285	0
343	Pyrocatechol (also called catechol)	1,749	0	0	0	1,749	0	0	0
374	Hydrogen fluoride and its water-soluble salts	616,357	786	0	0	490,829	0	59,199	65,543
401	1,2,4-benzenetricarboxylic 1,2-anhydride	3,146	0	0	0	223	2,923	0	0
405	Boron compounds	4,356	22	0	0	3,416	78	840	0
412	Manganese and its compounds	17,844	0	0	0	515	17,329	0	0
438	Methylnaphthalene	11,096	50	0	0	0	11,046	0	0
453	Molybdenum and its compounds	21,474	0	0	0	5,286	644	15,544	0
Total		**3,880,457**	**2,615**	**0**	**0**	**645,002**	**54,383**	**2,546,426**	**632,031**

Environmental Initiatives: Safety and Security

Release and Transfer of PRTR-listed Substances

■ **Overseas PRTR Data (Fiscal 2021)**

(kg)

PRTR No.	Chemical	Amount Handled	Amount Discharged		Amount Transferred		Amount Consumed		Amount Removed
			Into Atmosphere	Into Public Water Areas	Into Sewerage	Into Waste, etc.	Contained in Products	Recycled	
31	Antimony and its compounds	814	0	0	0	8	542	264	0
71	Ferric chloride	2,919	0	0	0	0	2,919	0	0
82	Silver and its water-soluble compounds	835	0	0	0	117	718	0	0
104	Chlorodifluoromethane (also called HCFC-22)	950	3	0	0	0	947	0	0
291	1,3,5-tris (2,3-epoxypropyl)-1,3,5-triazine-2,4,6 (1H,3H,5H)-trione	1,457	0	0	0	15	970	472	0
300	Toluene	8,561	8,561	0	0	0	0	0	0
392	N-hexane	30,022	30,022	0	0	0	0	0	0
413	Phthalic anhydride	971	0	0	0	10	646	315	0
448	Methylenebis(4,1-phenylene) diisocyanate	2,593,140	0	0	0	37,860	2,555,280	0	0
	Total	**2,639,669**	**38,586**	**0**	**0**	**38,010**	**2,562,022**	**1,051**	**0**

Environmental Initiatives: Safety and Security

Managing Environmental Load into Air and Water Areas

Sharp properly manages pollutants that affect air and water quality by establishing voluntary standards that are stricter than those set forth in laws and regulations and stricter than those agreed upon with local communities. It also actively conducts risk communication with local communities.

Reducing VOCs

Sharp strives to reduce the volatile organic compounds (VOCs) it emits. It has set a target of keeping VOCs released into the atmosphere to no higher than fiscal 2010 levels (based on a voluntary action plan by the Japanese electrical and electronics industry). Fiscal 2021 VOC emissions were 72 tons, approximately 65% less than in fiscal 2010.

Sharp is reducing VOCs with the installation of highly efficient abatement facilities in LCD production sites, a major source of VOC emissions.

Atmospheric Emissions in Japan

■ NOx Emissions

(Tons)

2017	2018	2019	2020	2021
54	45	34	41	15

(Fiscal year)

■ SOx Emissions

(Tons)

2017	2018	2019	2020	2021
2.0	1.7	1.1	1.0	0.9

(Fiscal year)
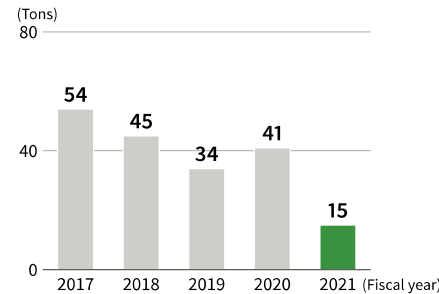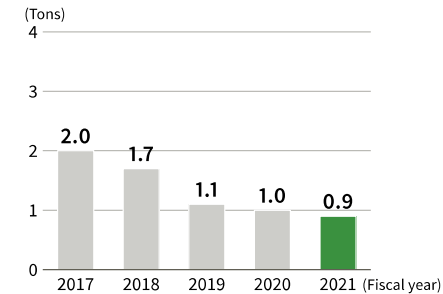
Emissions into Water Areas in Japan

■ VOC Emissions into the Atmosphere
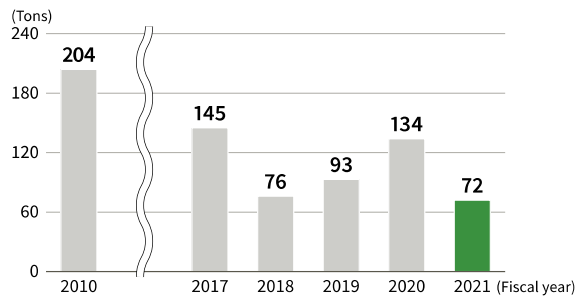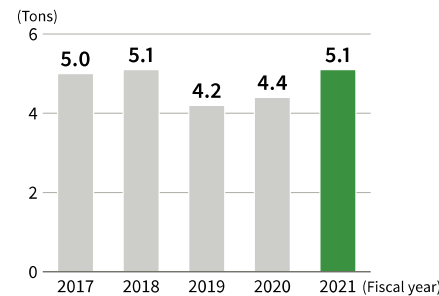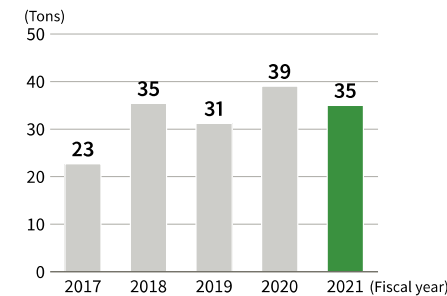
(Tons)

2010	2017	2018	2019	2020	2021
204	145	76	93	134	72

(Fiscal year)

■ COD (Chemical Oxygen Demand)

(Tons)

2017	2018	2019	2020	2021
5.0	5.1	4.2	4.4	5.1

(Fiscal year)

■ Nitrogen Pollutant Load

(Tons)

2017	2018	2019	2020	2021
23	35	31	39	35

(Fiscal year)

■ Phosphorous Pollutant Load

(Tons)

2017	2018	2019	2020	2021
1.7	1.2	0.5	0.2	0.1

(Fiscal year)
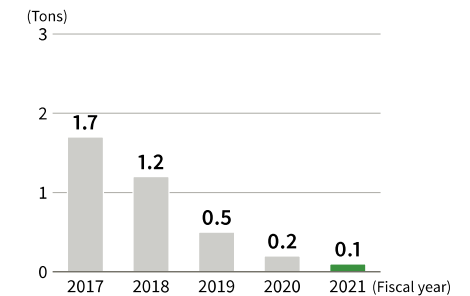
Environmental Initiatives: 🤲 Safety and Security

Managing Environmental Load into Air and Water Areas

Risk Management of Soil and Groundwater Pollution

Sharp has established and is appropriately applying in-house standards to minimize the risk of environmental pollution and accidents caused by chemical substances. It also strives to prevent such incidents from occurring by taking multi-layered leakage prevention measures at facilities that handle chemical substances. For plants where chlorine solvent contamination was found in the past, Sharp regularly notifies local government authorities and others of the cleanup progress.

Case Study

Analyzing Plant Wastewater Samples

Sharp's Fukuyama Plant (Fukuyama, Hiroshima Prefecture) collects and analyzes plant wastewater in collaboration with local residents and Fukuyama city officials as part of its risk communication activities. The collected wastewater undergoes individual analyses by the three parties. The results are then shared and used for an exchange of views. This also provides Sharp the opportunity to foster good relations with all relevant parties.

Wastewater sampling and analyses by three parties

Environmental Initiatives: Environmental Management

Putting Sustainable Management into Practice

In accordance with internal environmental conservation guidelines established in line with Sharp's Basic Environmental Philosophy, the Sharp Group Charter of Corporate Behavior, and the Sharp Code of Conduct, Sharp is pursuing environmental consciousness across all of its business activities. Toward realizing a sustainable global environment, Sharp has formulated SHARP Eco Vision 2050, a long-term environmental vision with 2050 as the target year. Under this vision, Sharp is striving to solve social problems and continuously raise corporate value through the development of technologies and the provision of products and services.

Promoting Sustainable Management

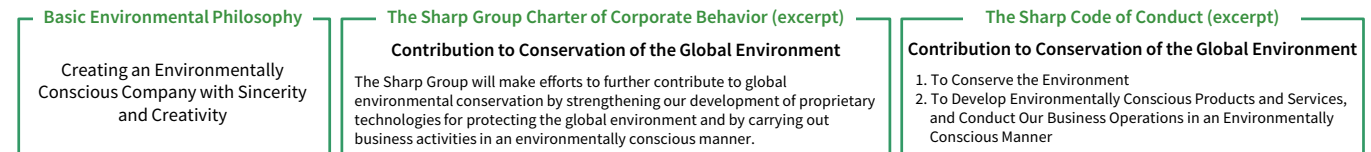Sharp Corporation has set up the ESG Promotion Office as an organization to formulate and carry out the company-wide policies, goals, and environmental vision and strengthen company-wide environmental governance.

The ESG Promotion Office formulates important environmental policies and strategies at the corporate level regarding sustainable management based on Sharp's management policies and environmental vision. Other roles of the organization include establishing the Sharp Global SER Committee*, which comprises senior executives such as heads of Sharp business units and subsidiaries, deciding on Sharp's environmental measures, formulating Sharp's environmental goals and guidelines, confirming progress toward environmental goals, implementing the PDCA cycle toward them, and supporting environmental activities.

In the area of product environmental laws and regulations and chemical substance controls, we periodically hold information exchange meetings to ensure compliance with applicable requirements. Working groups and expert committees are also established as required to address environmental issues that call for cross-functional efforts.

* See page 12.

Basic Environmental Philosophy

Creating an Environmentally Conscious Company with Sincerity and Creativity

The Sharp Group Charter of Corporate Behavior (excerpt)

Contribution to Conservation of the Global Environment

The Sharp Group will make efforts to further contribute to global environmental conservation by strengthening our development of proprietary technologies for protecting the global environment and by carrying out business activities in an environmentally conscious manner.

The Sharp Code of Conduct (excerpt)

Contribution to Conservation of the Global Environment

1. To Conserve the Environment
2. To Develop Environmentally Conscious Products and Services, and Conduct Our Business Operations in an Environmentally Conscious Manner
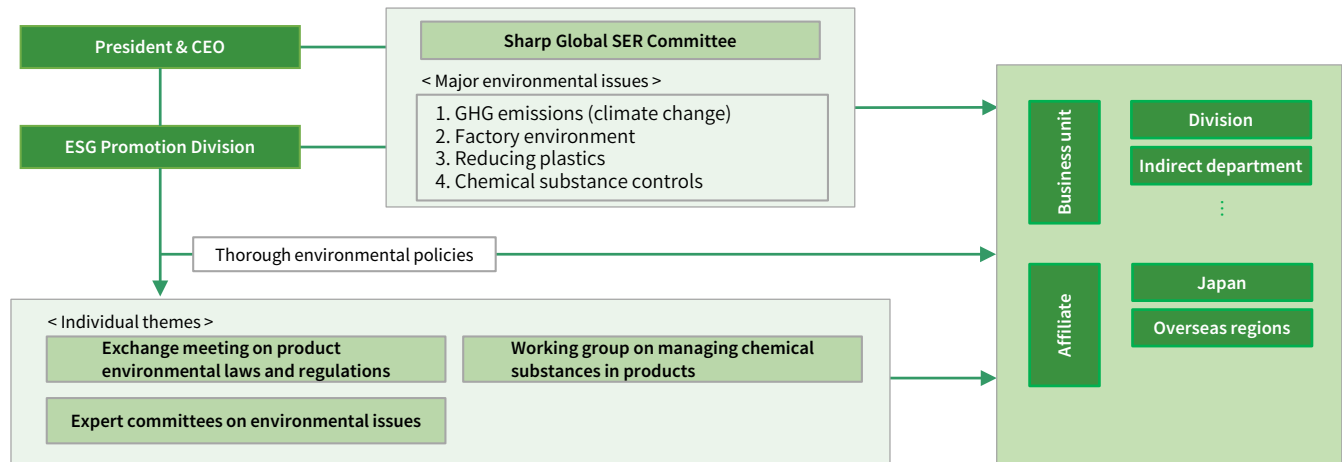
Related information: > Sharp Group Charter of Corporate Behavior (Contribution to Conservation of the Global Environment)
Sharp Code of Conduct (IV. Contribution to Conservation of the Global Environment)

■ **System for Promoting Sustainable Management in the Environmental Area**

Environmental Initiatives: Environmental Management

Putting Sustainable Management into Practice

Environmental Education

In accordance with the basic strategy of its management policy—foster and strengthen human resources—Sharp strives to step up the cultivation of human resources as the foundation of its sustainable management. To this end, the company has been providing training programs, including basic training open to all employees.

Since fiscal 2019, Sharp has held an e-learning course called environmental awareness training to help all employees acquire a wide range of environmental knowledge, and an introductory online training course on environmental laws and regulations that is mandatory for third-year employees.

In fiscal 2021, Sharp held CMS[1] auditor training, training on laws and regulations on chemical substances contained in products, and training on surveying chemical substances in products. Individual plants also held their own training sessions. For example, the Katsuragi Plant (Katsuragi, Nara Prefecture) held an introductory session on environmental management systems (ISO 14001[2]) for newly appointed environmental managers as well as training for employees who handle chemical solutions and gases. The Fukuyama Plant (Fukuyama, Hiroshima Prefecture) held environmental awareness training on climate change and the latest trends in energy issues.

With the aim of fostering human resources who will contribute to the company in stepping up compliance and achieving its environmental vision, Sharp will continue to improve and expand its environmental education curricula by adjusting them to different duties and roles.

[1] Chemical Management of Supplier
[2] A set of international standards concerning the environment that seeks to help companies and other organizations minimize their operations' negative impact on the environment.

Environmental Performance Data Collection and Management

To support sustainable management, Sharp has established a system for efficiently collecting and managing data on Sharp's environmental performance, including energy consumption, waste generation, water usage, and chemical substances handled in Sharp's business activities. This system is in operation at Sharp bases in Japan and overseas. Collecting and analyzing such data helps Sharp grasp the current state of its sustainable management, identify problems, and formulate measures.

Promoting an Environmental Management System

Since 1995, Sharp has been operating an ISO 14001-based environmental management system and has acquired ISO 14001 certification for all worldwide production bases[3]. The purpose of this system is to strengthen environmental sustainability management and improve the environmental awareness of employees.

ISO 14001 was revised in fiscal 2015. It now requires companies to further their efforts with a more strategic perspective—for example, by integrating their environmental activities with business activities. In response to the revision, Sharp is operating a more effective environmental management system that matches the particular needs of each base.

Related information: > ISO 14001-Certified Plants and Offices (PDF: 111 KB)

[3] Excluding bases operating less than one year.

Product and Plant Audits

Sharp regularly carries out a Green Product/Green Device Audit aimed mainly at ensuring compliance in product development. The company checks compliance with the environmental laws and regulations of each country and the reflection of environmentally friendly design in products, such as energy efficiency, resource savings, and recyclability.

Sharp also reviews and evaluates environmental activities at its production bases as part of the CSR self-assessment survey[4]. To strengthen governance and reduce risks, our survey in fiscal 2021 was focused on interviews at sites that have just joined the Sharp Group through M&A or other partnerships.

[4] See page 15.

Legal Violations, Accidents

In fiscal 2021, Sharp was not subject to any lawsuits or fines related to environmentally related legal violations. There were also no major environmentally related accidents.

Environmental Initiatives: Environmental Management

Developing Environmentally Conscious Products and Devices

Developing Green Products and Devices

Sharp calls its environmentally conscious products "Green Products (GP)". The GP Guidelines, which define development and design criteria in line with seven concepts, have been in use at all product design departments since fiscal 1998. In developing products, Sharp sets specific objectives according to the GP Standard Sheet, which is formulated based on the GP Guidelines. In the trial manufacture and mass production stages, it determines how well the actual product has met these objectives. The content of the GP Standard Sheet—the benchmark for development objectives—is revised each year in order to constantly improve the environmental performance of Sharp products. Sharp sales and manufacturing bases in Europe, ASEAN countries, and the Middle East meet periodically to keep abreast of changing product environmental laws and regulations around the world. The information gathered at these meetings is shared with Sharp business units in Japan and the legal requirements relating to product design are reflected in the GP Guidelines.

Sharp calls its environmentally conscious devices "Green Devices (GD)". To define guidelines for development and design based on seven concepts, Sharp established the GD Guidelines, which it began applying at all device design departments in fiscal 2004. Sharp sets objectives according to the GD Standard Sheet and assesses how objectives have been met in a similar way to GP standards. In fiscal 2013, Sharp revamped the GD assessment system by adding new criteria concerning forward looking initiatives that take customer demands into consideration. The degree to which these criteria are satisfied is represented in points called GD Challenge Points. The assessment criteria are revised every year so that Sharp can continuously raise the environmental performance of its products such as LCD modules and sensors.

■ **Green Product Concepts**

Energy Saving / Energy Creating
Products with superb energy-saving / energy-creating performance
Improve the energy efficiency and reduce the energy consumption of products; other measures

Resource Conservation
Products designed to conserve resources
Reduce the amount of materials used; design products that conserve resources during use; extend the life span of products; other measures

Recyclability
Products designed for recycling
Design products that are easy to disassemble; use easy-to-recycle materials; other measures

Safe Use and Disposal
Products that can be used and disposed of safely
Do not use substances that negatively affect people's health or the environment; other measures

Use of Green Materials and Devices
Products that use green materials and devices
Use recycled materials / plant-based plastics; other measures

Environmental Consciousness Pertaining to Batteries, etc.
Products that use batteries, manuals, and packaging with enhanced environmental consciousness
Reduce product packaging; design products that allow easy removal of batteries; other measures

Showing Eco Information of Products
Products that show their environmental performance and information
Acquire environmental labels (eco labels); implement LCA; other measures

■ **Green Device Concepts**

Energy Efficiency / Energy Creating
Devices with superior energy efficiency and that consume less energy
Reduce power consumption during operation and in standby mode; other measures

Resource Conservation
Devices designed to conserve resources
Reduce device weight or volume; other measures

Recyclability
Devices designed for recycling
Use standard plastic; design devices that are easy to disassemble; other measures

Safe Use and Disposal
Devices that can be used and disposed of safely
Manage usage of chemical substances contained in parts and materials; other measures

Long Life
Devices that make products last longer
Extend the life of the product with exchangeable parts and consumables (target: LCD devices); other measures

Packaging
Devices that use packaging with enhanced environmental consciousness
Reduce packaging; other measures

Information Disclosure
Devices that give environmental information
Provide information on chemical substances in devices; other measures

Environmental Initiatives: Environmental Management

Developing Environmentally Conscious Products and Devices

Developing Super Green Products

Since fiscal 2004, Sharp has been certifying products that offer a particularly high level of environmental performance as "Super Green Products (SGP)". In fiscal 2021, sales of those products reached 124.1 billion yen, with SGP sales accounting for 24% of all GP sales in Japan.
In fiscal 2016, Sharp revised the criteria for this certification. Products are certified if (1) they offer class-leading energy-saving or energy-creating performance, or (2) they offer significantly high environmental performance through the use of unique Sharp technology. This way, Sharp is aggressively pursuing the development of products that consume as little power as possible or that use resources to the least possible extent, as well as developing high-efficiency solar cells.

■ **Examples of Super Green Products for Fiscal 2021**

Plasmacluster washing machine/dryer
＜ES-W114＞

Smartphone < AQUOS wish >

Digital full-color MFP
< BP-70C45 >

Solar module
< NU-259AM >

Case Study

Developer Interviews

Sharp has the "Always Thinking Green" website, which features interviews with product planning staff, engineers, designers, and other staff involved in product development.
The site conveys their commitment to environmentally conscious manufacturing and the difficulties they have faced. Through this site, Sharp aims to boost the added value of products by communicating the products' appeal from an environmental perspective.
In fiscal 2021, the site featured AQUOS sense4/sense5G smartphones and the Plasmacluster refrigerator.

The smartphone development team

The Plasmacluster refrigerator development team

Environmental Initiatives: Environmental Management

Developing Environmentally Conscious Products and Devices

Product Environmental Assessment System

Sharp operates a product environmental assessment system to ensure compliance with environmental laws and regulations as well as to promote environmentally conscious product design. This system allows Sharp to keep a database of the development know-how and design data that all Sharp design and development bases possess on environmentally conscious products and devices. The database is used to raise design standards and to promote in-house standardization of life cycle assessments (LCA). This way, the system is contributing to the creation of environmentally conscious Sharp products and devices. Since fiscal 2016, Sharp has been strengthening the function for checking products' compliance with environmental laws and regulations.

■ **System Flow**

Product planning department	Engineering department	Quality control department	Head office	Sales departments, product divisions, sales companies, others
Product planning	Design, engineering sample	Assessment	Confirmation, approval	Confirmation, utilization

Data input/referral · Data input/referral · Data confirmation/assessment · Data confirmation/input · Data referral

Product Environmental Assessment System

Environmental Initiatives: Biodiversity Protection

Protecting Biodiversity

Biodiversity Protection through Business and Social Action Programs

While Sharp's business activities impact biodiversity, the company also benefits from the resources that biodiversity provides. That is why the Sharp Group is carrying out a multifaceted approach in which it protects biodiversity through business activities and social action programs at worldwide bases.
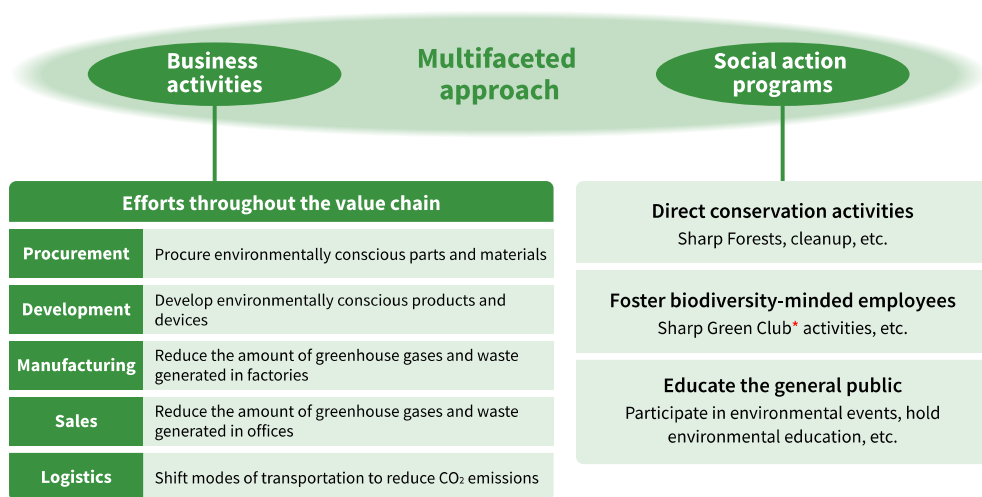
Based on the Sharp Group Policy on the Sustainable Support of Biodiversity, Sharp formulated the Sharp Biodiversity Initiative in fiscal 2009. The Initiative describes biodiversity in an easy-to-understand manner, and it outlines concrete measures for business activities and social action programs that take biodiversity into account.

■ **Sharp's Efforts for Protecting Biodiversity**

Business activities   **Multifaceted approach**   **Social action programs**

Efforts throughout the value chain

Procurement	Procure environmentally conscious parts and materials
Development	Develop environmentally conscious products and devices
Manufacturing	Reduce the amount of greenhouse gases and waste generated in factories
Sales	Reduce the amount of greenhouse gases and waste generated in offices
Logistics	Shift modes of transportation to reduce CO_2 emissions

Direct conservation activities
Sharp Forests, cleanup, etc.

Foster biodiversity-minded employees
Sharp Green Club* activities, etc.

Educate the general public
Participate in environmental events, hold environmental education, etc.

* A joint Sharp labor-management volunteer organization

Case Study

Conserving Aze-otogiri

At the Mie Plant (Taki District, Mie Prefecture), employees are working towards preserving biodiversity within the plant grounds. In 2013, the aze-otogiri[1] (Hypericum oliganthum), a flower thought to be extinct in Mie Prefecture, was discovered for the first time in 47 years along the Sana River, which flows beside the factory. The discovery led to the establishment of the Aze-otogiri Preservation Society[2]—one of several local groups that the Mie Plant works with. Members of the Aze-otogiri group learn about the biology and cultivation of aze-otogiri. They also transplant the flower and prepare and maintain the ground in order to expand the areas where the flower can flourish.

[1] A perennial herb of the Hypericaceae family, listed as endangered in the Red Data Book of the Ministry of the Environment.
[2] Organized by Taki Town and the Ministry of Land, Infrastructure, Transport and Tourism's Mie Office of Rivers and National Roads.

Aze-otogiri   Maintaining the transplant site

Case Study

Conserving Bamboo Lilies

The Tenri Plant (Tenri, Nara Prefecture) is committed to preserving biodiversity on ancient burial mounds located within its grounds. Bamboo lilies, a rare wild plant species, naturally grow on these mounds. This species has become scarce in Japanese fields and mountains due to land development and overharvesting. To nurture and conserve these lilies, our employees maintain the area by periodically cutting down withered bamboos and weeding the grounds.

Bamboo lily, a rare wild plant

Environmental Initiatives: Overview of Environmental Impact

Material Balance

Sharp gathers data to gain an overview of the burden its business activities place on the environment. Measured items include the consumption of energy and materials in business activities, the emissions of greenhouse gases, and the generation of waste. Sharp then uses these values to reduce its environmental burden.
Coverage: Sharp Corporation production sites and production bases in Japan and overseas

■ Input

Item			Unit	Fiscal Year		
				2019	2020	2021
Procurement, R&D, product manufacture	Energy		TJ[*1]	16,719	17,205	18,527
		Electricity	Million kWh	1,364	1,419	1,598
		Renewable energy[*2]	Million kWh	12	11	8
		City gas	Million m³	62	62	53
		LPG・LNG	Tons	5,387	5,809	5,968
		Heavy oil, kerosene, gas oil, gasoline	Kl	1,541	1,425	1,892
		Hot water, cold water, steam	TJ	173	235	177
	PFCs purchased		Tons	1,360	1,375	1,368
	Water resources		Million m³	22.3	25.3	27.0
			Million m³	7.3	9.0	10.6
		Water withdrawal / Third-party water[*3]	Million m³	7.0	8.6	9.8
		Groundwater	Million m³	0.3	0.4	0.8
		Water reused	Million m³	15.0	16.3	16.4
	Chemical substances handled (PRTR-listed)		Tons	5,809	6,282	6,520
	Chemical substances handled (VOCs)		Tons	2,937	3,065	3,554
	Materials consumed[*4]		Thousand tons	674	833	792
		Recycled plastic[*5]	Thousand tons	1	1	1
Logistics	Energy consumed (vehicle fuel)[*6]		TJ	258	210	212
Product use	Energy consumed (electricity)[*7]		Million kWh	4,488	5,563	5,295

■ Output

Item			Unit	Fiscal Year		
				2019	2020	2021
Procurement, R&D, product manufacture	Greenhouse gases		Thousand tons CO₂	974	951	985
		CO₂	Thousand tons CO₂	880	839	848
		Gases other than CO₂ (converted into amounts of CO₂)	Thousand tons CO₂	94	112	137
		HFC	Thousand tons CO₂	2	2	2
		PFC	Thousand tons CO₂	55	62	67
		SF₆	Thousand tons CO₂	31	38	56
		NF₃	Thousand tons CO₂	7	10	12
	Effluent		Million m³	4.8	6.6	8.4
		Public water areas	Million m³	2.6	3.9	6.2
		Sewerage	Million m³	2.2	2.7	2.2
	Chemical substances released and handled (PRTR-listed)		Tons	419	570	724
	Chemical substances released and handled (VOCs)		Tons	93	134	72
	Atmosphere[*6]	NOx emissions	Tons	34	41	15
		SOx emissions	Tons	1	1	1
	Water areas[*6]	COD (chemical oxygen demand)	Tons	4	4	5
		Nitrogen pollutant load	Tons	31	39	35
		Phosphorous pollutant load	Tons	0.5	0.2	0.1
	Product shipments[*8]		Thousand tons	606	766	714
	Waste, etc.		Thousand tons	68	67	78
		Final landfill disposal	Thousand tons	0.4	0.4	0.4
Logistics	CO₂ emissions[*6]		Thousand tons CO₂	18	14	15
Product use	CO₂ emissions[*7]		Thousand tons CO₂	2,857	2,967	2,810

Environmental Initiatives: Overview of Environmental Impact

Material Balance

■ Recycle

Item		Unit	Fiscal Year		
			2019	2020	2021
Amount recycled[6]	Home appliances (4 kinds)	Thousand tons	63	70	70
	Copiers/MFPs	Thousand tons	2.7	3.6	3.2
	PCs	Tons	10	15	9
	Amount of closed-loop material recycling of plastic	Thousand tons	1	1	1
Disposal after recycling[6]		Thousand tons	9	9	10

[1] TJ (terajoule) ＝ 10^{12} J
[2] Amount of solar power generated; amount of green power certificates purchased.
[3] Industrial-use water and tap water
[4] Total weight of product shipments and waste, etc. (estimate).
[5] Amount recycled through closed-loop plastic material recycling technology.
[6] In Japan.
[7] Annual energy used and amount of CO_2 emitted by products in the 8 major categories sold in the reporting year (estimate).
[8] Total weight of products in the 8 major categories sold in the reporting year and packaging materials used (estimate).

Environmental Initiatives: Overview of Environmental Impact

Calculation Standards for Environmental Performance Data

The environmental performance data are calculated based on the following calculation standards.

■ Input

Environmental Performance Indicators		Calculation Method
Procurement, R&D, product manufacture	Energy consumed	Calculated based on the Act on the Rational Use of Energy (Energy Conservation Act) and the Japanese Ministry of the Environment's Greenhouse Gas Emission Calculation and Reporting Manual
	PFCs purchased	HFCs, PFCs, sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) purchased annually
	Water resources consumed	Consumption and recycled use of water purchased from third parties (industrial-use water, tap water) and groundwater
	Chemical substances handled (PRTR-listed)	Among the substances covered under the PRTR Law, the total amount of substances handled annually at each plant in quantities of 500 kg or more
	Chemical substances handled (VOCs)	Among the 20 types of volatile organic compounds (VOCs) specified by Japan's four major electrical and electronic industry associations, the total amount of substances handled annually at each plant in quantities of 1 metric ton or more
	Materials consumed	Total weight of products in the 8 major categories* sold in the reporting year (estimate), plus waste, etc. generated
Logistics	Energy consumed	Revised ton-km method
Product use	Energy consumed	Estimate of annual energy used by products in the 8 major categories* sold in the reporting year. Calculation based on each product's annual energy consumption rate (using a heat input per unit of 9.97 MJ/kWh).

* Flat-panel TV, air conditioners, refrigerators, washing machines, air purifiers, microwave ovens, copiers/MFPs, solar cells

■ Output

Environmental Performance Indicators		Calculation Method
Procurement, R&D, product manufacture	Greenhouse gas emissions	● CO_2 emissions from purchased electricity Japan: Using CO_2 emission coefficient by electric power company (adjusted) published by Japan's Ministry of the Environment and the Ministry of Economy, Trade, and Industry Overseas: Using emission coefficient published in the IEA Emissions Factors ● CO_2 emissions from consumed fuel Using emission coefficient published in the Ministry of the Environment's Greenhouse Gas Emission Calculation and Reporting Manual ● Greenhouse gases other than CO_2 Using global warming potential published in the 4th Assessment Report by the Intergovernmental Panel on Climate Change (IPCC)
	Drainage	Annual drainage into public water areas and sewer system
	Chemical substances released and transferred (PRTR-listed)	Among the substances covered under the PRTR Law, the total amount of substances (handled annually at one or more plant in quantities of 500 kg or more) that were released and transferred
	Chemical substances released and transferred (VOCs)	Among the 20 types of volatile organic compounds (VOCs) specified by Japan's four major electrical and electronic industry associations, the total amount of substances (handled annually at each plant in quantities of 1 metric ton or more) that were released and transferred
	NOx emissions	Annual emissions
	SOx emissions	Annual emissions
	COD (chemical oxygen demand)	Drainage into public water areas
	Nitrogen pollutant load	Drainage into public water areas
	Phosphorous pollutant load	Drainage into public water areas
	Product shipments	Total weight of products in the 8 major categories* sold in the reporting year, plus packaging material used (estimate)
	Waste, etc.	Industrial waste + general office waste + valuable resources recovered
	Final landfill disposal	Final landfill disposal of industrial waste + final landfill disposal of general office waste
Logistics	CO_2 emissions	Revised ton-km method
Product use	CO_2 emissions	Amount of CO_2 emitted by products in the 8 major categories* sold in the reporting year, based on their energy consumption (estimate)

SHARP Sustainability Report 2022

Environmental Initiatives: Overview of Environmental Impact

Calculation Standards for Environmental Performance Data

■ Recycle

Environmental Performance Indicators		Calculation Method
Disposal, recycling	Home appliances (4 kinds)*	Amount of used home appliances (4 kinds) recycled
	Copiers/MFPs	Amount of recycled copiers and MFPs
	PCs	Amount of recycled PCs
	Amount of closed-loop material recycling of plastic	Amount of recycled plastic used, which was produced through closed-loop material recycling
	Disposal after recycling	[Weight of 4 kinds of home appliances, PCs, and copiers/MFPs collected] – [Weight recycled into new products or materials, or reused]

* TVs (CRT TVs, flat-panel TVs), air conditioners, refrigerators/freezers, washing machines/dryers

Social Initiatives

10 REDUCED INEQUALITIES

2.45%
Percentage of Disabled Employees in Japan (As of June 2022)

15 LIFE ON LAND

9,353 volunteers
Total number of participants in environmental conservation activities in fiscal 2021

Social Initiatives: Promoting Supply Chain CSR

Determining Procurement from the Standpoint of Providing Equal Opportunity and Fair Evaluation

As Sharp's business philosophy states, "Our future prosperity is directly linked to the prosperity of our customers, dealers and shareholders," Sharp aims for sustainable growth and mutual prosperity with all of its suppliers.

To these ends, Sharp emphasizes maintaining impartiality and fairness in all purchasing activities and chooses who it will procure local parts, materials, and equipment from by providing Japanese and overseas suppliers with an equal opportunity to do business with Sharp. This opportunity includes a fair evaluation of whether a supplier meets Sharp's requirements for quality, standards, and performance.

Close Communication and Mutual Understanding

To ensure sustainable growth and mutual prosperity with its suppliers, Sharp is going beyond initiatives related to the quality, price, and delivery of parts and materials. Sharp is also seeking to fulfill its social responsibilities over a wide range of areas across the entire supply chain. These areas include product safety, environmental protection, human rights and labor, and health and safety.

Sharp's basic concept, concrete policies, and requests to suppliers pertaining to procurement activities are set out in the Basic Purchasing Principles. And in the Sharp Supply-Chain CSR Deployment Guidebook, which is based on the Basic Purchasing Principles, Sharp clearly declares the implementation of CSR initiatives—such as complying with all laws, regulations, and social standards, and protecting the environment—as one of its procurement policies. Specifically, these include elimination of child/forced labor and discrimination, as well as compliance with labor related laws, such as those dealing with employees' right to organize and their right to collective bargaining. Sharp also asks its business partners to actively promote such activities.

To deepen the understanding between Sharp and its business partners, Sharp communicates actively with supplier sales representatives on a daily basis.

Basic Purchasing Principles

Basic Procurement Concept

1. Sharp's procurement activities are conducted in an open and impartial manner, with a fair evaluation given to suppliers in and outside Japan.
2. Sharp will comply with all laws and regulations, and achieve mutual prosperity with suppliers.
3. Sharp will fulfill social responsibility such as the conservation of the environment through its procurement activities.
4. Sharp pursues optimal quality and cost to the fullest.

Related information: > Basic Purchasing Principles

Basic Purchasing Principles Requests to Suppliers

① Compliance with laws and social standards that are applicable in countries and regions where suppliers do business
② Promotion of sound business operations
③ Consideration for the environment
④ Securing optimal quality and cost
⑤ Stable supply of parts and materials
⑥ Leading technology
⑦ No disclosing of confidential information

- Compliance with laws related to the manufacture and distribution of parts and materials
- Compliance with laws related to labor
- Compliance with laws related to health and safety and arrangement of proper labor environment
- Prohibition of child and forced labor
- Prohibition of discrimination based on race and sex and respect for the dignity of each employee
- Compliance with environmental laws
- Prohibition of bribery and unfair acts

Social Initiatives: Promoting Supply Chain CSR

Promoting CSR across the Entire Supply Chain

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Continue CSR/Green procurement survey in Japan	■ Developed a CSR/Green procurement survey system to make supply chain CSR surveys and risk analyses more efficient and effective	★	■ Continue CSR/Green procurement survey in Japan using the new system

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Supply Chain CSR Policy and Systems

The Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct[1] were formulated as the group's basic CSR policies and have been thoroughly engrained into all employees.

In December 2021, Sharp joined the RBA (Responsible Business Alliance), an alliance of companies that pursue social responsibility across the global supply chain. The RBA's vision and mission are shared throughout the entire Sharp Group.

To disseminate these policies throughout the supply chain, the Sharp Global SER Committee[2], which is chaired by the president of Sharp, set supply-chain CSR deployment as a key initiative. At committee meetings, members from relevant head office departments such as CSR, environment, and HR, along with business units and subsidiaries, share their policies and measures. The committee also monitors and manages progress on supply chain CSR-related measures.

[1] See page 11.   [2] See page 12.

Sharp Supply-Chain CSR Deployment Guidebook

To help suppliers understand and put into action CSR philosophy as stated in Sharp's Basic Purchasing Principles, in fiscal 2007 the company formulated and distributed its own Sharp Supply-Chain CSR Deployment Guidebook. The Basic Products Purchase Agreement also includes articles on CSR initiatives, based on the guidebook, that suppliers are requested to follow.

In fiscal 2015, Sharp fully revised the content of its guidebook to conform to the RBA[3] Code of Conduct. Since then, it has revised the guidebook as needed in line with revisions to the RBA Code of Conduct. In this way, Sharp strives to comply with the increasingly sophisticated international standards for CSR.

[3] RBA: Responsible Business Alliance. Founded in 2004 by a group of leading electronics companies including Hewlett-Packard, IBM, and Dell, the RBA, formerly the Electronic Industry Citizenship Coalition (EICC), has a code of conduct covering the social, environmental, and ethical responsibilities in the global supply chain of its members in the electronics and a wide range of other industries.

Related information: > Sharp Supply-Chain CSR Deployment Guidebook

Content of Sharp Supply-Chain CSR Deployment Guidebook

A. Labor
1) Freely Chosen Employment 2) Young Workers 3) Working Hours
4) Wages and Benefits 5) Humane Treatment 6) Non-Discrimination
7) Freedom of Association

B. Health and Safety
1) Occupational Safety 2) Emergency Preparedness 3) Occupational Injury and Illness
4) Industrial Hygiene 5) Physically Demanding Work 6) Machine Safeguarding
7) Sanitation, Food, and Housing 8) Health and Safety Communication

C. Environmental
1) Environmental Permits and Reporting
2) Pollution Prevention and Resource Reduction 3) Hazardous Substances
4) Solid Waste 5) Air Emissions 6) Materials Restrictions 7) Water Management
8) Energy Consumption and Greenhouse Gas Emissions

D. Ethics
1) Business Integrity 2) No Improper Advantage 3) Disclosure of Information
4) Intellectual Property 5) Fair Business, Advertising, and Competition
6) Protection of Identity and Non-Retaliation 7) Responsible Sourcing of Minerals
8) Privacy

E. Management System
1) Company Commitment 2) Management Accountability and Responsibility
3) Legal and Customer Requirements 4) Risk Assessment and Risk Management
5) Improvement Objectives 6) Training 7) Communication
8) Worker Feedback and Participation 9) Audits and Assessments
10) Corrective Action Process 11) Documentation and Records
12) Supplier Responsibility

Social Initiatives: Promoting Supply Chain CSR

Promoting CSR across the Entire Supply Chain

Promoting CSR Awareness and Conducting Risk Assessment at Suppliers

Sharp periodically carries out supply-chain CSR surveys to confirm how well suppliers are carrying out CSR based on the Sharp Supply-Chain CSR Deployment Guidebook and to identify, assess, and reduce CSR risk in the supply chain.

On the survey form, there are areas that conform to the RBA self-assessment questionnaire—labor, health and safety, environment, and ethics—as well as Sharp's own areas, which are biodiversity/chemical substances management and business continuity planning (BCP). In fiscal 2020, Sharp added another area, information security, to deal with the rise in cyber security risks across the supply chain. Through such efforts, Sharp assesses risk in a wider range of areas in response to changing conditions inside and outside of the company.

Sharp also improves the survey form by adding things like guidance on the questions, thus making the survey a medium that prompts suppliers to further their understanding of, and efforts to achieve, international CSR standards.

The survey is carried out separately at each factory that makes products for Sharp. Survey scorecards are given to participating suppliers and those with low-scoring areas are asked to submit corrective action plans. Through such post-survey communication with suppliers, Sharp is continuously working to improve CSR across the supply chain.

There has been increasing concern around the world in recent years about issues such as slave labor and forced labor. Europe and North America have led the way in enacting, enforcing, or discussing laws promoting due diligence of human rights in the supply chain. One example is the Uyghur Forced Labor Prevention Act. In the context of global factors such as the US–China rivalry and the war in Ukraine, companies need to further enhance their supply-chain CSR efforts.

In fiscal 2021, Sharp worked on building a CSR/Green procurement survey system to make supply chain CSR surveys and risk analyses more efficient and effective. The next survey will use the new system and will be run in the second half of fiscal 2022.

At production and procurement bases in China and ASEAN countries, since fiscal 2017 Sharp has been introducing two types of supplier management systems through which it has been carrying out ongoing risk management equivalent to that of Sharp in Japan.

Through such ongoing efforts, Sharp has found that across its supply chain there are no serious problems such as forced labor or child labor. In the unlikely event that such a problem did arise, we would immediately take the necessary corrective and relief measures. This would be done as outlined in our contracts with suppliers. If no remediation is expected, we will take strict measures, such as suspending transactions.

Sharp will continue to step up its efforts in response to trends in international human rights due diligence as it fulfills its corporate social responsibility in every facet of the supply chain.

Social Initiatives: Promoting Supply Chain CSR

Promoting CSR across the Entire Supply Chain

Education for Procurement Personnel

To help all those in procurement positions improve their understanding and implementation of CSR, information about the Basic Purchasing Principles and supply chain CSR is included in training materials for new employees, transferred employees, and management skills improvement[1]. All Sharp Group employees take compliance-related training based on the Sharp Code of Conduct[2], which covers topics such as respect for human rights.

Since February 2022 we have been using the RBA e-Learning Academy to provide education on the RBA Code of Conduct. Seventy-five procurement staff members in Japan have completed a total of 375 courses. The aim is to deepen their understanding of international CSR standards.

In fiscal 2022, we plan to extend this training to procurement staff members at overseas bases.

[1] See page 105. [2] See page 102.

Procurement BCP[3]

To ensure that corporate procurement departments secure a stable supply of parts and materials at fair prices, Sharp continuously strengthens partnerships with suppliers regarding long-term supply contracts and other matters, and also purchases from multiple suppliers. Sharp also formulated the Rules of Business Risk Management [4], which it uses to create and periodically revise BCPs. As part of this, Sharp requires suppliers to periodically check and update the BCPs of the factories that produce items delivered to Sharp. It also carries out CSR/Green procurement surveys to confirm how well suppliers are making and maintaining BCPs.

[3] BCP: Business continuity plan [4] See page 122.

Audits and Education to Ensure Full Compliance with the Subcontract Act

To comply with the Subcontract Act (Act Against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors) in Japan, Sharp Corporation and its affiliated companies implement compliance checks and in-house education on an ongoing basis.

Sharp encourages internal voluntary reporting of compliance issues and further strengthened precautionary measures to prevent the recurrence of problems. Business units, procurement departments, Head Office departments, and domestic affiliated companies conduct self-audits in which they check how well they are complying with the Subcontract Act. Sharp also holds internal training sessions for domestic affiliated companies, has employees take part in outside seminars, and performs periodic internal audits to raise awareness among employees of the importance of complying with the Subcontract Act.

Social Initiatives: Promoting Supply Chain CSR

Responsible Minerals Procurement Initiatives

Policies and Systems for Responsible Minerals Procurement

In recent years, companies have had to expand the scope of their efforts regarding the minerals, regions, and risks involved in the responsible procurement of minerals. This means not only abiding by legal frameworks such as the Dodd-Frank Wall Street Reform and Consumer Protection Act of the United States and the EU's Conflict Minerals Regulation but also taking a firm CSR stand in light of issues such as child labor and environmental destruction at mining sites.

In the supply chain for procuring minerals from conflict-affected and high-risk areas, Sharp has a basic policy in place to ensure it is not complicit in human rights abuses and environmental destruction, and so that it does not inhibit sound, legitimate business activities.

Based on this basic policy and the Sharp Global SER Committee (SGSC) [1], which is chaired by the president of Sharp, we have made responsible minerals procurement a key theme. A survey system has been created in major business units and production subsidiaries and we constantly check on the progress of relevant measures under this system.

Related information:> Responsible Minerals Procurement

Cooperation with Industry

To ensure that responsible minerals procurement is carried out effectively, Sharp believes in the importance of collaborating with industries in Japan and other countries and acting based on widespread consensus. Since fiscal 2012, Sharp has been a member of the Responsible Minerals Trade Working Group of the Japan Electronics and Information Technology Industries Association (JEITA).

We also actively take part in JEITA's Responsible Minerals Sourcing Inquiry Briefings by helping in planning, creating documents, and joining the briefings as part of our efforts to spread understanding of responsible minerals procurement in the industry supply chain and boosting the capabilities of downstream companies. Together with JEITA, we periodically send outreach letters to smelters or refiners that are not yet participants of the RMAP[2] created and operated by the RMI[3] urging them to undergo audits. These efforts are part of our contribution to effectively stamping out human rights abuses and other problems in the global procurement of minerals.

Furthermore, since December 2021, Sharp has been a member of the RMI, working to deepen our global collaboration and due diligence initiatives while ensuring we stay abreast of the latest international developments relating to responsible minerals procurement.

Survey Activities in Accordance with International Standards

Sharp uses the RMI's industry standard reporting templates (CMRT[4], CRT[5], and MRT[6]) to conduct surveys on 3TG (tantalum, tin, tungsten, and gold), as well as minerals such as cobalt and mica if requested by customers.

In the surveys, primary suppliers are urged to procure minerals from RMAP-conformant smelters or refiners. And based on the CMRT, CRT, and MRT returned by survey participants, we identify and evaluate risk based on the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD Guidance).

In fiscal 2021, as a result of about 450 surveys carried out at major business units and production subsidiaries, 366[7]. smelters and refiners were identified and the RMAP conformance rate was about 63%[7].

For smelters and refiners that are not yet conformant with RMAP and those with high risk levels, we urge their participation in RMAP through our primary suppliers. If any smelters or refiners have been found to be dealing with militant forces or complicit in serious human rights abuses, this information is shared with suppliers, with whom we discuss measures such as switching to RMAP-conformant smelters or refiners.

Education and Awareness Raising on Responsible Minerals Procurement

To deepen employees' understanding of responsible minerals procurement, as a rule we hold monthly meetings with those in charge of surveys at major business units and production subsidiaries, where participants share information on the latest international developments and discuss practical survey issues and how to improve the survey system.

Procurement personnel and new employees take part in periodic supply chain CSR training, which covers responsible minerals procurement. Another way we further employees' understanding on responsible minerals procurement is by uploading new and relevant material to the management skills improvement training page on the Sharp intranet.

[1] See page 12.
[2] RMAP (Responsible Minerals Assurance Process) is an RMI program for validating conformance of RMI-listed smelters or refiners.
[3] RMI: Responsible Minerals Initiative
[4] CMRT (Conflict Minerals Reporting Template) is a free, standardized reporting template developed by the RMI.
[5] CRT (Cobalt Reporting Template) is a free, standardized reporting template developed by the RMI.
[6] MRT (Mica Reporting Template) is a free, standardized reporting template developed by the RMI.
[7] 3TG smelters or refiners that are involved with major business units and production subsidiaries. Conformance rate as of March 2022.

Social Initiatives: Promoting Supply Chain CSR

Responsible Minerals Procurement Initiatives

Due Diligence Efforts in Line with OECD Guidance

To carry out responsible minerals procurement, Sharp integrates into its management a five-step framework for risk-based due diligence recommended in the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

OECD Five-Step Framework	What Sharp Is Doing
Step 1: Establish strong company management systems	• Formulate and make public a basic policy for responsible minerals procurement, and convey this throughout the company and industry. • Make responsible minerals procurement a key theme under the Sharp Global SER Committee, and constantly check on the progress of relevant measures. • Put articles, including responsible minerals procurement requirements, of the Sharp Supply-Chain CSR Deployment Guidebook into basic parts purchase agreements. • Take part in JEITA's Responsible Minerals Sourcing Inquiry Briefings and promote capacity building through supplier mobilization.
Step 2: Identify and assess risk in the supply chain	• Conduct supplier surveys using CMRT, CRT, and MRT. • Use a proprietary survey system to check CMRT/CRT/MRT returned by suppliers and assess risk. 　(Detect and identify risks according to Annex II of the OECD Guidance.)
Step 3: Design and implement a strategy to respond to identified risks	• Provide suppliers with information on high-risk smelters/refiners and urge them to stop using such smelters/refiners.
Step 4: Carry out independent third-party audit of supply chain due diligence at identified points in the supply chain	• Periodically confirm and verify RMAP audit results on the RMI website. • Work with industry in sending outreach letters to smelters/refiners that are not yet participants of RMAP urging them to participate.
Step 5: Report on supply chain due diligence	• Disclose the state of due diligence in the Sharp Sustainability Report.

Social Initiatives: Quality

Ensuring Quality and Safety

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Continue building on previous efforts to improve quality targets (long-term reliability, usability, quality level, etc.) based on customer needs	■ Shared knowledge on reliability and safety via a company-wide working group ■ Enhanced usability tests, incorporated user survey findings into product improvements, and verified the effects, thereby boosting the strength and appeal of products	★★	■ Ensure reliability and strengthen efforts to raise product/brand value to achieve quality that customers around the world will acknowledge

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Quality Philosophy

To respond to society's needs and make products that satisfy our customers,
we keep the slogan "Quality First" in mind at all times.
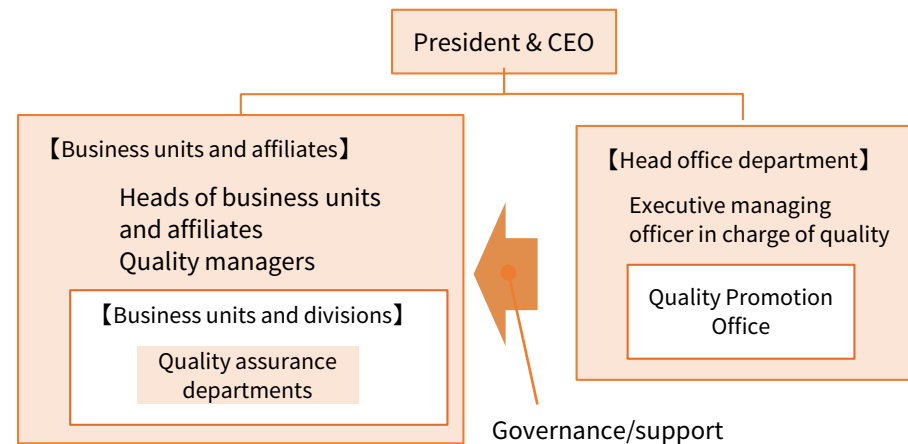
Quality Slogan

Quality First in Heart and Mind

Basic Stance and Vision on Quality

To gain customer trust and improve customer satisfaction, based on its Quality Philosophy and Quality Slogan, the Sharp Group constantly strives to respond to customer needs and demands by providing products and services that are safe, high quality, and reliable.

Quality Assurance System

Under the executive managing officer in charge of quality in the Sharp Group, the Quality Promotion Office leads governance and supports related efforts, and the Group has a system in place for each business unit and affiliate to autonomously conduct its business.

■ Sharp's Quality Assurance System

President & CEO

【Business units and affiliates】
Heads of business units and affiliates
Quality managers

【Business units and divisions】
Quality assurance departments

【Head office department】
Executive managing officer in charge of quality

Quality Promotion Office

Governance/support

Social Initiatives: Quality

Ensuring Quality and Safety

Quality Management System

To enable it to conduct a variety of quality assurance activities in all stages of the manufacturing cycle, including planning, design, procurement, production, assessment, and after-sales, the Sharp Group established the Sharp Corporation Standard based on the ISO 9001 international quality management standard. Stipulating systems and methods necessary for quality assurance, the Sharp Corporation Standard is strictly adhered to by all Sharp sites in Japan and other countries, and by consolidated subsidiaries carrying out design, production, and sales.

Through ongoing revision and implementation of the standard, all employees—in product planning, design, production, sales, and after-sales service—know exactly the level of quality they should be guaranteeing customers in Sharp's continuous efforts to improve quality.

ISO 9001 certification status as of March 31, 2022
• 38 of 39 sites are certified, for a certification rate of 97.4%

Quality Policy

In line with the Quality Policy stipulated in Sharp Corporation's company rules (Quality Assurance Basic Rules), the Sharp Group makes and implements quality plans aimed at achieving the quality targets it has set.

Quality Policy

Provide high quality and attractive products that customers can continuously use them with safety and satisfactory.

(1) Observe laws and regulations and place top priority on safety and reliability.

(2) Pursue convenience and comfort from usability.

(3) Squarely face with voice of the customer and reflect it in products

Efforts to Improve Quality

The Sharp Group established the Quality Engineering Committee as a way to advance quality technologies. The Committee decides policies and sets fiscal-year targets related to quality issues arising in new products. It also leads company-wide research and improvement efforts among business units to assure quality in new business areas such as the 8K+5G ecosystem, AIoT[1], and digital healthcare. The Committee is made up of heads of business units and subsidiaries and is chaired by the Sharp executive managing officer in charge of quality.

Within the Quality Engineering Committee are Expert Subcommittees made up of experts from the various business units. These Expert Subcommittees work towards prompt solutions to issues that concern multiple business units or the entire company.
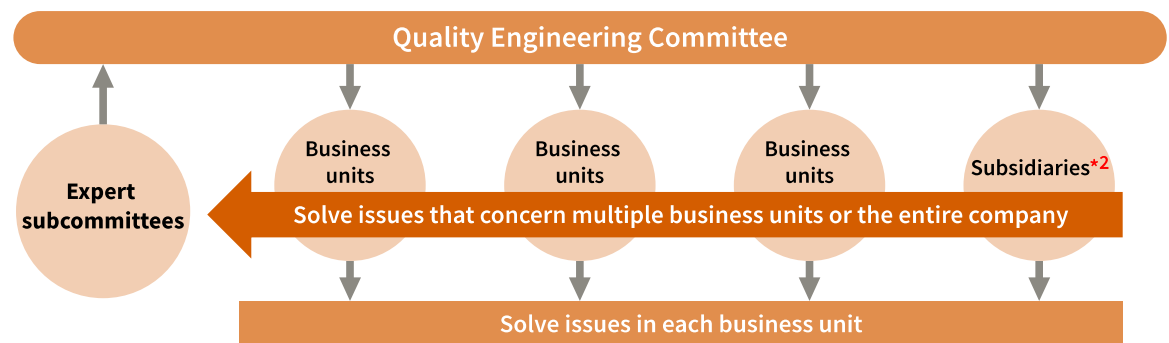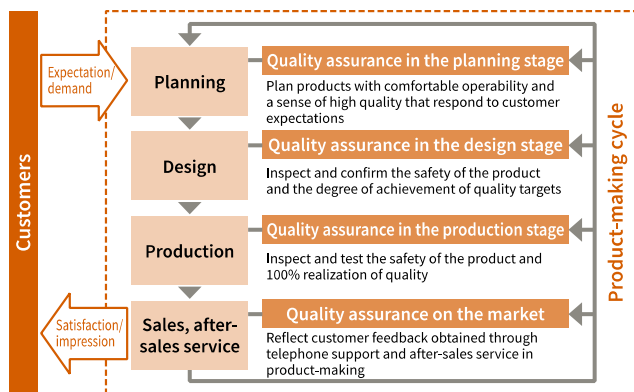
[1] AIoT is a word coined by Sharp, combining the words AI (artificial intelligence) and IoT (Internet of things). AIoT is a vision of how products and services will connect to artificial intelligence via the cloud and become a people-oriented existence. AIoT is a registered trademark of Sharp.
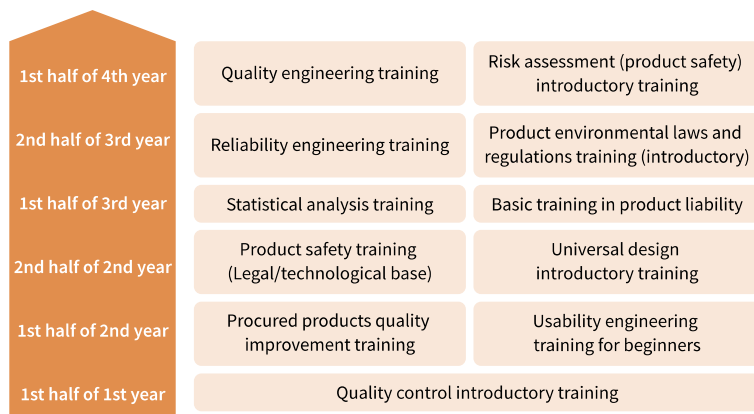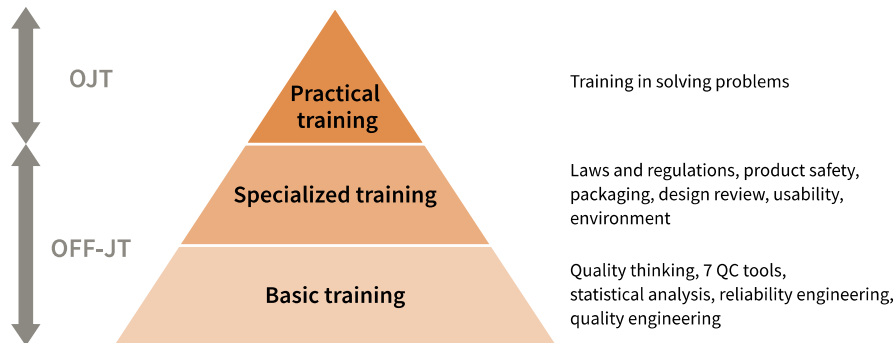[2] Subsidiaries of Sharp business unit status

Social Initiatives: Quality

Fostering Quality Experts

Fostering Quality Experts

Based on its Quality Philosophy, Sharp works to foster quality thinking and boost quality-related techniques by carrying out systematic quality-related education with the aim of making products that customers can use with safety and peace of mind.

In particular, the company is stepping up basic training through programs that allow young employees (in their first four years with the company) to gradually acquire quality-related techniques.

Training takes a number of forms depending on the goals of participants. Besides an e-learning program and videoconference classes that help maximize learning efficiency, there are group training courses to improve practical skills, which are carried out at various company factories. In fiscal 2021, there were 43 courses in quality training, with a total of 6,141 participants.

■ **Fiscal 2021 Training Courses and Number of Participants**

Training form	No. of courses	No. of participants
E-learning	35	5,536
Group training	8	605
Total	43	6,141

OJT

Practical training — Training in solving problems

OFF-JT

Specialized training — Laws and regulations, product safety, packaging, design review, usability, environment

Basic training — Quality thinking, 7 QC tools, statistical analysis, reliability engineering, quality engineering

1st half of 4th year	Quality engineering training	Risk assessment (product safety) introductory training
2nd half of 3rd year	Reliability engineering training	Product environmental laws and regulations training (introductory)
1st half of 3rd year	Statistical analysis training	Basic training in product liability
2nd half of 2nd year	Product safety training (Legal/technological base)	Universal design introductory training
1st half of 2nd year	Procured products quality improvement training	Usability engineering training for beginners
1st half of 1st year	Quality control introductory training	

System for practical QC training

Social Initiatives: Quality

Ensuring Product Safety

Sharp Voluntary Product Safety Action Policy

Keenly aware that product safety assurance is the most important aspect of a company's business and one of its social responsibilities, Sharp strives to provide customers with safety and peace of mind. It does this by prioritizing the safety of the products it manufactures and sells and by making safety-related information public. To this end, the company has formulated voluntary action guidelines on product safety in efforts to earn an even higher level of trust from society.

Efforts to Ensure Product Safety

Sharp strives to ensure its products are safe and to constantly raise levels of safety. Besides abiding by laws and regulations of countries and obtaining safety certifications through activities such as factory audits by third parties, the company utilizes its own risk-assessment-based safety standards. To ensure safety even in cases where unforeseen defects arise, these in-house safety standards stipulate items like flame-retardant construction and testing for abnormal conditions. These standards are revised as needed and are taught to all relevant employees in design, quality, and other divisions so that they are understood and followed thoroughly.

Since fiscal 2020, Sharp has been using e-learning material developed exclusively for the company to expand the practice of risk assessment related to product safety. Sharp is enhancing its internal training with this material, along with a new upskilling course. It is hoped these initiatives will help employees embrace the concept of risk assessment more deeply and motivate them to develop safer products.

Sharp will continue to step up efforts to promptly respond to social changes and legal revisions regarding product safety so that customers can use Sharp products with peace of mind.
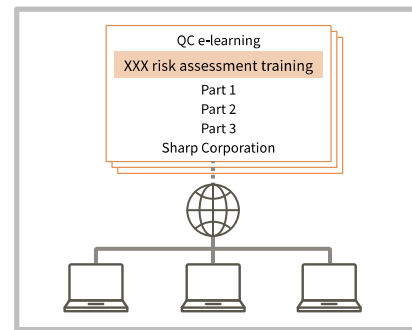
Sharp's original e-learning material, used since fiscal 2020

Information Disclosure and Response When Problems Occur

If an accident caused by a Sharp product occurs on the market, the company immediately gathers information on the accident and analyzes it to determine the cause. If it is determined that there is a risk of harm or damage to the customer, information is promptly disclosed via media such as newspapers and the Sharp website, and all appropriate measures are taken to ensure the safety of customers.

For major product-related accidents stipulated in the Consumer Product Safety Act, the Sharp website has a list of information on major product-related accidents for which the cause is thought to be the product itself. There are 12 such cases.[1]

[1] Number in fiscal 2021 (as of March 31, 2022).

■ **Flow for Dealing with Product-related Accidents**
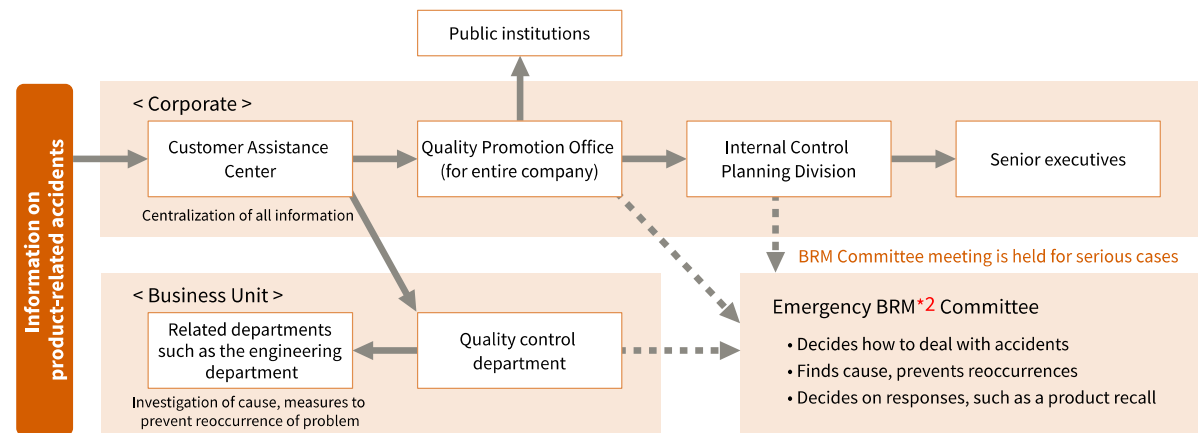
[2] BRM: business risk management

Social Initiatives: Quality

Ensuring Product Safety

Product Security Policy and Efforts

Products connected to networks are exposed to growing risks as information technology advances and the value of information they handle increases. They are at a risk of cyber-attack taking advantage of their vulnerabilities, which can result in information leakage or a hijacking of the device being hacked. Security measures once considered adequate are now seen as insufficient, owing to technological advances and other factors. Around the world, there is an urgent and growing need to improve legislation on product security.

Such a situation has been prompting Sharp to act to ensure that customers can use its products without worries. We have established teams and reporting lines dedicated to enhancing product security, along with the rules to be followed at the stages of planning, developing, operating, and maintaining products. We also gather vulnerability information and share it internally, as well as train employees thoroughly, to ensure the quality of our product security continuously.

We are expecting a future in which standalone systems are interconnected with one another, perhaps creating added vulnerabilities. To prepare for such a future, we have adopted security by design, a concept that intends to build in security from early stages before design. This approach to product development is shared throughout the organization.

Related information: > Global Basic Policy on Information Security

Social Initiatives: Quality

Making Easier-to-Use Products

Practicing User-Centered Design

Sharp practices user-centered design (UCD) in order to provide products that customers find easier to use.

UCD is a concept—as outlined in the international ISO 9241-210 standard—to provide products and services that satisfy customers by seeing things from their perspective, understanding their needs, and reflecting them in product design. Sharp has its own UCD Basic Policy and the Eight Principles of UCD based on this concept and shares them across the Sharp Group. Sharp investigates customers' latent dissatisfaction and needs as part of its product development process and reflects those findings in the specifications and design of its products. By repeatedly going through evaluations and improvements, Sharp is bringing forth products and services that customers find easy to use and attractive.

### Investigating Customers' Dissatisfaction and Needs and Reflecting Them in Product Design

In user-centered design (UCD), Sharp collects customer feedback on ease of use through various methods and applies it to product design.

Through usability tests (observing how people actually use Sharp products), questionnaires, interviews, and opinions gathered from customers during Customer Assistance Center phone calls and repair visits, anonymous information from customers is compiled and shared among Sharp development personnel, who put it to use in new product design.

For in-person information gathering such as usability tests, strict measures are taken to prevent the spread of Covid-19. If necessary, these activities are carried out online using web conferencing systems.
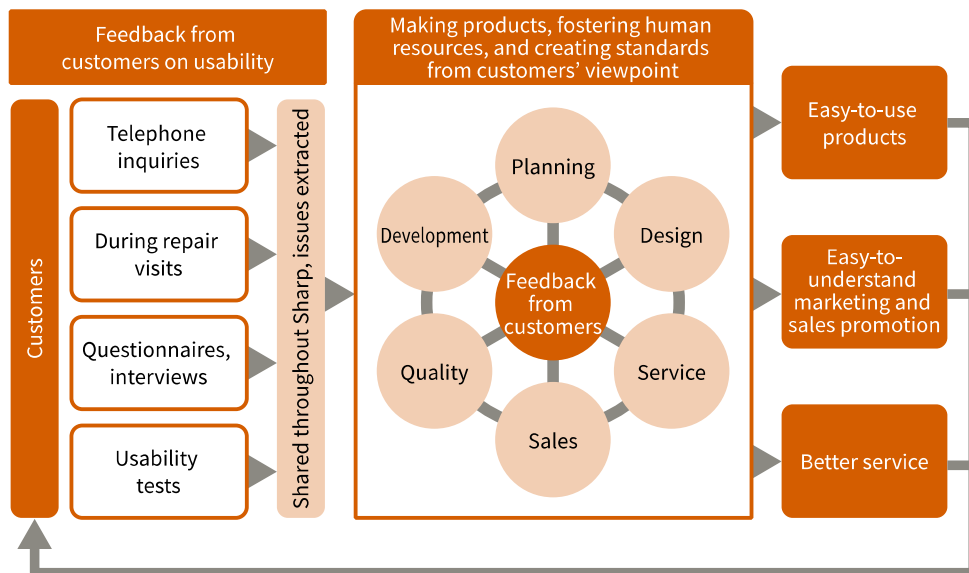
Testing the usability of a commercial-use product
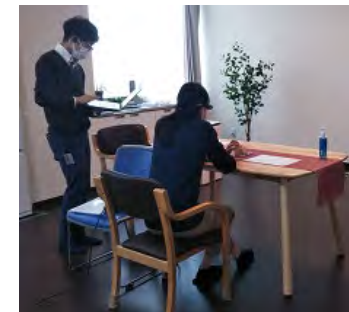
Usability test on an app prototype using eye tracking

Voice

Comments from Participants in Usability Tests

- User testing allowed us to identify areas for improvement. We put our findings to good use in developing products. (Sharp product planning staff member)
- Even if a product has amazing functions, it's no good if those functions are hard to use. That's why usability testing is so important. (Sharp staff member in her 50s)

Feedback from customers on usability

Making products, fostering human resources, and creating standards from customers' viewpoint

Customers

- Telephone inquiries
- During repair visits
- Questionnaires, interviews
- Usability tests

Shared throughout Sharp, issues extracted

Planning — Design — Service — Sales — Quality — Development (circled around) Feedback from customers

- Easy-to-use products
- Easy-to-understand marketing and sales promotion
- Better service

Social Initiatives: Quality

Making Easier-to-Use Products

Efforts in Universal Design

In line with the aforementioned UCD Basic Policy, Sharp also takes into consideration universal design (UD). Universal design is a philosophy for building products, information, and environments so that they can be used by many more customers—regardless of things like nationality, age, gender, or disability. Sharp strives to develop products and services that can be used comfortably by as many people as possible by conducting UD evaluations and surveys of mainly home appliances and digital multifunction printers (MFPs).

As of June 2022, 18 models of Sharp home appliance products support the UD considerations listed on the website of the Association for Electric Home Appliances in Japan.

To continue the aforementioned activities company-wide, Sharp works to foster human resources through training. Major education activities include introduction to universal design (e-learning) to impart the understanding and acquisition of basic UD knowledge, UD experience learning, in which employees see firsthand what it's like to be physically disabled so that they can know how to make products more accessible, and a usability training system for specialized education.

UD experience learning is usually conducted in person in a group, but due to the Covid-19 pandemic, a web conferencing system was utilized for online classes in which participants used smartphone apps for the learning material.

Evaluating the usability of a multifunction copier for the vision-impaired
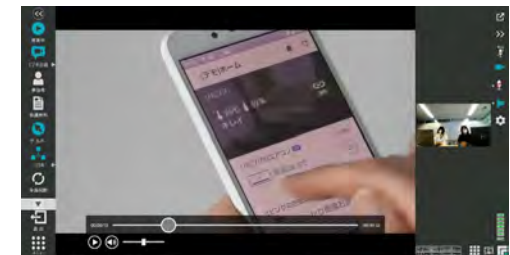(a kiosk terminal to provide government services)

Using wearable tools to experience what it's like for elderly people to use products

Walking as a vision-impaired person in UD experience learning

Online UD experience learning

Computer screen for online UD experience learning

SHARP Sustainability Report 2022

Social Initiatives: Quality

Making Easier-to-Use Products

Efforts to Ensure Accessibility

Accessibility is the concept of making products and services so that they can easily be used by people who are in some way limited in their physical functions; for example, senior citizens and the physically disabled. Under U.S. federal law[1], federal agencies purchasing equipment and services are obligated to choose those that are accessible to everyone, including the physically disabled. For Sharp digital MFPs and other products, assessment results of accessibility standards stipulated by federal law are compiled on a product evaluation sheet (VPAT[2]), which is disclosed on the website of Sharp Electronics Corporation (SEC), Sharp's U.S. sales company.

[1] Section 508 of the Rehabilitation Act
[2] VPAT: Voluntary Product Accessibility Template. A table containing information regarding how a particular product or service conforms with Section 508 of the U.S. Rehabilitation Act.

Related information: > > Sharp Electronics Corporation website

Example of VPAT for a digital MFP

Social Initiatives: Quality

Making Easier-to-Use Products

Honors from Third Parties 1

Sharp Corporation Wins Overall Customer Satisfaction Top Prize, 2022 IID Awards (Japan)

Sharp's Brain Series electronic dictionary was given the Overall Customer Satisfaction Top Prize in the 2022 IID Awards* in Japan. This was the 11th year in a row for Sharp to win this award. Sharp also won top prizes in all the evaluation categories: operability, search function, easy-to-view screen, readability, audio quality, portability, design, durability, and value for money.
Sharp has been repeating the cycle of obtaining feedback from users and retailers and improving the product's usability. We will continue our product development and improvement efforts to satisfy an even broader user base.

IID Awards logo

IID Awards trophy

Brain Series color electronic dictionary

* Resemom, an education information website run by IID, Inc., conducted on online survey of parents of junior and senior high school students who own an electronic dictionary.

Honors from Third Parties 2

Sharp Corporation Wins Gold Prizes in 2021–2022 Kaden Awards (Japan)

A number of Sharp products were given a gold prize in the 2021–2022 Kaden ("home appliances") Awards. The KI-NS50 Plasmacluster humidifying air purifier won in the air purifier category, the HV-P75/P55 Plasmacluster humidifier won in the humidifier/dehumidifier/heater category, and the AX-XA20 Healsio superheated steam oven won in the kitchen appliances category.
The Kaden Awards, now in their seventh year, are organized by the GetNavi magazine and the Kaden Watch news site. The winners are selected based solely on votes by the readers of the two media outlets. The awards recognize products that incorporate innovative technologies and advanced designs and that are highly rated by customers. Some customers praised our products' ease of use. One noted, "Sharp's product solved the problem of inconvenience." Another said, "The Sharp product is easy to use."

From left: KI-NS50 Plasmacluster humidifying air purifier, gold prize, air purifier category;
HV-P75/P55 Plasmacluster humidifier, gold prize, humidifier/dehumidifier/heater category;
AX-XA20 Healsio superheated steam, gold prize, kitchen appliances category

Social Initiatives: Customer Satisfaction

Enhancing Customer Satisfaction

| Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■Increase customer satisfaction by improving service quality	■Improved service quality By improving employees' CS awareness and repair skills: Customer satisfaction rate was 89.1%	★★	■Increase customer satisfaction Customer satisfaction rate 90.0% or higher

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Basic Stance on Customer Satisfaction

＜**Providing Products and Services That Offer Peace of Mind and Satisfaction**＞

Sharp always thinks from the customer's point of view and, as a rule, develops and provides products and services with the customer in mind. To ensure that customers can continue to use Sharp products for many years with peace of mind, Sharp strives to improve its products and its sales and after-sales services by reflecting the opinions of customers.

Sharp will continue to pursue customer satisfaction (CS) so that customers choose Sharp now, next time, and every time.

CS Slogan

Building a relationship of trust through quality and service
so that customers choose
Sharp now, next time, and every time.
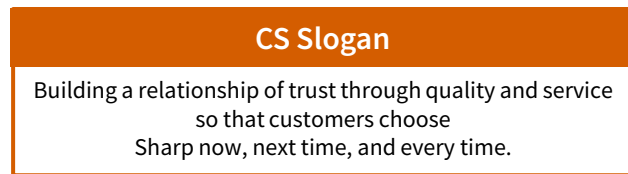
Related information: > Sharp Group Charter of Corporate Behavior

After-Sales Service System

Sharp has an after-sales service system that can handle all kinds of customer inquiries, whether it's instructing them how to use products or repairing products that are not working properly.
Centered on Sharp Corporation's Customer Assistance Center and after-sales service departments at Sharp sales companies, the entire Sharp Group worldwide collaborates to provide high-quality, fast, accurate, and friendly service that truly satisfies customers.

■ **Flowchart**
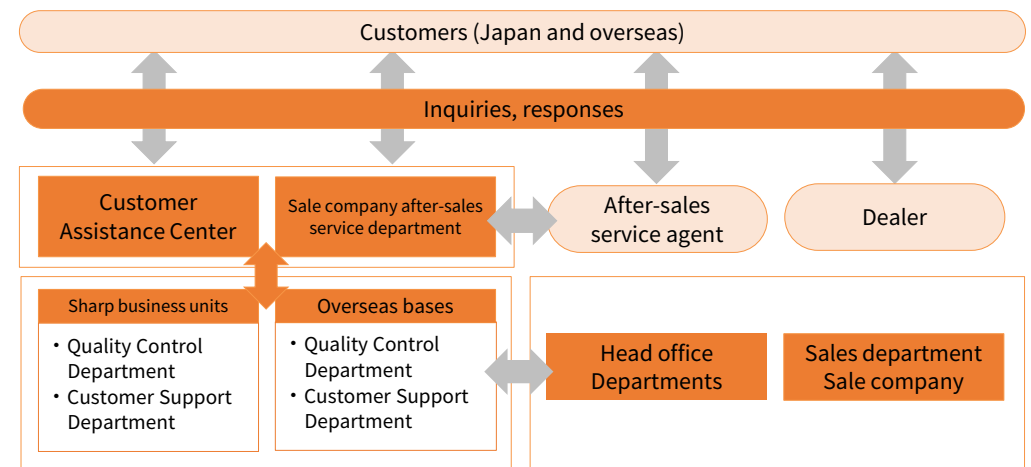
Social Initiatives: Customer Satisfaction

Enhancing Customer Satisfaction

Repair and Servicing System (in Japan)

Repair of Sharp products in Japan is carried out by Sharp Marketing Japan Corporation, Customer Service Company. The entire company works together with a user-oriented mindset to satisfy customers and realize its slogan: "Looking customer smile is my pleasure" To this end, service engineers, who work out of more than 90 service bases[1] all over Japan and are familiar with local customers, provide repair service that truly satisfies customers.

Service inquiries are accepted every day of the year[2]. The company puts special effort into prompt response to problems with home appliances that are indispensable to daily life, such as washing machines, refrigerators, and air conditioners.

[1] As of June 2022.
[2] Business days vary from region to region.

Slogan
Looking customer smile is my pleasure

Voice

〜Change Customer Feelings from Dissatisfaction and Worry to Satisfaction and Peace of Mind〜

I'm a service engineer at Sharp Marketing Japan Corporation, Customer Service Company. As such, I strive every day to improve my after-sales skills to make customers happy.

Today's diversifying lifestyles are making various home appliances an increasingly indispensable part of life. Any problems with Sharp products will cause inconvenience and dissatisfaction among customers, and this could affect people's trust in Sharp products in general.

That's why we offer prompt and reliable repairs to quickly resolve any inconvenience. After repairs are completed, we ask our customers if they have any other issues. We give them advice on how to deal with problems and how to take care of the product. Our policy is to respond with sincerity, so that they can use Sharp products with confidence.

We sometimes get encouraging feedback from our customers. They might say, "Now I can use the product for a long time with peace of mind."

I'll keep improving myself as a service engineer by boosting my technical and customer satisfaction skills. I hope to keep providing customer-oriented after-sales service, so that dissatisfied and worried customers end up feeling happy and confident they can use Sharp products for a long time to come.

Yuhki Miura
Kyoto Service Center, Customer Service Company, Sharp Marketing Japan Corporation

Social Initiatives: Customer Satisfaction

Enhancing Customer Satisfaction

### Customer Questionnaire (in Japan)

In Japan, all customers who are visited by service engineers are asked to answer a questionnaire covering the entire service process, from initial inquiry and appointment to product repair. More than 130,000 customer opinions are received annually via this questionnaire.

To improve convenience for customers and to speed up response, the questionnaire has also been available on the Sharp website since fiscal 2017. Starting in fiscal 2022, the survey will be completely web-based.

Sharp will continue to pass on customers' valuable opinions to relevant company departments, closely analyze problems, and use the information gathered to improve service mechanisms and manufacturing.

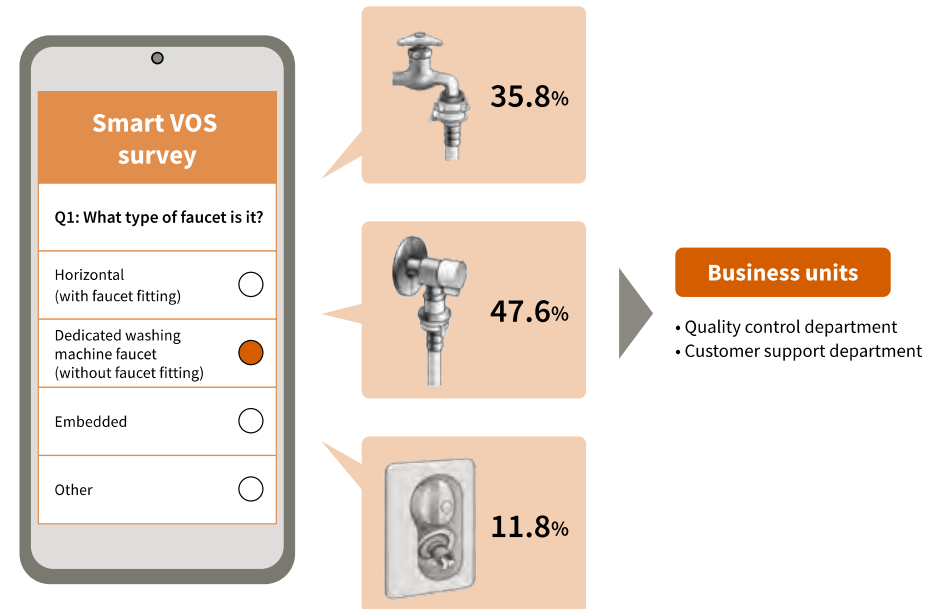■ Percentage of Customers Giving High Marks to Service Engineers (postcard and online surveys)

(Satisfaction level %)

Fiscal year	2017	2018	2019	2020	2021
Value	94.9	94.9	94.7	95.4	89.1
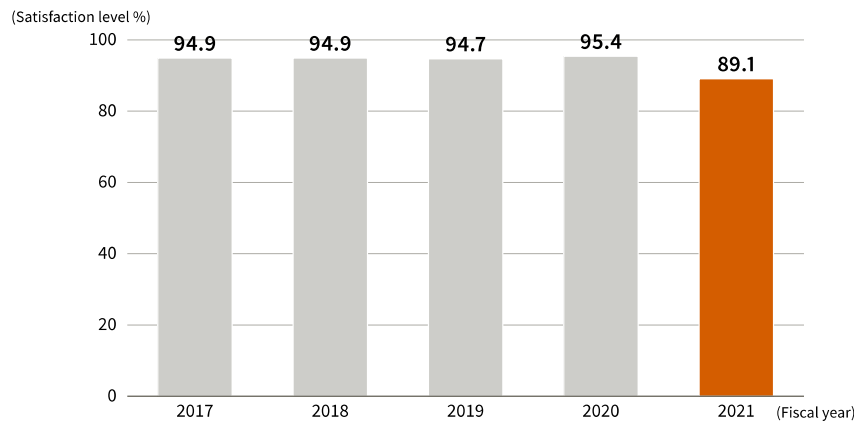
Voice

Manufacturing That Reflects Actual Customer Usage (in Japan)

Smart VOS (Voice of Service) Surveys

When we visit customers' homes for repairs, we use smartphones to conduct surveys on topics such as the installation environment and actual use of the product. The information we collect is fed back to the relevant business units, who look at how that information can be reflected in new products.

Smart VOS survey

Q1: What type of faucet is it?

○ Horizontal (with faucet fitting)

● Dedicated washing machine faucet (without faucet fitting)

○ Embedded

○ Other

35.8%

47.6%

11.8%

Business units
• Quality control department
• Customer support department

Social Initiatives: Customer Satisfaction

Enhancing Customer Satisfaction

Aiming for Customer-Oriented Services

＜Customer Assistance Center (Japan)＞

Through the Customer Assistance Center, which responds to a wide range of customer inquiries concerning products, Sharp is constantly striving to be customer-oriented in its response. To this end, the center meets periodically with product development departments to give them feedback in the form of customer inquiries, which leads to the development of improved and new products. We are also enhancing the customer support website to make it more user-friendly and to help customers troubleshoot issues by themselves.

In October 2018, we started providing chatbot-based automated responses. In November 2020, we started an operator chat service for customers who were unable to resolve their issues using the chatbot. In this way, we have been expanding internet-based support channels in line with the spread of smartphones.

Sharp is striving to respond to diversifying customer needs and achieve its goal of always serving in a customer-oriented manner.

＜ Reliable Operation of Customer Support＞

The Customer Assistance Center must be able to provide customer support even in challenging times, such as during the Covid-19 pandemic or natural disasters such as earthquakes and typhoons.

Our business continuity plan (BCP) ensures the continued operation of our customer support services even in emergency situations. Our support offices are distributed across multiple locations and are connected through a system that makes them ready to complement one another.

＜ Improving Response to Customers＞

As the face of Sharp, customer consultants study products and learn how to interact properly with customers before they start their jobs.

Even after they have begun their jobs, consultants periodically undergo training and study sessions to boost their skills. They also take qualification upgrading tests, so we can determine how well they have acquired their skills. These are part of Sharp efforts to maintain and improve person-to-person dealings with customers.

■ Number of Calls Received from Customers in Japan

(Thousand calls)

Fiscal year	Calls
2017	1,950
2018	1,802
2019	1,642
2020	1,600
2021	1,706
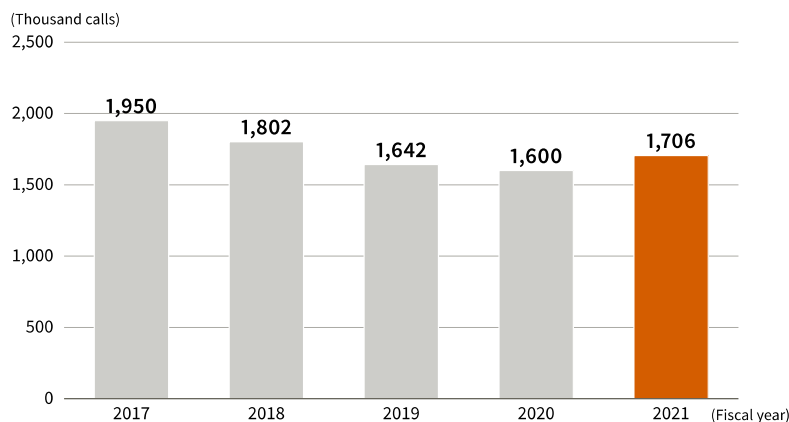
■ Upskilling Customer Consultants

Personnel	Implementation
Customer consultants (trainees)	Acquire basics in manners, product knowledge, and consumer-related laws and regulations
	Test ability to serve as customer consultants
Customer consultants (after starting their jobs)	Improve customer consultant skills through periodic training and study sessions
	Determine how well customer consultants have acquired skills by having them periodically take qualification upgrading tests
Supervisors	Ensure person is fit to be a supervisor
	Improve supervisor skills through periodic training and study sessions
	Determine how well supervisors have acquired skills by having them periodically take qualification upgrading tests

Social Initiatives: Customer Satisfaction

Increasing Service Capabilities (in Asia)

Case Study

Sharp Indonesia won the Indonesia Customer Service Quality Award 2021

In September 9th 2021, electronics manufacturing company P.T. Sharp Electronics Indonesia (SEID) won the Indonesia Customer Service Quality Award (ICSQ AWARD) 2021.

ICSQ AWARD is one of prestigious awards in Indonesia, which involves a professional research team from SWA Magazine (most popular business magazine in Indonesia).

SEID believes great after-sales service is the key of success to maintaining customer loyalty. Therefore SEID always improve the facility by offering variety customer service options, responsive service, and innovate through digital channel service.

This assessment was obtained through a positive response from a survey of 5,000 consumers in big cities in Indonesia. Respondent's assessment refers to 5 main aspects, such as Responsibility, Assurance, Tangible, Empathy, and Responsiveness.

Customer service top management representative
Lise Tiasanty (left) and Ronald R. Huwae (right)

ICSQ AWARD 2021 logo

The customer service help customer to fulfill their needs

Social Initiatives: Communication with Shareholders and Investors

Communication with Shareholders and Investors

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Strengthen IR communication, such as through the continued and active participation of senior executives in conferences	■ In addition to increasing the frequency of conference participation by senior executives, new materials were published on the IR website as part of efforts to strengthen communication with shareholders and investors	★★★	■ Strengthen communication through various IR events and further enhance the IR website

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

IR Disclosure Policy

Sharp discloses information to shareholders and investors in a fair and timely manner, in order to increase trust in its IR activities and to ensure a proper assessment of Sharp's corporate value in capital markets.
Sharp discloses information designated under the laws and regulations of Japan, and it also adequately discloses other information, such as business overview, management policy, and strategy.

Basic Policy on Allocating Profits

Sharp considers distributing profits to shareholders to be one of management's top priorities. Sharp pays dividends from surplus, comprehensively taking into account its consolidated business performance, financial situation, and future business development, while making active investments in R&D and other areas and strengthening the financial standing from a long-term perspective. In line with this, Sharp's basic policy is to ensure stable dividends at a payout ratio of 30%. For fiscal 2021, the annual dividend paid per common share was 40 yen, which represents a payout ratio of 33.0% and an increase of 10 yen per share compared with the previous fiscal year.

Communicating with Shareholders and Investors

Sharp actively facilitates opportunities for shareholders, investors, and analysts to communicate directly with senior executives. In addition to financial results briefings, management policy briefings, management briefings for shareholders, and one-on-one meetings, whenever possible senior executives attend conferences organized by securities companies. And whenever senior executives are unavailable, the IR department meets with shareholders and investors.
At the same time, Sharp seeks to be responsive to changing investor needs. For example, Sharp is pursuing greater interdepartmental cooperation with regard to ESG, which represents one of the company's key business challenges in recent years and an area of growing investor interest. The IR department is constantly collecting information about investor needs, how they are changing, investors' views on Sharp, and the outlook for the industry. It then relays all of this feedback to the senior executives.
Sharp will continue to use IR activities to help a wide range of shareholders and investors better understand Sharp's management situation and business policy.

General Shareholders' Meeting, Management Briefings

Sharp strives to create an environment that enables shareholders to easily exercise their voting rights. Efforts include disclosing notices of the meetings before they are sent out, participating in an electronic voting platform (for institutional investors), posting English notices about the meetings on its website, and allowing shareholders to exercise voting rights via the Internet.
Also, after the general shareholders' meetings, Sharp holds management briefings to exchange opinions with shareholders on topics which are not limited to the agenda of the general shareholders' meetings.

Social Initiatives: Communication with Shareholders and Investors

Communication with Shareholders and Investors

IR Activities Designed to Meet the Diversifying Needs of Investors

In response to diversifying needs, Sharp makes every effort to properly disclose a wide range of information promptly and accurately, and enhance its communication with shareholders and investors in Japan and overseas.

In particular, Sharp endeavors to provide detailed disclosure of financial information for which there is great interest, such as through securities reports, summaries of financial results, financial presentation materials, and integrated reports. ESG represents another important business challenge, about which Sharp actively discloses information through not only sustainability reports but also finance-related materials and other sources.

Also, Sharp has developed and maintains an accessible and easy-to-understand IR website. It is compatible with smartphone viewing and, in addition to having a page tailored for individual investors, it offers a robust array of content, such as a page providing graphs of major performance data. In fiscal 2021, the new "Sharp at a Glance" was put online, offering a compact summary of a variety of information, including financial data and stock and bond-related data.

Related information: > Investor relations

> Annual Report

> Learn about Sharp

> Sharp at a Glance

Preventing Insider Trading

Sharp has effectuated regulations restricting insider trading, established strict controls on undisclosed material facts ("insider tips"), and instituted restrictions on the buying and selling of stocks and other securities. Sharp has also implemented in-house training related to insider trading. This training includes, among other approaches, an educational campaign on the corporate intranet that targets Sharp Group employees in Japan with the aim of preventing insider trading by Sharp Group directors, audit and supervisory board members, executive officers, or employees.

In addition, given the importance of disclosure, when "material facts specified in the Financial Instruments and Exchange Act" and/or "important company information that should be disclosed in a timely manner as stipulated by securities exchanges" is generated, Sharp does its utmost to promptly disclose and publicize the relevant details. Further, regarding media and analyst coverage, Sharp deals with it while fully honoring the spirit of disclosure and remaining attentive so as not to violate insider-trading regulations.
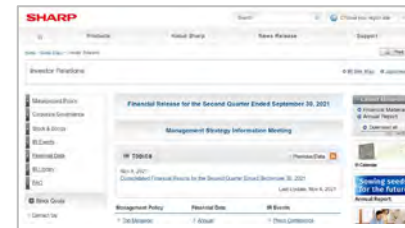
Investor relations website

2021 Annual Report
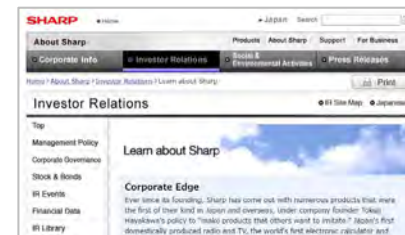
Webpage for "Learn about Sharp"

Sharp at a Glance

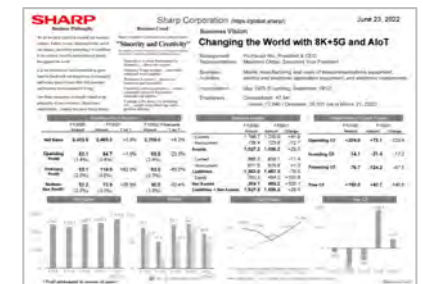# Social Initiatives: Communication with Shareholders and Investors

Third-party Evaluations / ESG* Indexes

ESG indexes help investors make investing decisions by taking account of companies' ESG efforts as well as their financial performance.

As of September 2022, Sharp has received high marks while being included in the following ESG indexes.

* Environmental, Social, and Governance

FTSE4Good Index Series
An index designed to measure the performance of corporate social responsibility initiatives from an ESG perspective. It is operated by FTSE International Ltd., part of the London Stock Exchange Group. Sharp has been included in this index for 13 consecutive years.

FTSE Blossom Japan Index
An ESG index reflecting the performance of Japanese companies that demonstrate strong ESG practices, operated by FTSE. The Government Pension Investment Fund (GPIF) of Japan uses this as a stock index for ESG investments. Sharp has been included in this index for six consecutive years.

FTSE Blossom Japan Sector Relative Index
An ESG index centered on the FTSE's ESG assessment of a company's approach to risks and opportunities related to climate change. Companies in this index are considered to be highly carbon intensive (in terms of their greenhouse gas emissions per unit of sales). The GPIF of Japan uses this as a stock index for ESG investments.

MSCI ESG Leaders Indexes
ESG indexes operated by MSCI Inc. They are composed of companies that have the highest ESG rated performance in each sector. Sharp has been included in this index for five consecutive years.

2022 MSCI ESG Leaders Indexes Constituent

THE INCLUSION OF Sharp Corporation IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF Sharp Corporation BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

S&P/JPX Carbon Efficient Index
An environmental stock index adopted by the GPIF of Japan. Because of the level of environmental reporting and carbon efficiency (carbon emissions per unit sales) maintained by Sharp, the company has been selected as a constituent of this index since 2018.

S&P/JPX Carbon Efficient Index

EcoVadis
EcoVadis evaluates the sustainability performance of supplier companies. Its aim is to improve those companies' environmental and social practices by taking into account the impact that global supply chains have on the environment and society. Sharp has received a Gold rating from EcoVadis.

FTSE4Good | **FTSE Blossom Japan Index** | **FTSE Blossom Japan Sector Relative Index**

Social Initiatives: For Local Communities

Promoting Social Contribution Activities

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Continue to collaborate with local communities to solve social problems, with employees taking the lead role in conducting activities that benefit communities	■ Total number of participants in environmental conservation activities: 9,353 (including family members), total number of activities: 645 ■ Career education provided to total of 1,814 students at special-needs schools	★★	■ Collaborate with local communities to solve social problems, with employees taking the lead role in conducting activities that benefit communities and, thereby, contribute to achieving the SDGs (Sustainable Development Goals)

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Based on its business philosophy of "contributing to the culture, benefits, and welfare of people throughout the world," Sharp is working to address local social issues as a member of the communities where it does business. In order to continue fostering relationships of mutual prosperity with communities, Sharp employees take the initiative in carrying out voluntary and ongoing activities centered on the environment, education, and social welfare.

Environmental Conservation Activities

In recognition of the fact that preserving ecosystems and the diversity of life that they contain contributes to a healthier and more prosperous living environment for both companies and people, Sharp carries out environmental conservation activities at its production sites and sales and service bases across Japan.

Activities aimed at protecting the interdependent balance of life on Earth, its biodiversity, specifically the biodiversity of *satoyama* (areas that lie between the foot of a mountain and arable land), are spearheaded by the Sharp Green Club (SGC), a volunteer organization composed of Sharp and its labor union. The SGC's activities focus on environmental challenges that are familiar to the lives of Sharp Group employees in Japan and emphasize communication with local residents and other stakeholders to raise environmental protection awareness. An example of the SGC's *satoyama* protection activities is the Sharp Forest project, which involves afforestation efforts conducted by volunteers in five locations around Japan that seeks to use forest cultivation as a means of fostering an understanding of the relationship, as well as deepening the connection, between forests, wildlife, and humanity and to foster greater global environmental mindedness. The SGC also works with the Ministry of the Environment, local governments, and other organizations in four locations in Japan to protect wetlands and waterfowl listed under the Ramsar Convention, such as by eliminating invasive species and conducting cleanup activities. In addition, employee volunteers take part in ongoing cleanup activities around the Sharp Group's various factories and business locations as well as participate in cleanup and greening initiatives organized by local governments and other organizations, all for the sake of facilitating environmental protection tied to, and carried out in conjunction with, local communities.

In fiscal 2021, 645 such activities took place with the participation of a total 9,353 volunteers, including Sharp executives, employees, and their family members. Overseas, as well, Sharp pursues a program of corporate social responsibility (CSR) encompassing activities focused on environmental protection, educational support, and social welfare.

For Sharp, social contribution starts with what the company founder described as a "heart of gratitude." Sharp will continue to pursue activities that are tied to the local community in order to repay the kindness that the local community, and society as a whole, has shown Sharp.

Case Study

Cleaning up around the Mie Plant
(Taki District, Mie Prefecture)

Planting pansies around the Mie Plant
(Taki District, Mie Prefecture)

Social Initiatives: For Local Communities

Promoting Social Contribution Activities

Activities in Japan

Management and employees work together on community-based volunteer activities that tackle environmental challenges.

Case Study

Kurumagawa (Taki Town) has a serious problem. Large areas of local farmland are being abandoned, owing to an aging farming population and damage from wild animals. To address this problem, the Mie Plant (Taki District, Mie Prefecture) has since 2012 joined forces with a local volunteer group, the Kurumagawa Yamazato Fun Club, to grow buckwheat.
On July 31, 2021, 16 Sharp employees and their family members took part in sowing seeds. And on October 30, 17 of them harvested the buckwheat.

Sowing buckwheat seeds

Harvesting the buckwheat

Case Study

The Hiroshima Plant (Higashi-Hiroshima, Hiroshima Prefecture) takes part in a project to maintain the grounds* of Ikoi no Mori Park at the foot of Mt. Ryuo. The project is organized by the Saijo Environmental Association for Preserving Mountains and Water.
On October 16, 2021, 15 Sharp employees and their family members helped to clear shrubs that hinder the growth of other trees like *konara* oak and Japanese blue oak. The participants took Covid-19 precautions, such as wearing face masks, taking their temperature, practicing physical distancing, and disinfecting their hands.

* Local residents, companies, and government jointly form a dedicated organization ("groundwork trust") to review the local environment and work to improve it.

Clearing shrubs

Case Study

The Makuhari Site (Chiba, Chiba Prefecture) helps conserve the Yatsu-higata tidal flat , which is registered under the Ramsar Convention*. The area is a stopover for migratory birds heading to Australia from Siberia and Alaska. On November 20, 2021, 19 Sharp employees and their family members, with help from the Yatsu-higata Nature Observation Center, took part in conservation activities such as removing reeds. They also enjoyed some birdwatching.

* An international treaty, adopted in February 1971, concerning the conservation of important wetlands as habitats for waterfowl and the protection of the wildlife inhabiting those wetlands.

Removing reeds
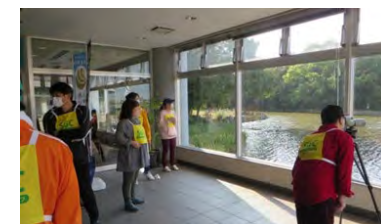
Birdwatching

Social Initiatives: For Local Communities

Promoting Social Contribution Activities

Activities around the World

Sharp bases around the world actively carry out community service activities.

Case Study

SEID：P. T. Sharp Electronics Indonesia

As part of its CSR, Sharp Indonesian production and sales base SEID organizes Sharp Mapan, a program to support farmers in need.
This year's program started with rice planting on July 5, 2021 and ended with a harvest on September 28. While boosting the livelihoods of the farmers, the program has been praised by the local municipality in Karawang.

Rice planting in July

The rice fields in harvest season in September

Case Study

SEID：P. T. Sharp Electronics Indonesia

Many residents in Indonesia's Karawang Regency were affected by flooding triggered by heavy rainfall from December 11, 2021.
On December 22, Sharp Indonesian production and sales base SEID initiated an emergency response CSR program. This involved providing 150 sets of staple food, free health checkups, and treatment of external wounds through the Karawang Regional Disaster Management Agency. For children at evacuation centers who experienced greater loss due to the disaster, SEID donated materials containing advice on coping with trauma.

At the donation ceremony

Case Study

SEM：SHARP Electronics (Malaysia) Sdn. Bhd.

Malaysia suffered flooding caused by heavy rainfall from March 7, 2022. Sharp Malaysian R&D and sales base SEM cooperated with the Malaysian Ministry of Education to help rebuild schools affected by the disaster. SEM donated 976 electric appliances, including fans (ceiling, wall, and stand), air conditioners, refrigerators, and TVs to 44 schools in Selangor State and 56 schools in Pahang State.

At the donation ceremony

Social Initiatives: For Local Communities

Promoting Social Contribution Activities

Career Education for Disabled Children

As part of a larger program of community service activities that draws on its founder's commitment to helping disabled individuals, Sharp works with Sharp Tokusen Industry Co., a Sharp special subsidiary*, to enhance career education activities conducted at special-needs schools and similar organizations for disabled students. The following courses are provided with the aim of fostering a career-minded perspective in students and motivating them to work and achieve greater self-sufficiency.

- Workplace tour: Visit the workplace of disabled employees and attend a lecture
- Workplace experience: Experience work where disabled employees are active
- School visits: Disabled Sharp employees visit schools to give talks on what it means to work

A workplace visit

A participant in a workplace experience

A classroom during a school visit

* A subsidiary that has made special efforts supporting the employment of disabled people, as defined in Japan's Act on Employment Promotion, etc. of Persons with Disabilities (for example, improving facilities where the disabled work).

Case Study

Marking 10 years since the start of the school visit program

Sharp's program of career education support activities conducted at special-needs schools and similar organizations for disabled students, which was launched in 2012, recently marked its 10th year. To date, a total of about 18,000 people have participated. One of the changes over the last 10 years was the start of an online school visit in 2020. The program has received requests from a total of 234 special-needs schools. After considering what it could do to continue this much-needed program during the Covid-19 pandemic and to support the valuable experience of school life, Sharp took advantage of its commitment to creativity to develop the three lectures that it is currently offering. Feedback from questionnaires given to teachers after the course indicates that students adopted a more optimistic outlook in day-to-day school life after participating in the course as they prepared for employment, and that the course provided an effective way for students to prepare for practical training. In addition, the program has proven effective as a substitute for out-of-school education, which has been difficult to provide during the pandemic.

At the same time, Sharp has continued to offer the on-site school visit program, in which instructors visit schools, while taking steps to prevent infection, for example by changing how group activities are carried out.

We are also working to create an environment in which students can easily participate in workplace tours and workplace experience/practical training, in which students visit Sharp, by taking steps to prevent infections, for example by restricting the number of participants per session.

Initiatives to promote self-sufficiency through work for disabled individuals are necessary and should continue. Going forward, Sharp will continue these and other programs to help as many people as possible find work while examining how career education support activities can function more effectively.

Online school visit

Social Initiatives: For Local Communities

Promoting Social Contribution Activities

Comment from a Principal of a Special-needs School Participating in Career Education

We really appreciate all that Sharp Tokusen Industry Co. has done to help our career guidance program for students. I'm grateful that we've been able to participate in the company's online school visit, which began in fiscal 2020, for the last three years.

Our school is the prefecture's only special-needs school for students with health issues. Our students are being treated for illness on an in- or out-patient basis, have mental health issues like neurosis or psychosomatic disorder or behavioral impediments, have a history of not attending traditional schools, or are not a good fit for traditional classes, for example because they are on the autism spectrum or have a condition such as a learning disorder or ADHD. Depending on the characteristics of individual students' disorders, we see issues in the areas of sociability and the ability to manage one's own health and life.

We discovered the company's online school visit program just as we were exploring how we could foster students' ability to work, live, and practice self-discipline through outside stimuli, which we believe are more necessary than ever due to the pandemic and the resulting lack of progress in educational plans. The program provides an extremely easy-to-understand explanation of not only knowledge for work, but also knowledge that's necessary for life management and tips students can use while pursuing their education. In examining the meaning of work, the program asks students to think about things from the perspective of someone working in a way that fits into actual life. The program's content offers a valuable opportunity to think in a concrete way about what they should be aware of in their daily lives in the future by leading them to learn in an autonomous way, interact with friends and learning materials, and think of their own answers, for example by focusing on life management, interpersonal skills, and students' existing abilities. In addition, it has provided an excellent opportunity for students to reexamine their own lives and the concept of work itself.

Tsutomu Ohki
Principal, Ibaraki Prefectural Tomobe-higashi Special-Needs School

Our school will continue to focus on students' individual educational needs as we pursue a fine-grained program of educational activities designed to help each and every student develop and realize their own dreams in life.

To that end, we hope to strengthen partnerships by enhancing the trusting relationships and connections we've built with partner organizations to date. I look forward to more guidance and support from Sharp Tokusen and wish them further success and growth in future.

Comment from a Sharp Tokusen Industry Co. Employee

We accept numerous trainees. One thing we try to do when we accept new trainees is to encourage self-help and self-reliance. Some people with midlife disabilities find themselves facing inconveniences in daily life. Such people can realize improvements by taking a variety of creative steps in their lives. We have trainees think about whether they can incorporate such creative steps into their work. To encourage growth on the part of trainees, I believe it's important that they cultivate the ability to think of such steps themselves.

Another thing we try to do is to help trainees master the communication skills they'll need in their jobs, for example reporting, communicating, and consulting as well as engaging in enjoyable small talk in the workplace. I feel that many of our trainees have difficulty communicating. That's why I make an active attempt to talk to them so that they can experience the joy of interacting with others. I look forward to continuing to support them so that their communication skills improve and helping them to act in an independent manner.

Masahiro Ohnishi
Supervisor, Sharp Tokusen Industry Co.

Social Initiatives: Efforts Related to Human Rights

Efforts Related to Human Rights

Guiding Principles on Human Rights

As a participant in the United Nations Global Compact, the Sharp Group promotes initiatives that conform to international principles about human rights and labor standards, such as those advocated in International Labour Organization (ILO) conventions.

The Sharp Group's fundamental policies with regard to human rights are embodied in the Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct. These stipulate that the Sharp Group respects fundamental human rights and individuality by eschewing practices that are discriminatory or which infringe upon human rights, such as child labor or forced labor, and every effort is made to ensure that all Sharp employees are aware of and adhere to these policies.

Human Rights Education and Training

In Japan, new employees and mid-career hires of the Sharp Group learn about Sharp's philosophy on human rights by studying the Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct.

Each site carries out ongoing human rights awareness activities, including annual human rights training. In fiscal 2021, Sharp held online training and e-learning on preventing all forms of harassment, as well as on other important topics. A total of 16 sessions were provided to around 16,410 employees.

In fiscal 2021, compliance-related training based on the Sharp Code of Conduct was also provided to all Sharp Group employees. In this training, employees learned about human rights issues by focusing on the prevention of child labor and the protection of student workers and young workers, key themes in the human rights and labor field. About 19,800 employees took part in this e-learning program.

Sharp Group Charter of Corporate Behavior (excerpt)

The Sharp Group respects fundamental human rights and does not engage in discriminatory actions or human rights violations in any of our business activities. The Sharp Group does not sanction child labor or forced labor.

Sharp Code of Conduct (excerpt)

1. We respect the fundamental human rights and the dignity of individuals in all business activities, and will not be complicit in human rights violations. In case business activities, products and services are found to adversely affect human rights, we will take all appropriate measures.

2. We will not sanction child labor or any form of forced labor, and we will support its effective abolition.

3. In any corporate activities, including employment practices such as hiring, payment, promotion, opportunities for training and the like, we do not take any action that constitutes discrimination based on nationality, race, ethnic group, color, sex, physical health, pregnancy, sexual orientation, age, marital status, religion, creed, social status, birth, property, bodily feature, physical or mental disability, political opinion, and the like.

4. We do not engage in acts and speech that constitute inhumane acts, such as abusive behavior, expressions of contempt, verbal abuse, sexual harassment, power harassment and the like, in our offices and other work places.

5. Based on global standards and applicable laws and regulations, we will respect and consider the rights of employees, such as freedom to associate, freedom to join a trade union, freedom to take industrial action, freedom to join a worker's council and the like without revenge, threats, and/or harassments to employees.

Human rights-related initiatives in line with the Sharp Group Charter of Corporate Behavior, the Sharp Code of Conduct, local laws and regulations, and other requirements are also being promoted at Sharp's overseas bases.

Additionally, Sharp carries out ongoing human rights compliance checks at its production sites via SER self-assessment surveys* conforming to international principles, such as those advocated in ILO conventions.

* See page 15.

In the UK, we have disclosed a statement to prevent forced labor and human trafficking based on the UK Modern Slavery Act 2015.

In Australia, we have submitted reports as required under the Modern Slavery Act.

Related information: > Modern Slavery Act Transparency Statement

SHARP Sustainability Report 2022

Social Initiatives: Efforts Related to Human Rights

Labor-Management Relationship

Good Labor-Management Relationship That Prioritizes Dialogue and Respect for Employee Rights

Sharp respects employees' right to organize and the right of collective bargaining based on the laws of each country or region, and it works to strengthen its trusting relationships with labor unions.

At Sharp Corporation, for example, labor agreements between the company and the union give the union the right to organize, the right to bargain collectively, and the right to take collective action.

Under labor agreements, Sharp provides periodic opportunities for labor-management meetings, such as the Central Labor-Management Council, which involves top executives from both sides, and labor-management meetings at each production site and affiliate. In addition, labor and management periodically meet to exchange opinions and information regarding the company's financial condition and issues in the work environment. When there are issues that will have an impact on the working conditions of union members, both sides meet for discussion before action is taken.

As of March 31, 2022, a total of 4,391 Sharp Corporation employees are members of the Sharp Workers Union. This represents a union participation rate* of 98.6%.

In Europe, Sharp holds European Works Council meetings every year to review the financial condition and managerial issues throughout Europe. In China, companies are obligated to hold meetings with employee representative assemblies to decide on issues such as employee working conditions. In line with relevant local laws, Sharp strives to build cooperative labor management relationships.

* The percentage of union members among employees excluding those in management positions as defined under the Labor Standards Act of Japan. The above employee figure counts employees whose labor agreement stipulates non-union status (personnel affairs, accounting, etc.) as not belonging to a labor union.

Preventing Workplace Harassment

FY2021 Objectives	FY2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Raise awareness of consultation service in order to prevent harassment ■ Respond to and resolve harassment-related consultation cases ■ Hold anti-harassment training at least once a year	■ E-learning provided for all employees on how to prevent harassment and where to report cases of harassment ■ Harassment consultation service staff received 29 harassment-related consultations; all matters were properly handled and resolved in line with established rules	★★	■ Respond to and resolve harassment-related consultation cases ■ Provide e-learning for all employees at least once a year on how to prevent harassment

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Basic Concept

Workplace harassment is socially unacceptable behavior damaging to human dignity. It prevents employees from being effectively empowered, hinders workplace cohesion and operations, and negatively affects the company's image in society.

Harassment-related consultations are handled swiftly and fairly, and disciplinary action is taken in accordance with the rules of employment if any prohibited behavior considered to be harassment is identified.

Prohibited behavior considered to be harassment
- Sexual harassment
- Harassment relating to pregnancy, childbirth, childcare, caregiving, etc.
- Power harassment (workplace bullying)

Harassment Prevention Measures

In order to help prevent harassment, Sharp provides all employees, including managers, with e-learning and other harassment-prevention training. There were 14,112 participants in fiscal 2021.

Additionally, Sharp utilizes employee surveys to help ascertain the status of workplace harassment and to identify whether warnings and guidance should be issued in order to prevent potential problems.

Harassment Consultation Service

Sharp has also set up a harassment consultation service for all of its bases in Japan in order to handle harassment-related reporting and consultations, thereby helping to ensure that, in the event that harassment occurs, a system is in place to immediately deal with it. In addition, Sharp has established the Crystal Hotline as a general consultation service for all workplace-related concerns, particularly those related to compliance.

Consultation services are available to Sharp employees, temporary staff, employees of business partners, and other relevant parties.

Sharp has developed harassment response guidelines, which stipulate the appropriate way to handle harassment reports, such as how to ensure those making the reports do not suffer any negative repercussions or have any personally identifiable information leaked or disclosed without their consent.

Social Initiatives: Human Resource Development / Personnel System
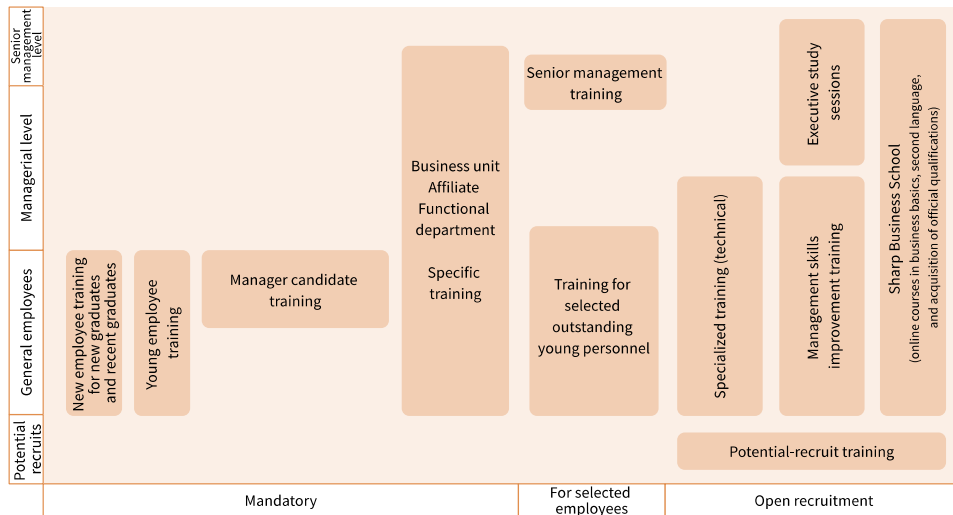
Human Resource Development

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Expand education and training system aimed at developing the next generation of human resources ■ Strengthen individual skills improvement initiatives	■ Expanded human resource development programs for selected employees (opened courses in management skills improvement and leadership improvement) ■ Expanded self-development courses (opened courses in management skills, management philosophy, and foreign languages)	★★	■ Expand education and training system aimed at developing the next generation of human resources ■ Encourage an employee mindset to come up with new business ideas

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Variety of Human Resource Development Programs

Sharp's range of development programs is one way the company is boosting its comprehensive strength.

We have many kinds of development programs aimed at improving the quality and scope of employees' capabilities. These train young employees, cultivate the next generation of leaders, and strengthen individual skills.

Job-Level-Specific Human Resource Development

In job-level-specific training, special emphasis is placed on the development of young employees so that they can acquire the knowledge, skills, and mindset essential to each stage of their careers.

Towards that end, young people receive training starting from when they are first selected to join Sharp, training upon joining the company, and training in their first few years at the company. Candidates for promotion take manager candidate training as part of Sharp's efforts to systematically strengthen its management capabilities.

Besides mandatory job-level-specific training, Sharp has other human resource development programs, such as business unit-specific training, training for selected employees, and open-recruitment training.

Human Resource Development for Selected Employees

For Sharp to achieve sustainable growth in the medium to long term, it must foster the next generation of leaders who will carry the company into the future. We therefore select outstanding employees who can build our future and improve the necessary skills of these management personnel.

In programs for senior management candidates for the near and foreseeable future, we have courses designed to help them grow by, for example, providing them with the needed managing skills and improving their leadership capabilities.

Social Initiatives: Human Resource Development / Personnel System

Human Resource Development

Personnel, Education, and Training System for Fostering Strong Individuals

Sharp works to cultivate an environment in which employees can pursue independent learning whenever and wherever they are, in order to build up the basic business knowledge and expertise that they need as professionals.
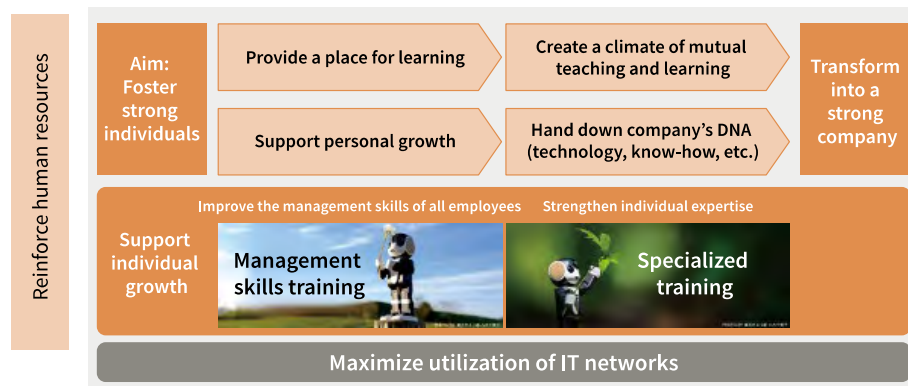
Specialized Technical Training

Sharp pursues a variety of initiatives aimed at helping employees improve/deepen their expertise (technical competency).

The courses we offer are a basic skills-building seminar (e-learning) in which primarily younger engineers learn the basics of technology; a device seminar, which introduces employees in product development to Sharp's latest devices; and technical workshops, which incorporate a practical program that is directly linked to job skills in specific technical fields.

Sharp's education and training initiatives are aimed at strengthening technical expertise company-wide, going beyond the limited framework of specific business and products to share technical know-how across internal functions and to develop younger employees by passing existing skills and techniques on to them.

Learning for Self-Development

We continue offering management skills improvement training, in which basic business knowledge and skills essential for any employee are taught.

With regard to the study sessions and management skills improvement training, Sharp actively supports employee self-development by providing an e-learning environment, which complements the group training sessions, allowing employees to use their home computers and smartphones to easily pursue learning anywhere, any time.

In addition to management skills improvement training, we have started new training offerings open to all employees. These include courses in business framework and other management skills, management philosophy, and foreign languages. Our training system satisfies the numerous ways that employees desire to improve themselves.

By providing these various education and training initiatives on an ongoing basis, Sharp is fostering a corporate culture of employee-driven mutual learning and instruction in which personnel who are capable of delivering the sorts of innovation that strengthen the company will be cultivated.

■ **Sharp Group Learning for Self-Development Participation (Fiscal 2021)**

No. of Participants (Total)	Total Learning Hours
4,905	11,676 hours

Social Initiatives: Human Resource Development / Personnel System

Personnel System Conducive to Talent Development and Motivation Boosting

Employee Evaluations and Compensation

Because we believe employees' compensation should depend on their achievements, we use a bonus/pay raise system that is tied to company performance and employee evaluation in order to reward those employees who have produced good results.

To ensure fair evaluations, employees have an interview with their managers at the beginning, middle, and end of each evaluation term, at which time both sides confirm how well the employee is doing in terms of progress towards targets, contribution to the company, and job results. Evaluation results are given to employees every half year along with explanations of the evaluations with the aim of contributing to employees' growth.

Personnel Declaration System

All employees submit a career development plan along with a self-assessment of their job aptitude. Sharp then stores this information—along with records of interviews with supervisors—in a personnel database. This provides an overview of how employees are progressing with respect to their career goals, and it allows Sharp to effectively develop human resources.

Step-Up Campaign (Qualification Acquisition Encouragement Plan)

To support employee self-development, Sharp offers monetary rewards to employees who have acquired qualifications, with the amount depending on the difficulty of acquiring the qualification. This plan covers about 200 qualifications, including some for field-specific techniques and skills, some directly related to daily duties, and some for language skills.

Employee Survey

Employee surveys cover employees at Sharp Group companies in Japan. The surveys have been conducted periodically since 2005 with the aim of invigorating and improving the workplace. In 2021 the survey took place in July and 18,668 people responded to the survey (97.9% response rate). The survey results, obtained from questions about the current situation regarding the respondent's work, workplace, superiors, and so forth, are summarized for each workplace and shared with every employee. Workplace meetings are held based on the survey results to identify the issues to be addressed and carry out voluntary improvement activities.

Welfare

Sharp Group companies in Japan have introduced a variety of employee benefits and welfare systems, which contribute to a stable and secure working environment for employees.

|	
Corporate pension system	In addition to the public pension system, Sharp has introduced its own corporate pension system (defined benefit corporate pension) to help support employees after their retirement.
Health insurance association	Sharp Health Insurance Association provides enrolled employees and their dependents with specific supplemental benefits above and beyond those mandated by law when sick or injured. A variety of health promotion services are also provided to those enrolled in the Health Insurance Association.
Other employee benefits and welfare systems	Property accumulation savings, employee stock ownership plan, Group health insurance plan, medical examination subsidy (e.g., for comprehensive medical screenings), special incentive leave (an extra five days of paid leave for every five years of continued employment)

Social Initiatives: Diversity Management

Developing Diversity Management

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Promote measures in line with action plan for Act on Promotion of Women's Participation and Advancement in the Workplace ■ Maintain 2.4% employment rate for the disabled	■ Implemented action plan in line with Act on Promotion of Women's Participation and Advancement in the Workplace Percentage of female managers: 4.6% as of March 31, 2022 ■ Maintained employment rate for the disabled Employment rate for the disabled: 2.45% as of June 1, 2022	★	■ Promote action plan in line with Act on Promotion of Women's Participation and Advancement in the Workplace ■ Maintain 2.4% employment rate for the disabled

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Basic Concept

Sharp's business philosophy, established in 1973, embraces the concept of diversity by stating that "It is the intention of our corporation to grow hand-in-hand with our employees, encouraging and aiding them to reach their full potential and improve their standard of living." We aim to produce new value based on mutual respect among employees and to develop and propose products and services that can contribute to better lives, creating the next future with customers.
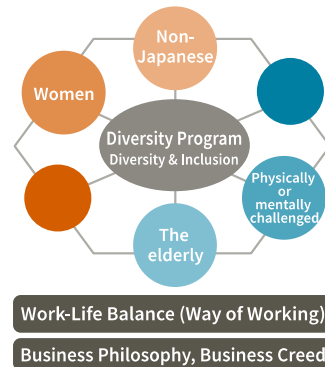
Diversity management is a human resources strategy for utilizing a diverse range of employees, but we regard it as a business strategy at the same time. Also, the Sharp Code of Conduct states that, "In any corporate activities, including employment practices such as hiring, payment, promotion, opportunities for training and the like, we do not take any action that constitutes discrimination based on nationality, race, ethnic group, color, sex, physical health, pregnancy, sexual orientation, age, marital status, religion, creed, social status, birth, property, bodily feature, physical or mental disability, political opinion, and the like," and that, "We will actively take part in efforts to enhance the work environment where employees with diverse characteristics can fully demonstrate their abilities." This is what Sharp is actively working towards, giving individual consideration based on need.

Non-Japanese / Women / The elderly / Physically or mentally challenged

Diversity Program Diversity & Inclusion

Work-Life Balance (Way of Working)

Business Philosophy, Business Creed

Promoting Activities of Female Employees

Sharp formulated an action plan based on Japan's Act on Promotion of Women's Participation and Advancement in the Workplace, which came into effect in April 2016. In line with this action plan, Sharp is working to raise the percentage of women in all job categories and increase the number of women in managerial positions. This will enable it to achieve further diversity in its workforce and contribute to society through better products and services. To this end, Sharp has set the following goals and is actively pursuing further engagement of its female employees.

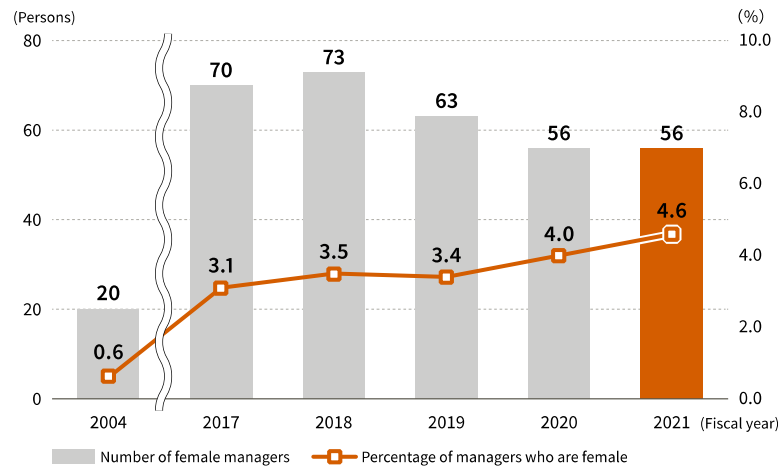| Goal	Deadline
• Have at least 15% of new graduates hired for engineering jobs and 50% of new graduates hired for non-engineering jobs be women • Have at least 5% of managers be women • Have at least 95% of female employees having returned to work after taking childcare leave stay at Sharp beyond 12 months after their reinstatement	By the end of fiscal 2024

Social Initiatives: Diversity Management

Developing Diversity Management

Promoting Female Employees to Managers

For years, Sharp has striven to expand the roles of women in the workplace and promote female employees to managers. As of the end of fiscal 2021, the percentage of managers who were female was 4.6%, an almost eight-fold increase compared to 0.6% in the year Sharp launched a program to promote more women to managerial positions.

■ Number of Female Managers at Sharp Corporation

(Persons) / (%)

Fiscal year	2004	2017	2018	2019	2020	2021
Number of female managers	20	70	73	63	56	56
Percentage of managers who are female	0.6	3.1	3.5	3.4	4.0	4.6

■ Number of female managers　—□— Percentage of managers who are female

Supporting Employees Returning from Maternity or Childcare Leave

Sharp has held reinstatement support seminars every year since fiscal 2014. These seminars involve an explanation of the company's current circumstances and the various support systems related to childbirth and nursing. As well, employees who have returned to work after taking childcare leave share their experiences and provide advice on how to balance work and child rearing. Attendees are also given the opportunity to build networks with other working mothers. These seminars help to resolve anxiety during time off from work and foster a positive mindset about returning to work.

Screen shots of the reinstatement support video

Starting in fiscal 2020, the classroom-style seminar was changed to an online seminar to make it easier for participants to join from home while looking after children. This change was the result of feedback expressed during reinstatement support-related interviews with employees. Additionally, in order to help build a stronger support system, which encompasses both the returning employee's family and workplace, the seminar video was also distributed to their spouses and supervisors. Sharp will continue to listen to employees and incorporate their feedback as it works to become an even better and more attractive place to work.

Sharp also has two systems in place to support employees who are eager to advance their careers after returning to work after childbirth. One is for giving one-off payments to employees making an early return from childcare leave and the other is for subsidizing the fees for non-registered daycare facilities for employees with children at age two or younger, who fall outside the scope of the government program for free early childhood education and care.

Social Initiatives: Diversity Management

Developing Diversity Management

■ Sharp Corporation Personnel Composition, by Gender

(Person)

		Men	Women	Total
Directors, audit and supervisory committee members		7	0	7
Employees	Executive officers	9	0	9
	Managers	1,156	56	1,212
	General staff	3,753	700	4,453
	Subtotal	4,918	756	5,674
Total		4,925	756	5,681
Ratio		86.7%	13.3 %	
Average age		45.9	43.0	45.5
Average years of service		23.1	20.4	22.7

(As of March 31, 2022)

	Men	Women	Total
New graduate hires (graduates of universities and technical colleges, April 1, 2022)	183	30	213

■ Ratio of Men and Women at Major Overseas Subsidiaries

Base		Directors, managers		Non-supervisory employees (permanent employees)		Total	
		Men	Women	Men	Women	Men	Women
SEC (US)	Sales, production	82.0%	18.0%	69.9%	30.1%	71.0%	29.0%
SEE (UK)	Sales, production	76.6%	23.4%	74.4%	25.6%	74.8%	25.2%
SEID (Indonesia)	Sales, production	83.0%	17.0%	70.3%	29.7%	71.0%	29.0%
SATL (Thailand)	Production	65.8%	34.2%	29.7%	70.3%	30.5%	69.5%
SMM (Malaysia)	Production	80.9%	19.1%	42.6%	57.4%	45.5%	54.5%
SOCC (China)	Production	83.0%	17.0%	24.7%	75.3%	30.1%	69.9%
NSEC (China)	Production	63.9%	36.1%	65.1%	34.9%	65.0%	35.0%
WSEC (China)	Production	49.0%	51.0%	46.9%	53.1%	47.2%	52.8%

(As of March 31, 2022)

Social Initiatives: Diversity Management

Developing Diversity Management

Expanding Opportunities for Non-Japanese Employees in Japan

With the globalization of business, Sharp is working globally to secure and systematically train human resources who can meet the needs of each workplace. In recent years, Sharp has promoted greater employment of international students and people of other nationalities residing in Japan. As of April 2022, we have approximately 100 non-Japanese employees from 11 countries working in various departments and job categories. To avoid illegally employing undocumented workers, Sharp checks the residence status of all foreign nationals before hiring them. This follows the advice of the Immigration Services Agency of Japan's Ministry of Justice. (Sharp uses an Agency website to validate residence card numbers.)

Reemployment of Retirees

In 2001, Sharp introduced a professional employee system that reemploys employees who have reached the mandatory retirement age of 60. This stems from the company's stance on promoting the utilization of senior employees who have a strong work ethic. It also takes into consideration employees who wish to give back and contribute to society through the skills and knowledge they have accumulated over many years.

At present, employees who have reached the mandatory retirement age of 60 (and who wish to continue working until the age of 65) are redeployed with the company. In response to the Act on Stabilization of Employment of Elderly Persons—which came into effect in April 2021—Sharp is considering offering guaranteed employment up to the age of 70.
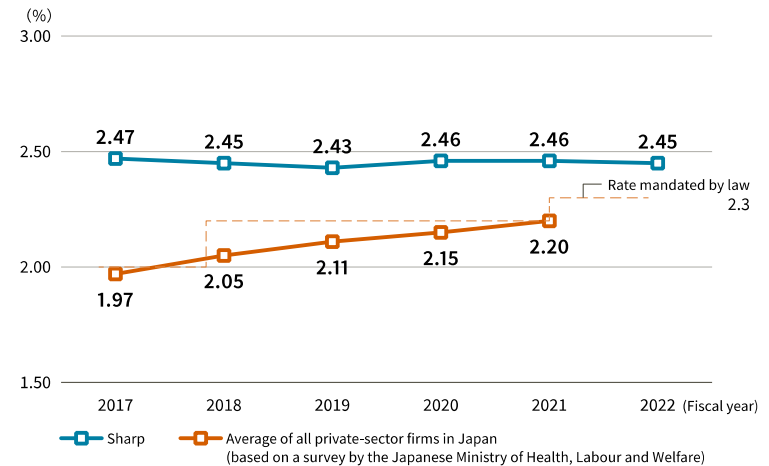
Promoting Employment of the Disabled

Ever since Sharp founder Tokuji Hayakawa established the "accumulation of community service" as one of the "Five Accumulations of Competency*," Sharp has been actively involved in social service and welfare. The entire Sharp Group makes efforts to promote the employment of the disabled and to create a better work environment for these employees.

Specifically, Sharp launched a recruitment website addressing the employment of disabled people. This website contains information on initiatives to hire such individuals to work in the Sharp Group. Sharp is also striving to make the working environment more accessible for disabled employees.

For example, during training sessions attended by hearing-impaired participants, there are support measures such as voice recognition software and PC note-taking (a method for conveying audio information by entering it into the keyboard of a PC) so that voice communication is converted into text for participants to read and understand.

Employment Rate of the Disabled in Japan

As of June 1, 2022, the Sharp Group employed approximately 310 disabled persons. The percentage of disabled employees among all employees was 2.45%, above the 2.3% rate mandated by law (as stated in the Act on Employment Promotion etc., of Persons with Disabilities).

■ **Employment Rate of the Disabled in Japan**

(Fiscal year)	2017	2018	2019	2020	2021	2022
Sharp	2.47	2.45	2.43	2.46	2.46	2.45
Average of all private-sector firms in Japan	1.97	2.05	2.11	2.15	2.20	

Rate mandated by law 2.3

Data as of June 1 each year for Sharp Corporation, a Sharp special subsidiary, and group companies.

Online Recruitment Interviews

Sharp started to use online interviews for recruitment in the first half of fiscal 2019. With fewer time and location constraints, this new form of recruitment has allowed us to interview applicants flexibly, regardless of the place they live or work, the level of disability, and other factors. We are creating and increasing opportunities to approach a diverse range of talents by leveraging the benefits of online interviews.

For fiscal 2021 as well, all of Sharp's recruitment interviews were done online to protect the safety and health of both applicants and interviewers under the Covid-19 pandemic.

* Accumulation of trust, accumulation of capital, accumulation of community service, accumulation of human resources, and accumulation of trading partners

Social Initiatives: Activities to Support Work-Life Balance

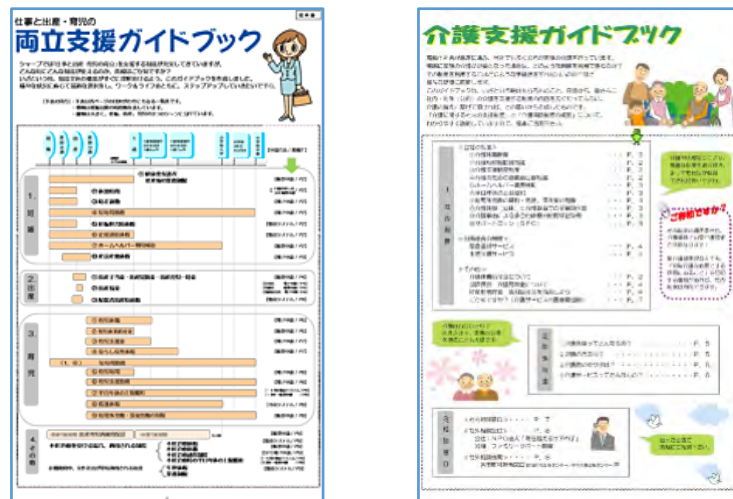## Activities to Support Work-Life Balance

Basic Concept

In line with its promotion of diversity, Sharp supports its employees by creating a rewarding workplace. Sharp gives employees a choice of work styles—allowing them to select the style that best suits them at various stages in their lives—thereby helping them achieve a work-life balance that will enable them to lead rich lives both at work and at home.

Specifically, Sharp is expanding support programs for childcare and nursing care and is distributing guidebooks and other information to promote use of these programs.

In addition, Sharp has established a support system for balancing work with medical treatment. Employees undergoing medical treatment are able to work comfortably without being pressed by time. An employee's health and capacity for work are the key considerations in determining their work schedule and obligations.

On top of all this, Sharp is continuously implementing initiatives aimed at helping employees find a work style that is both efficient and satisfying, such as by establishing No Overtime Day and by actively encouraging employees to schedule and take their annual paid leave.

Work-Life Balance Guidebook and Nursing Care Guidebook

Promoting Childcare Leave for Men

To create a more employee-friendly workplace, Sharp has made efforts to establish a support system and environment in which both male and female employees can participate in child rearing. Japan is undergoing a low birth rate, diversifying work and life styles, and an increase in double-income households. In light of this, Sharp is expanding and improving its childcare leave system and encouraging more male employees to take part in child rearing. As a result, many male employees have taken childcare leave (36 people at Sharp Corporation in fiscal 2021).

Sharp will continue to support its employees' active participation in childcare and in family life with their children.

Acquiring Kurumin Certification

In 2007, 2009, 2012, 2015, and 2020, Sharp Corporation was recognized by the Minister of Health, Labour and Welfare as a company supportive of childrearing based on the Act on Advancement of Measures to Support Raising Next-Generation Children and received the "Kurumin" mark of certification.

Social Initiatives: Activities to Support Work-Life Balance

Activities to Support Work-Life Balance

■ Work-Life Balance Support Programs (Main Programs and Participation at Sharp Corporation) （Person）

Program Name	Description	Participation		
		Fiscal 2019 （usage rate）	Fiscal 2020 （usage rate）	Fiscal 2021 （usage rate）
Childcare Leave*1	Allows leave until the child turns two years old. (The 10-day period beginning at the start of the childcare leave is treated as a period with pay.) ＜Fiscal 2021＞ Return to work rate Men: 100% Women: 93.8% Retention rate*2 Men: 95.6%; Women: 95.1%	125 (42.8%) *3 Men: 85 (33.7%) Women: 40 (100%)	74 (43.3%) *3 Men: 50 (34.0%) Women: 24 (100%)	56(44.4%) *3 Men: 36 (34.0%) Women: 20(100%)
Reduced-Hours Employment during Childbearing/Childcare	A system by which an employee can reduce work time by up to three hours per day (in units of 30 minutes) during pregnancy. Also allows a female/male employee to work under the same reduced-hours employment system until March 31 after her/his child has reached the sixth year of elementary school.	13	7	3
Childcare Support Work Program	Allows flexible work schedules (work day start and end times) until March 31 after the child has reached the sixth year of elementary school. This allows an employee to shorten working hours up to an average of three hours per day in one-hour units.	313	215	230
Nursing Care Leave*1	Allows an employee to take leave to care for a family member requiring nursing care for a total of two years (can be divided up).	6	3	7
Nursing Care Support Work Program	Allows flexible work schedules (work day start and end times) during a six-month period in order to carry out nursing care. (Can be changed if necessary.) This allows an employee to shorten working hours up to an average of three hours per day in one-hour units.	9	7	10
Other Programs	Multipurpose Leave, Multipurpose Leave Taken in One-Hour Units (or half-day units), Staggered Commuting Hours during Pregnancy, Guaranteed Reemployment after Childbearing/Childcare, Reemployment after Returning from a Spouse's Overseas Transfer, Reemployment after Nursing Care, Reduced-Hours Employment or Reduced Weekly Working Days for Nursing Care, Support for Unmarried Employees with Family Nursing Care Obligations (commuting costs and other relevant expenses), Paternity Leave, Daycare Adaptation Leave, Nursing Care Leave (in one-hour units), Nursing Leave (in one-hour units), Home Helper Expense Subsidies, Leave of Absence or Annual Paid Holidays for Fertility Treatment, Fertility Treatment Financing System, Reduced-Hours Employment for Career Development Support, Volunteer Leave, Subsidy for Fees of Non-Registered Daycare Facilities, One-off Payments for Employees Making an Early Return from Childcare Leave, Subsidy for Fees for Sick Children Daycare and Extended Daycare			

*1 Childcare leave or nursing care leave will never work against the employee in terms of personnel evaluations, pay raises, promotions, or bonuses.
*2 Percentage of employees still working 12 months after returning to work.
*3 The usage rate for fiscal 2019 is based on Sharp's two-year childcare leave policy. The rate from fiscal 2020 is calculated in line with the Basic Survey of Gender Equality in Employment Management of Japan's Ministry of Health, Labour and Welfare.

Social Initiatives: Promoting Occupational Safety and Health

Promoting Occupational Safety and Health

Sharp Group Basic Policies on Safety and Health

Basic Philosophy

The Sharp Group regards protecting the safety, security, and health of employees all over the world as indispensable to its business activities, and is dedicating appropriate management resources in a spirit of Sincerity and Creativity, in order to achieve a safe and pleasant working environment.

Basic Policy

1. Legislative Compliance
   In addition to strict compliance with legislation related to safety and health in each country and region, all Group companies must comply with in-house standards established in line with the standard Group policy,
2. Establishment of Management Organization
   The Sharp Group has established a management organization to deal with safety and health, with clearly delineated roles, authority, and responsibilities, and is promoting activities at the structural level.
3. Establishment and Operation of Management System
   The Sharp Group has established an occupational safety and health management system, and is engaged in continuous evaluation and improvement of its activities, with a view to eliminating potential hazards and risks to safety and health in the workplace.
4. Implementation of Education and Training
   The Sharp Group is endeavoring to raise awareness of safety and health and to promote voluntary activities by implementing for all employees the education and training required to improve safety and health.
5. Setting Targets and Full Employee Participation in Practical Activities
   The Sharp Group sets targets for preventing accidents and improving employees' health, and is striving to meet these targets by means of practical activities in which all employees participate.

### Organization Promoting Safety, Hygiene, and Health

Sharp works to ensure the safety and to maintain and improve the health of all of its employees, as well as further the creation of a pleasant working environment. Towards that end, it has developed a clear administrative responsibility system for preventing industrial accidents and improving occupational safety and health levels. Also, in order to show Sharp's commitment to maintaining and improving health, it calls the names of its organizations and activities "safety, hygiene, and health" instead of "safety and health" and has established the following organizational system for promoting safety, hygiene, and health.

In order to ensure that activities for the maintenance and improvement of safety, hygiene, and health go smoothly, Sharp holds Central Safety, Hygiene, and Health Committee meetings that bring the management and the labor union together to discuss and decide basic policies for the entire company. The Committee establishes annual company-wide policies, objectives, and priority action items related to safety, hygiene, and health and rolls them out to business sites and affiliated companies.

At each business site or affiliated company, the Safety, Hygiene, and Health Committee consisting of labor and management representatives, as well as chemical, electrical, and gas subcommittees, meets every month to report, discuss, and review safety, hygiene, and health activities. The discussion and decision outcomes are communicated to all employees through the various departments.

In addition, in order to establish comprehensive safety, hygiene, and health management on company premises, every month at each business site a Safety and Hygiene Council meeting is convened, which includes subcontractors permanently stationed on-site. This committee discusses safety, hygiene, and health-related policy, targets, and planning, shares updates about safety, hygiene, and health initiatives, and works to prevent industrial accidents.

■ **Organization Promoting Safety, Hygiene, and Health**
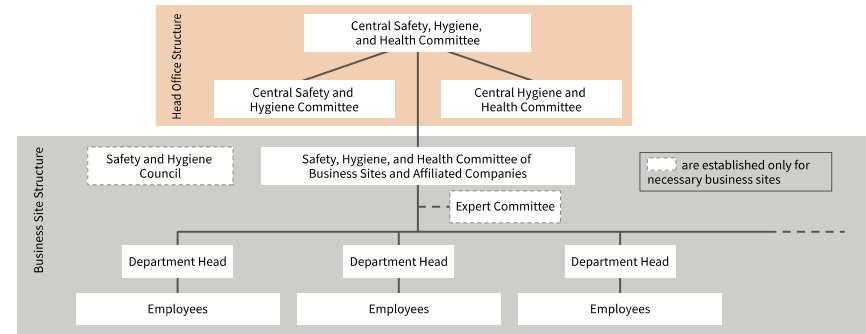
Social Initiatives: Promoting Occupational Safety and Health

Promoting Occupational Safety and Health

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Eliminate severe accidents, reduce industrial accidents ■ Prevent health problems caused by overwork	■ Severe accidents: Thoroughly enforced rules for working with hazardous and toxic materials to eliminate the occurrence of severe accidents ■ Number of industrial accidents (including cases without lost work time) By implementing priority measures for workplaces with many industrial accidents, 23.3% year-on-year reduction was achieved ■ Strengthened measures against long work hours for Sharp Corporation employees General staff worked an average of 104 overtime hours in fiscal 2021, an 8.8% year-on-year reduction Had all employees working long hours interviewed and guided by a physician	★★	■ Eliminate severe accidents, reduce industrial accidents ■ Prevent health problems caused by overwork

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Occupational Safety and Health Management System

Sharp has established an occupational safety and health management system and is promoting measures to ensure the further penetration and establishment of "proactive safety," an initiative under which potential workplace accident risks are identified in advance and eliminated or reduced.
Four of Sharp's major business sites in Japan have received ISO 45001 certification, and one has received OSHMS certification from the Japan Industrial Safety and Health Association (JISHA). Sharp has also established and is promoting occupational safety and health management systems at other workplaces and affiliated companies to promote systematic, organized, and continuous safety and health management and raise the level thereof.

Initiatives to Reduce Industrial Accidents

Sharp companies in Japan are working to eradicate unsafe practices and cultivate a culture of safety by following safety and procedural rules and by reaffirming awareness of the safety first concept.
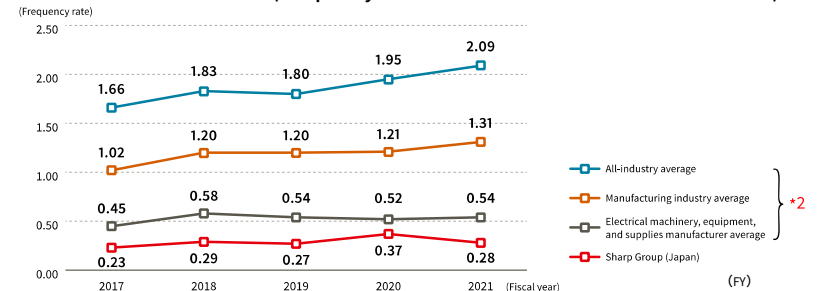At workplaces where there are many industrial accidents, we are raising employees' awareness of dangers by making potential hazards more visible and conducting training in near-miss accidents and danger prediction. The goal is to prevent things that lead to serious industrial accidents, such as falls and crashes, and getting caught between or inside machinery. In addition, at production sites we are conducting risk assessments, re-inspecting equipment and machinery, and checking parts that aren't normally entered or looked inside during inspections.
As a result of these efforts, the Sharp Group's industrial accident rate (frequency rate of lost-worktime industrial accidents[1]) in Japan in fiscal 2021 was 0.28, which was continuously lower than the national average for all industries (2.09), the manufacturing industry (1.31), and the electrical machinery, equipment, and supplies manufacturing industry (0.54). In addition, the Sharp Group has not experienced any fatalities since fiscal 2013.

■ **Example of Company-Wide Effort to Eradicate Industrial Accidents (Promotional Posters)**

■ **Annual Industrial Accident Rates (Frequency Rate of Lost-Worktime Industrial Accidents)**

(Frequency rate)

(Fiscal year)	2017	2018	2019	2020	2021
All-industry average	1.66	1.83	1.80	1.95	2.09
Manufacturing industry average	1.02	1.20	1.20	1.21	1.31
Electrical machinery, equipment, and supplies manufacturer average	0.45	0.58	0.54	0.52	0.54
Sharp Group (Japan)	0.23	0.29	0.27	0.37	0.28

*1 Indicator that represents the incidence of industrial accidents per million work hours (one day or more of suspended operations).
*2 National averages for all industries, the manufacturing industry, and manufacturers of electrical machinery, equipment, and supplies are based on a 2021 survey by the Japanese Ministry of Health, Labor, and Welfare.

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SHARP Sustainability Report 2022

Social Initiatives: Promoting Occupational Safety and Health

Promoting Occupational Safety and Health

Healthy Sharp 23 Health Management Initiative

Sharp's business philosophy states that "It is the intention of our corporation to grow hand-in-hand with our employees." To this end, we have been conducting a health management initiative (from fiscal 2014 to 2022) called Healthy Sharp 23 aimed at supporting the health of employees.

The Sharp Workers Union and the Sharp Health Insurance Association are working together to achieve the following Healthy Sharp 23 targets:

1. Reduce the obesity rate of employees
2. Lower the smoking rate of employees
3. Increase the rate of employees who regularly exercise
4. Reduce the total amount of sick leave associated with mental health issues and disorders
5. Eliminate constant excessive work hours

Mr. Get,
the mascot for Healthy Sharp 23

Making Employees Healthier

Sharp is committed to making its employees healthier. For example, based on the results of periodic health checkups, employees have workplace physician interviews and are provided with health guidance to prevent lifestyle diseases, lose weight, and stop smoking. We have also made all company buildings smoke-free. We also encourage regular exercise through a competitive walking campaign among workplaces, which runs via a smartphone app.

We also have ongoing, focused activities to follow up on employees' health. For example, we encourage employees who are at risk of brain and heart diseases to undergo health checkups.
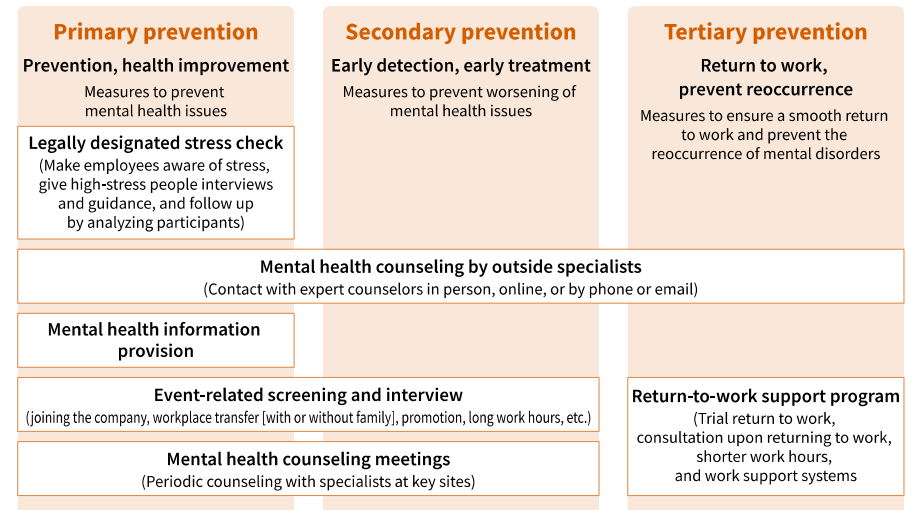
Enhancing Mental Health Care

Sharp uses its employee stress check system, which is required under the Japanese law, to let employees realize their level of exposure to stress. The system is expected to lead to the prevention, early detection, and early treatment of mental health issues. Stress check results are also analyzed for each organization, so that we can improve the workplace environment.

Sharp also offers comprehensive mental health services to employees, including counseling with mental health doctors and workplace counselors and counseling at outside specialized institutions. Mental health information is also made available to employees on the intranet.

Our return-to-work support program also demonstrates our commitment to supporting reinstatement after absence and prevention of a recurrence of mental health issues. Employees returning to work will have a preliminary talk with the workplace physician and their department, and they can choose to return to work on a trial basis and work shorter or flexible hours.

■ **Measures to Prevent Employees' Mental Health Issues**

Primary prevention	Secondary prevention	Tertiary prevention
Prevention, health improvement Measures to prevent mental health issues	**Early detection, early treatment** Measures to prevent worsening of mental health issues	**Return to work, prevent reoccurrence** Measures to ensure a smooth return to work and prevent the reoccurrence of mental disorders
Legally designated stress check (Make employees aware of stress, give high-stress people interviews and guidance, and follow up by analyzing participants)		
Mental health counseling by outside specialists (Contact with expert counselors in person, online, or by phone or email)		
Mental health information provision		
Event-related screening and interview (joining the company, workplace transfer [with or without family], promotion, long work hours, etc.)		**Return-to-work support program** (Trial return to work, consultation upon returning to work, shorter work hours, and work support systems)
Mental health counseling meetings (Periodic counseling with specialists at key sites)		

Social Initiatives: Promoting Occupational Safety and Health

Promoting Occupational Safety and Health

Preventing Health Problems Caused by Overwork

The Sharp Code of Conduct states that "We will actively make efforts to create a safety-first workplace environment and to manage proper working time and the like by placing maximum priority on human life, and by complying with global standards, the laws and regulations and internal company rules relating to work conditions and occupational health and safety." The Code of Conduct provides the basis for our efforts to prevent health problems caused by overwork, including efforts to curb long working hours, so that all employees can work in full physical and mental health.

Specifically, in order to limit the amount of overtime work, Sharp has set upper limits on working long hours and has designated days on which no overtime is allowed. Other measures which Sharp utilizes are securing break times between the end of working hours and the start of the next and mandating physician consultation and guidance for employees working long hours.

The total hours actually worked by Sharp Corporation general staff were 1,786 hours per employee in fiscal 2021, and annual overtime work hours per employee were 104 hours.

Measures Related to Work Hours	Description
Upper limits on overtime work	• A general staff member may work overtime (1) for not more than 80 hours per month and (2) for not more than 720 hours per year • A manager may work overtime (1) for less than 100 hours per month to the extent that (2) overtime above 80 hours per month is limited to two consecutive months and that (3) the average overtime per month for the past six months is not more than 80 hours
No overtime days	• Two no overtime days are set per week
Rules to secure rest time	• Seven consecutive workdays are prohibited • At least 10 hours of rest time should be secured between the end of one work period and the start of the next
Encouragement to take scheduled annual paid leave	• Employees are encouraged to schedule and take their annual paid leave (In fiscal 2021, general staff at Sharp Corporation took 79.2% of their annual paid leave.)
Criteria for mandatory physician consultation and Guidance	• All employees whose overtime above the weekly limit of 40 hours has exceeded 80 hours in the given month must receive physician consultation and guidance

Protecting Employees from Covid-19

Protecting the health of employees, their families, customers, business partners, and all other stakeholders is the number one priority for Sharp. Towards that end we work with relevant organizations to prevent the spread of infection. Sharp undertakes careful measures developed in line with governmental policy and the conditions at each base in Japan to prevent the spread of Covid-19 while ensuring the continuation of business activities.

■ Primary Measures Taken by Sharp Corporation and Its Affiliates in Japan*

Initiatives	Description
Telework and other measures aimed at preventing the spread of infection	Each business unit undertakes measures at its own discretion and based on such considerations as the surrounding traffic infrastructure, the workplace physical environment, employees, job categories, and job duties < Examples > • Teleworking • Flexible working options (e.g., flextime and staggered work hours to avoid commuting during rush hours; having employees go straight to and return home directly from their business destinations) • Changing commuting modes (changing from public transportation to cars or other modes) • Having employees who may be infected (e.g., have an elevated temperature based on a temperature check before coming to work or who have cold symptoms) stay at home • Having employees with family members suspected or confirmed to be infected stay at home • Workplace entrance temperature checks (and denying entry to anyone with an elevated temperature; the same applies to visitors) • Distributing masks to employees and requiring that they wear them • Enforcing hand washing and disinfection (putting sanitizing solution at building entrances/exits, in bathrooms, hallways, etc.) • Regular disinfection of contact surfaces inside buildings (doorknobs, elevator buttons, etc.) • Enforcing physical distancing and coughing etiquette • Suspending the requirement for in-person meetings and holding online meetings instead, from the standpoint of preventing infection and reducing contact • Spacing out seating and installing partitions in rooms and cafeterias • Installing Plasmacluster ion generators in rooms, meeting areas, etc.
Recommending that employees get vaccinated against Covid-19	• Giving employees paid leave to get vaccinated • Offering vaccination in the workplace Vaccination is offered at sites in Sakai, Yamato-Koriyama, and Makuhari to employees, temporary staff, subcontractors, and other related personnel wishing to get vaccinated. Between July 2021 and May 2022, a cumulative total of 8,181 people were vaccinated.

* These are measures that were implemented between April 2020 and March 2022. We are revising these as the number of Covid-19 cases around Japan fluctuates and as circumstances at our sites change.

Governance

Governance: Corporate Governance

Corporate Governance

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Pursue structural development aimed at further improving the functioning of the Board of Directors ■ Strengthen Group governance ■ Ensure comprehensive, ongoing implementation of auditing measures to prevent the recurrence of inappropriate accounting-related issues	■ Increased the number of independent outside directors (from two to three) ■ Revised the subsidiary management framework (all product and device business subsidiaries' management administration departments assigned to head office departments not directly involved in business) ■ Confirmed that the implementation of measures to prevent the recurrence of inappropriate accounting-related issues is improving the effectiveness of the internal control system	★★	■ Revise approval authority to improve decision-making speed ■ Construct a new business promotion system aimed at the early realization of ESG-focused management

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Basic Policy

Sharp's basic policy on corporate governance is to maximize corporate value through timely and appropriate management while ensuring transparency, objectivity, and soundness supported by the concept, "Our future prosperity is directly linked to the prosperity of our customers, dealers and shareholders…" as stated in the company's Business Philosophy.

Based on this policy, Sharp is strengthening the supervisory function over the Board of Directors and enhancing the flexibility of decision-making by appointing outside director and operating an Audit and Supervisory Committee.

Sharp has also introduced an executive officer system that clearly separates supervisory and decision-making functions from business execution functions, thereby creating a structure that steadily facilitates nimble and efficient business execution. Further, Sharp is implementing deep-rooted enhancements to individual fields of business and operations by establishing a divisionalized management system in which each business unit assumes responsibility for their earnings, to be regulated by the CEO Office and the Corporate Strategic Planning and Control Group at the head office.

In addition, Sharp has formulated the Sharp Group Charter of Corporate Behavior as action guidelines for all directors, executives, and employees to raise their awareness of compliance, and it is working for its permeation across the entire Sharp Group.

Corporate Governance System
＜Supervisory and Decision-Making Functions＞

Sharp Corporation Board of Directors meetings are held on a monthly basis in principle to make decisions on matters stipulated by law and on management-related matters of importance, and to supervise the state of business execution. The Board of Directors comprises internal directors who are experts in the fields of business of the Sharp Group and outside directors appointed from talent with high specialism and abundant experience in fields such as social and economic trends and management.

Sharp has established a voluntary Nominating Committee and Compensation Committee as advisory committees to the Board of Directors. The Nominating Committee recommends candidates for directorships to the Board of Directors and the Compensation Committee determines the value of remuneration and bonus packages for directors undertaking a role on the Board of Directors. Additionally, matters pertaining to dealings between the parent company group and the Sharp Group that are within the purview of the Executive Management Meeting shall, before any decision is made, be subject to study and approval by a special committee with regard to the necessity, reasonableness, and appropriateness of the dealings in question.

Further, as a strategy to enhance corporate governance, more than half of all Nominating Committee and Compensation Committee members are independent outside directors, and each committee chairperson is an independent outside director. Also, all members of the special committee are independent outside directors.

In addition, Sharp has established an Internal Control Committee to serve as an advisory committee to the Board of Directors. The Internal Control Committee discusses basic policy, maintenance and operation of internal control and internal audits, reports to the Board of Directors, and, when necessary, refers matters for discussion to the Board of Directors.

Governance: Corporate Governance

Corporate Governance

■ Composition of Supervisory and Decision-Making Organs

	All Members (Persons)	Internal Directors (Persons)	Outside Directors (Persons)	Non-directors (Persons)	Chairperson / Committee Chair
Board of Directors	7	2	5	0	Chairperson: President & CEO
Nominating Committee	5	2	3	0	Committee chair: Independent outside director
Compensation Committee	5	2	3	0	Committee chair: Independent outside director
Special Committee	3	0	3	0	Committee chair: Independent outside director
Internal Control Committee	7	2	3	2	Committee chair: President & CEO

■ Directors (except Audit and Supervisory Committee members)/Directors Who Are Audit and Supervisory Committee members

	All Members (Persons)	Internal Directors (Persons)	Outside Directors (Persons)	Independent Directors (Persons)	Term
Directors (except Audit and Supervisory Committee members)	4	2	2	1	1 year
Directors who are Audit and Supervisory Committee members	3	0	3	2	2 years

＜Business Execution Functions＞

The Board of Directors' rules stipulate matters on which the Board must decide upon. These matters include Sharp's basic management policy, management plans, other important matters of management, and matters prescribed by laws, regulations, and articles of incorporation.

As for decisions on other matters of management and business operations, these are stipulated in in-house rules such as the Internal Authorization Rules, and the most relevant rules are used to make decisions. For matters that are key to company-wide management and business operations, these are deliberated on at an Executive Management Meeting that comprises Sharp executives. The meeting convenes in a timely manner, which allows rapid management decision-making.

＜Auditing Functions＞

The Audit and Supervisory Committee is composed of three directors, all of whom are outside directors with a high level of expertise. Two of them have specialisms to an appropriate extent in finance or accounting. Further, two members are independent directors and one is a full-time member of the Audit and Supervisory Committee. On the Sharp website can be found the "Standards for Independence of Outside Directors," which stipulates standards for judging the independence of outside directors.

The Audit and Supervisory Committee exchanges opinions periodically with executive directors, the internal audit division, and accounting auditors, and seeks to attain legality, propriety, and efficiency in business execution. Sharp has also established an Audit and Supervisory Committee Office composed of employees with specialisms in specific fields such as accounting and law, which supports the Audit and Supervisory Committee. Sharp undergoes audits by its accounting auditor, PricewaterhouseCoopers Arata LLC, in order to ensure the reliability of financial documents and other finance-related information. Through audits, Sharp receives proposals on how to make operational improvements.

To preserve the independence of the internal audit division from the business execution divisions, an Internal Audit Division has been established directly under the jurisdiction of the President. It audits the propriety of business execution and the appropriateness and efficiency of management. It also makes defined proposals on operational and business improvements as a means of increasing management efficiency and supporting the internal control system.

Management of Related Party Transactions and Others *

Sharp has established the Regulations on Related Party Transactions. Sharp manages these transactions so that they will not adversely affect the company's finances or business performance.

Sharp has also created a list of related parties. When entering into business with the counterparty, Sharp determines whether or not the transaction should be considered a related party transaction. Such transactions undergo all of the internal procedures that are followed for conventional transactions. In doing so, Sharp assesses the necessity, reasonability, and appropriateness of the transaction terms and conditions. This allows Sharp to exercise prudence when deciding on business deals. Important related party transactions are subject to review and approval beforehand by a special committee. The committee assesses the necessity and other factors of the dealings in question. Once a year Sharp verifies the content of transactions specified by outside directors, and the results are reported to the Board of Directors.
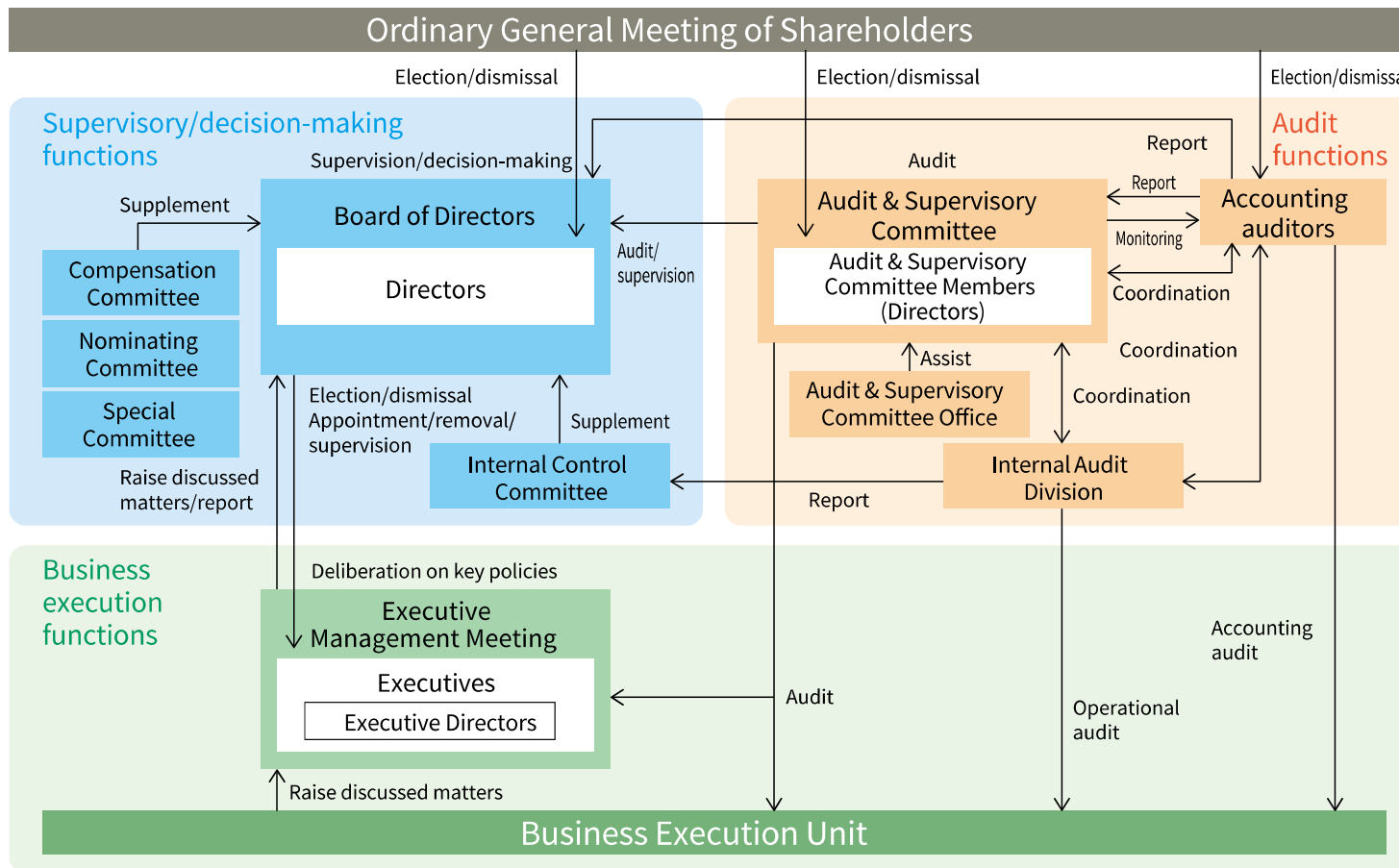
* Related party transactions and management-involved transactions:
  Related party transactions are transactions with a company or person having a certain level of connection with Sharp, including Sharp's officers, subsidiaries, and major shareholders.
  Management-involved transactions are transactions that Sharp's management personnel have introduced or planned.

Governance: Corporate Governance

Corporate Governance

■ Corporate Governance System of Sharp Corporation (as of June 23, 2022)

Ordinary General Meeting of Shareholders

Election/dismissal — Election/dismissal — Election/dismissal

Supervisory/decision-making functions

Supplement

Supervision/decision-making

Board of Directors

Directors

Audit/supervision

Compensation Committee

Nominating Committee

Special Committee

Election/dismissal Appointment/removal/ supervision

Supplement

Internal Control Committee

Raise discussed matters/report

Audit functions

Audit

Report

Report

Monitoring

Audit & Supervisory Committee

Audit & Supervisory Committee Members (Directors)

Accounting auditors

Coordination

Coordination

Assist

Audit & Supervisory Committee Office

Coordination

Internal Audit Division

Report

Business execution functions

Deliberation on key policies

Executive Management Meeting

Executives

Executive Directors

Raise discussed matters

Audit

Operational audit

Accounting audit

Business Execution Unit

Governance: Internal Control

Internal Control

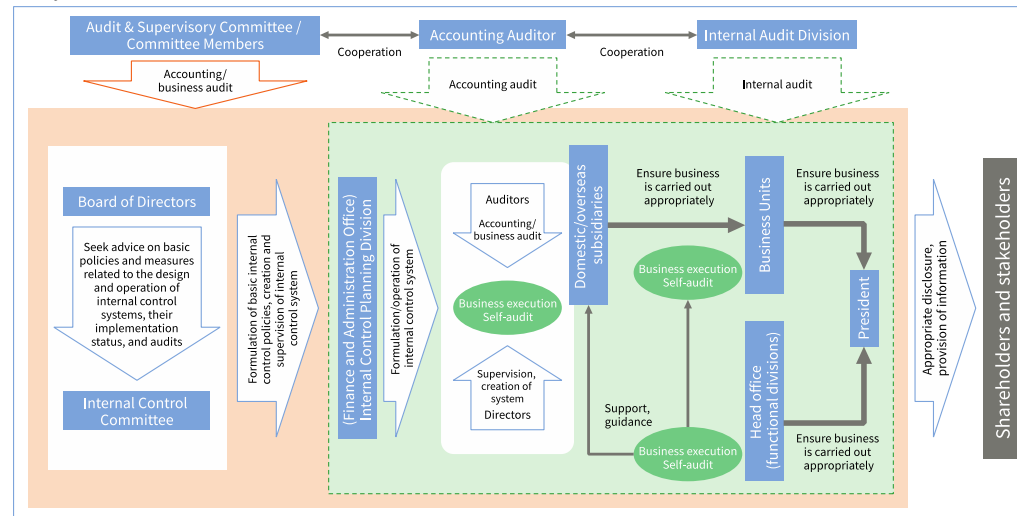| Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Implement 55 measures based on Basic Policy for Internal Control, including the three unattained measures of FY2020; assess and confirm the effectiveness of internal controls and take corrective action ■ Re-design internal control across the Sharp Group, including the subsidiary found to have used inappropriate accounting procedures; confirm operation of the Sharp Group's internal controls, and complete corrective actions	■ Implemented 55 measures based on Basic Policy for Internal Control, including the three unattained measures of FY2020, and assessed and confirmed the effectiveness of internal controls ■ As a result of implementing recurrence prevention measures to correct unsatisfactory internal controls accompanying inappropriate accounting procedures, corrective measures were completed and improvement in unsatisfactory internal controls was confirmed	★★	■ Implement comprehensive design and operation of internal controls based on Basic Policy for Internal Control ■ Establish internal control systems for new consolidated subsidiaries (e.g., Sakai Display Products) and make a concentrated effort to resolve material issues (problems)

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

As a means of facilitating the effective functioning of corporate governance, Sharp has designed and operates an internal control system for ensuring the propriety of business activities across the entire Sharp Group based on the provisions of Japan's Companies Act and of the Internal Control Report System, which falls under the Financial Instruments and Exchange Act.

Specifically, in order to establish Sharp's basic approach to internal control, the Basic Policy for Internal Control was adopted by the Board of Directors, and, in accordance with this policy, Sharp also established the Internal Control Committee to serve as an advisory panel to the Board of Directors. The Internal Control Committee discusses various internal control system-related policy measures, while also affirming their design and operation, and, when necessary, carries out other duties, such as proposing revisions to the Basic Policy. Sharp also develops and maintains systems and structures, such as specialized departments, in accordance with the Basic Policy, establishing and implementing measures to facilitate them and comprehensively checking and evaluating their status of operation, as well as working to entrench and improve them. In particular, Sharp endeavors to, among other things, improve its financial reporting-related systems, strengthen compliance, and reduce business risks all for the sake of increasing the effectiveness of its internal control system.

In fiscal 2021, Sharp completed the redesign and operational improvement of Group internal control, including the inappropriate accounting procedures identified at its subsidiary

in fiscal 2020. Sharp has also continued to implement various measures to boost the control functions of each internal control area as well as the efficiency of assessments. Sharp also mounted intensive efforts to resolve material issues (problems) discovered in the assessments.

These efforts helped to ensure the effective functioning of the Group internal control system in each of the control domains in fiscal 2021, as detailed in an Internal Control Report, which was submitted in June 2022.

In fiscal 2022, Sharp is focused on the design and operation of internal controls for its new consolidated subsidiary, Sakai Display Products (SDP), as well as continuing to comprehensively confirm and evaluate the status of operation of internal control for the Sharp Group, taking steps to improve problem areas and make the system more efficient and effective.

■ Internal Control System (As of June 2022)

Governance: Risk Management

Risk Management

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Improve and maintain a rule-based risk-management system across the Sharp Group, and ensure response rules for the occurrence of a major risk incident	■ Improved and maintained a rule-based risk-management system across the Sharp Group, and ensured response rules for the occurrence of a major risk incident	★★	■ At new consolidated subsidiaries (e.g., Sakai Display Products), build a management system based on risk management-related rules, and firmly establish response rules for the occurrence of a major risk incident ■ •Review operation of business continuity management

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Management Based on the Rules of Business Risk Management

Sharp believes risk management is essential to fulfilling its corporate social responsibility, which entails meeting the expectations of stakeholders through the sustainable development of business. To this end, Sharp has formulated the Rules of Business Risk Management as a basic approach to risk management. In the Rules, risk items that could have a major impact on management are identified and managed as "specific risks" through the creation of a risk management system. For each specific risk, a functional department responsible for risk management across the entire company and a business unit responsible for risk management in their respective business domains collaborate to minimize risks and to prevent risks from actually occurring.

To be able to respond to changes in the business environment and market, Sharp is constantly working to prevent specific risks from occurring and considering and formulating responses should risks occur, in line with the Rules of Business Risk Management. It does this by periodically making changes and additions to specific risks, assessing them, and changing their order of priority. The results are reviewed by the general manager of the Corporate Strategic Planning and Control Group and reported to the Internal Control Committee, which is chaired by the Chairman of the Board.

Response to Occurrence of Major Risks

The Rules of Business Risk Management prescribe rules for emergency response, detailing responses if a major risk incident does come to pass. Taking prompt and appropriate action when an emergency situation occurs works to minimize loss and to prevent the damage from spreading not only across the company, but also to society at large. These emergency rules also specify action items to be implemented to ensure prompt and appropriate information disclosure to stakeholders. In fiscal 2021, improvements were made to the Sharp Group's management system based on rules related to risk management. At the same time, rules on responses in the event of major risk incidents were reinforced.

Promoting Business Continuity Management

Sharp's major plants and group companies have formulated BCPs (business continuity plans). This effort is intended to expedite the continuation or early recovery of business in a large-scale disaster, such as an earthquake or an outbreak of an infectious disease. By regularly reviewing BCPs and holding training sessions, Sharp works to maintain and improve the business continuity capacity of the organization.

Basic policies for BCPs shared across the Sharp Group are "First priority to human life," "Proactive program and program for recovery from disasters," and "Support for local community and business connections." Sharp seeks to maintain and improve the business continuity performance of its organization through reviews to account for organizational and business changes and through drills.

If, in the event of a major disaster, a significant impact on its business activities is anticipated, Sharp will establish an emergency headquarters at the head office to support and work with Sharp sites in affected areas and to implement an initial response focused on ensuring the safety of employees and their families and a business continuity and recovery response.

In fiscal 2021 as in fiscal 2020, there were natural disasters, including earthquakes, typhoons, and torrential rains. To respond to this situation, Sharp held drills in confirming the safety and whereabouts of employees as part of efforts to thoroughly convey measures to all departments. In response to the Covid-19 pandemic, the company put in place infection-prevention measures for employees. These measures are based on considerations such as the workplace physical environment, the number of employees in a given team, the job category, and job duties. When an employee returns a positive Covid-19 test, we take steps to ensure business continuity. We report the case promptly to the Head Office and take the necessary measures at the department in question.

Going forward, Sharp will continue to work towards business continuity management as responses to all forms of disasters and pandemics.

Governance: Compliance

Compliance

Fiscal 2021 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Continue global compliance enhancement	■ At affiliated companies in Southeast Asia, Oceania, and the Middle East, introduced bribery and corruption risk management processes and updated rules for preventing bribery and corruption ■ Uploaded global personal information protection-related training videos to Sharp's intranet and made them viewable by Sharp employees in Japan and overseas	★★	■ Continue global compliance enhancement

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

System to Promote Compliance

Sharp defines compliance as "observing laws, regulations, and company rules, and acting in line with corporate ethics." Accordingly, Sharp is pursuing management practices that give priority to compliance.

The person most responsible for leading compliance at Sharp is the head of the Corporate Strategic Planning and Control Group. This person is in charge of formulating basic policies for compliance and making sure these policies are firmly established within the company. Meanwhile, the person responsible for leading compliance for the entire Sharp Group is the head of the CEO Office. This person is in charge of devising concrete measures for compliance and thoroughly implementing them. As well as affirming the implementation status of compliance measures, they draw up corrective measures where necessary and makes sure they are thoroughly executed.

Under these two heads, the presidents of the business units are responsible for compliance within their respective organizations. The business unit presidents are also responsible for guiding and supervising compliance measures at subsidiaries and affiliated companies (hereafter, "affiliates") under their business units.

Promoting compliance at each affiliate is the responsibility of the affiliate president.

Among the laws and regulations that pertain to business execution, some are considered to be critically important and capable of affecting the entire Sharp Group. For each of these material categories of laws and regulations, the company sets up a dedicated legal department. The aim is to achieve thorough compliance with these laws and regulations. Each legal department fully understands the content of the critically important law and studies the effects it could have on the business of the entire Sharp Group and on operations shared by different departments. It then reviews—as needed—business operations and processes, revises company regulations, formulates or revises routine operation standards, communicates these changes, and provides guidance and supervision to executives and employees.

If a compliance-related risk occurs, Sharp will respond appropriately in accordance with the Basic Rules for Compliance and the Rules for Business Risk Management, and take comprehensive corrective measures and prevent recurrence.

Compliance Training

As a means of promoting compliance, the Sharp Group has formulated the Sharp Group Compliance Guidebook, which states defined standards for matters to be observed, matters which are prohibited, and actions to be taken for all executives and employees, and publishes and disseminates this throughout the company.

Sharp also periodically carries out compliance training (including e-learning) on the Sharp Code of Conduct and material categories of laws and regulations (such as competition laws, anticorruption, and personal information protection). Approximately 19,800 employees took part in this training in fiscal 2021.

Governance: Compliance

Hotline for Compliance Issues

In line with the Japan's Whistleblower Protection Act, Sharp Corporation and its affiliated companies in Japan have set up the Crystal Hotline, a hotline to report problems in the workplace, such as violations of laws, the Sharp Group Charter of Corporate Behavior, and the Sharp Code of Conduct, and compliance issues. The company has also set up a competition law hotline, which serves as a contact point specifically for issues related to competition laws. These hotlines have been set up both inside the company and externally (via an outside law firm providing legal counsel). They are available via email, phone, and other means for employees and temporary staff, as well as business partners*, to make reports. The Crystal Hotline also accepts anonymous reports. Sharp also has a consultation service dedicated to addressing workplace harassment (which includes sexual harassment, pregnancy discrimination, and abuse of authority). The hotlines and consultation service receive reports and conduct fact-finding investigations in line with strict operating rules. Those who have submitted a report or requested a consultation are informed of the details of the response. If the investigation reveals any violation of laws, regulations, or company rules, any deviations from socially accepted norms, or any other compliance issues, Sharp will put into effect measures for remediation and recurrence prevention.

The hotlines are operated in line with the clear stipulation of both the Sharp Code of Conduct and the rules governing hotline service operation that the privacy of individuals contacting the hotlines will be strictly protected and that those persons will suffer no unfavorable treatment or penalties. Six months after any corrective action is taken, we check that the whistleblower contacting the Crystal Hotline has not been disadvantaged. After a further period, we also check whether the corrective actions and recurrence prevention measures are working effectively.

In fiscal 2021, the Crystal Hotline received 58 reports and the harassment consultation service received two reports. For each of these, Sharp investigated the facts of the matter and issued orders for any necessary corrective measures. Meanwhile, the competition law hotline received one report in fiscal 2021, but no violations were identified.

Hotlines have been set up at Sharp's major overseas bases, with consideration for the legal system and other matters in each country. Action is taken to swiftly address any problems. In fiscal 2021, there were 90 reports.

* Only the Crystal Hotline is available for use by employees of business partners.

Compliance with Competition Laws

In order to comply with Japan's Act on Prohibition of Private Monopolization and Maintenance of Fair Trade, as well as with equivalent overseas laws and treaties enacted to protect the interests of consumers by maintaining and promoting free and fair markets (hereafter, "competition laws"), Sharp has put in place rules across the entire Sharp Group on observing competition laws. It has also created an Antimonopoly Act Compliance Manual (Action Guidelines). These guidelines stipulate basic compliance matters that employees must adhere to in their duties with regard to cartels. To raise awareness amongst employees, Sharp has prepared a guidebook summarizing the key points of competition laws for each field of business, and it carries out periodic internal training via e-learning. Sharp also raises awareness internally of case studies relating to competition laws from within Japan and internationally as well as information on major revisions to the laws. Sharp prevents actualization of competition law-related risks in transactions with business partners by reviewing all contracts and consulting with its legal department when approving new contracts. Sharp's legal department monitors the status of compliance with competition laws by confirming the circumstances of matters such as transactions and contacts with competitors in each field based on the reports from the business departments to the legal department. These reports encompass identified risks, which are periodically reviewed. This enables Sharp to more effectively prevent the actualization of competition law risks (such as cartel activities or bid-rigging). Such efforts maintain the effectiveness of Sharp's compliance program.

Governance: Compliance

Preventing Corruption in All Forms and Dealing Properly with Donations

The Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct contain provisions that strictly prohibit any form of corrupt behavior, such as extortion or direct or indirect bribes of money, goods, or services. The Group Charter and Code of Conduct also stipulate that donations must be handled in a proper manner.

Systems and Rules for Preventing Bribery

In March 2015, Sharp instituted the Rules for Prohibition of Bribery (hereinafter "the Rules"), which govern both executives and employees, with a view to preventing corrupt practices such as bribery. Under the Rules, Sharp is working to clarify and strengthen an internal checking system and prevent any act of bribery. Particular attention is paid to the employment of third parties such as agents and consultants, providing or exchanging gifts or entertainment to government employees, and participation in associations, with defined issues for relevant departments to confirm. Sharp sets up a consulting department for providing internal approval for each issue above. In order to further augment this checking system and clarify the targets for checking, a partial revision of the relevant rules was undertaken in August 2018.
The Rules define "facilitation payments" and clearly state that they are considered a form of bribery and are prohibited in principle.

Global Response

In order to ascertain the risk of bribery and corruption among overseas affiliates and institute a more effective checking system, in fiscal 2020 and 2021 Sharp investigated and analyzed risks at affiliates in Southeast Asia, Oceania, and the Middle East. Based on these results, the company proceeded to update its internal rules of anti-bribery and incorporate bribery risk management processes utilized at Sharp in Japan into operations at overseas affiliates.

Raising Awareness within the Sharp Group

To raise awareness among employees in Japan and overseas, Sharp has created and published an in-house guidebook and training materials to ensure compliance with Japan's Unfair Competition Prevention Act and other relevant laws. And with the US taking a more proactive stance on punishing foreign companies in recent years, Sharp has also invited US attorneys to come and conduct a training session on the US Foreign Corrupt Practices Act (FCPA), which included how it affects the entire Sharp Group.
Sharp's intranet for affiliates in Japan and its global intranet for overseas affiliates periodically feature articles on bribery in Japanese, English, and Chinese. These articles present bribery-related cases and analyze and explain related issues. The aim is to deepen understanding and raise awareness of bribery among employees of affiliates in Japan and overseas.
No violations were reported in fiscal 2021.

Dealing Properly with Donations

In Japan, Sharp prevents illegal payoffs and improper expenditures through a system of compulsory reviews that check legality, reasonableness, and transparency. In place since December 2008, this system serves to assess the propriety of monetary disbursements such as donations and contributions made by Sharp Corporation and its affiliated companies. In fiscal 2021, 11 cases of contributions were reviewed.
The Sharp Code of Conduct states, "Regarding political donations, we will observe all applicable laws and regulations and we will ensure transparency and proceed in strict conformance with internal company rules when making such donations in line with the company policy to build a healthy and responsible relationship with politics and government." Based on this policy, any political donations abide by relevant laws and follow the necessary internal procedures.

Governance: Compliance

Management of Personal Information

Domestic Response

To ensure that personal information is appropriately managed and to prevent incidents of data leakage, Sharp provides regular compliance training (including e-learning). In addition, individual training sessions are held for employees who handle personal information as part of their job duties.

To ensure the effectiveness of Sharp's efforts to protect personal information, processes that require approval from the department specialized in personal information protection are incorporated into Sharp's internal approval system regarding the handling of personal information. This contributes to consistently appropriate management of personal information obtainment, sub-processing, and provision to third parties by relevant departments. Also, following approval, the handling status—e.g., obtainment, storage, management, usage, deletion—of each customer's personal information is to be recorded in Sharp's own management database and updated as needed so that it can be checked and reviewed on an ongoing basis.

Appropriate handling of personal information is further ensured through the management of database audits of all departments that obtain customers' personal information, checking the handling status against what is recorded in the management database. Moreover, on-site audits are also performed for specific departments that must follow even more stringent handling requirements.

Global Response

Data protection has become an increasingly important issue around the world. The General Data Protection Regulation (GDPR) in the EU was enacted to protect personal data. Governments around the world, including those in China and individual states in the U.S., have been increasingly enforcing measures and formulating new laws based on the GDPR. In response, Sharp has been periodically conducting fact-finding surveys and risk analysis on the various areas related to the acquisition and processing of personal data in the EU. Based on its findings, it has been taking measures that include providing appropriate privacy notices, signing agreements, and putting in place internal rules required for proper handling of personal data. Sharp is also raising awareness among employees by periodically issuing information about the enactment of—and amendments to—laws on global protection of personal information. Along with that, Sharp shares examples of financial penalties for breaches of these laws. To educate its employees in Japan and overseas, Sharp has also posted training videos about global protection of personal information on the Sharp Group intranet.

Sharp is also continuously gathering and analyzing information on data protection laws around the world, such as the California Consumer Privacy Act (CCPA), the California Privacy Rights Act (CPRA), and China's Personal Information Protection Law (PIPL), as part of global efforts to formulate and implement measures to comply with laws on the handling of personal information.

Exclusion of Antisocial Forces

Fundamental Stance on the Exclusion of Antisocial Forces

As a matter of basic policy, Sharp prevents or excludes any association with antisocial forces without exception, and deals with them in a resolute manner. It has established specific guidelines in the Sharp Group Charter of Corporate Behavior under the section entitled "Practice of Fair and Open Management," as well as clearly stipulated in the Sharp Code of Conduct that Sharp shall seek to exclude antisocial forces by being "cooperative in the maintenance of social order, and will not engage in antisocial activity."

Activities Aimed at Excluding Antisocial Forces

Sharp Corporation has established Rules for Excluding Antisocial Forces, which serve as the basis for Sharp's effort to prevent antisocial transactions, as well as Sharp's preparation and updating, as needed, of such resources as manuals for dealing with antisocial forces. In order to facilitate its handling of antisocial forces, Sharp maintains a system of prompt communication and cooperation with the police, legal advisors, and other external experts, from whom it regularly obtains information, which is then thoroughly disseminated and managed amongst the Sharp Group. Sharp also works to raise employee awareness by conducting once-a-year compliance training, which includes how to deal with antisocial forces.

In addition, Sharp Corporation and its affiliated companies in Japan take other steps to exclude antisocial forces, such as including a stipulation of antisocial forces exclusion in all basic agreements for ongoing transactions and concluding memorandums containing the equivalent stipulation with existing suppliers.

Governance: Compliance

Appropriate Advertising and Promotion, Representation-Related Law Compliance

Under its business creed of "Sincerity and Creativity," Sharp strives to reliably fulfill its corporate social responsibilities to customers and all stakeholders in the provision of correct information useful for selecting products and services. To this end, Sharp prioritizes appropriate advertising and promotion activities. It also complies with product and service representation-related laws, such as the Act against Unjustifiable Premiums and Misleading Representations, Pharmaceutical and Medical Device Act[1], and Fair Competition Code. Sharp positions compliance with these laws as a control item within its Rules of Business Risk Management[2], and implements various measures to promote compliance.

Systems and Rules for Preventing Legal Violations

With regard to product and service representation within Japan, Sharp follows internal rules, which stipulate the basic approach to representation and a system for checking appropriate representations.

1. A dedicated supervisor is appointed to work with departments involved in the production of representations and to perform a final check prior to the publication of brochures and mass advertising
2. A senior committee is established to make decisions about any questionable representations (Representation Review Committee, Sharp Fair Representation Council)
3. Operations are carried out in line with the Fair Competition Code[3], formulated by the Home Electric Appliances Fair Trade Conference, with regard to product representations and premiums.
4. Public external organizations[4] are consulted for objective guidance and advice

Also, overseas, Sharp follows local laws along with the Fair Expression Guidelines, which have been developed based on the same thinking utilized in Japan, in order to facilitate appropriate decision-making.
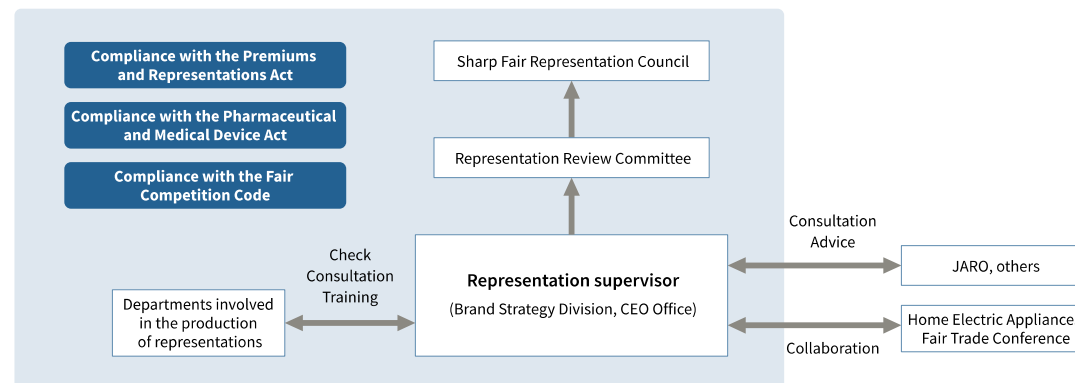
Fostering Awareness via Upskilling Support for Relevant Personnel

Regular in-house training related to the Premiums and Representations Act, Pharmaceutical and Medical Device Act, and Fair Competition Code is provided to departments involved in the production of representations. Additionally, Sharp actively participates in outside seminars led by public institutions and provides feedback internally on the most recent trends.

Further, Sharp has established a Premiums and Representations Portal Site on its intranet, which offers a consolidated assortment of functions, including ensuring the thorough dissemination of in-house standards and rules for performing checks based on in-house specifications and manuals, disseminating information on new legal and regulatory trends, and providing a contact desk to request labeling checks and to seek consultations.

In fiscal 2021, there were no violations of the Premiums and Representations Act or the Pharmaceutical and Medical Device Act by the Sharp Group.

Ensuring Representations Keep Up with Social Changes

Sharp strives to create appropriate representations that keep up with current events and laws.

In fiscal 2021, with the pandemic still ongoing, priority was placed on conducting checks and consultations related to antimicrobial and antiviral product labeling. Also, there was stronger coordination with industry groups, such as by inviting Home Electric Appliances Fair Trade Conference instructors to come deliver Fair Competition Code training workshops for Sharp employees.

[1] Act on Securing Quality, Efficacy, and Safety of Products Including Pharmaceuticals and Medical Devices
[2] See page 122.
[3] Voluntary industry standards formulated by the Home Electric Appliances Fair Trade Conference and recognized by the Consumer Affairs Agency and Japan Fair Trade Commission
[4] Home Electric Appliances Fair Trade Conference, Japan Advertising Review Organization (JARO), others

■ **Representation Review Framework**

Governance: Compliance

Tax Management Initiatives

Tax Policy

Sharp demonstrates sincerity and creativity in its pursuit of sound business activities, in the process fulfilling its responsibilities as a member of society. A basic policy of the Sharp Group Charter of Corporate Behavior and Sharp Code of Conduct is the "Practice of fair and open management" in all corporate activities and operations, conforming to the laws and regulations of each country and region, international rules and company rules, as well as social norms and corporate ethics. Based on this basic policy, Sharp works to maintain and improve its compliance with tax laws and other tax-related regulations through proper payment of taxes and employee education.

Tax Governance System

The general manager of the Finance and Administration Office oversees tax obligations for the Sharp Group as a whole. In line with Sharp's global tax policy, group companies have a responsibility to understand and comply with the relevant tax laws and regulations that apply to their operations. The Accounting Department in the Finance and Administration Office supports group companies and handles overall tax-related duties for the Sharp Group to reduce tax-related risk.

When faced with a tax-related issue, Sharp works together with relevant affiliated companies in Japan and overseas and, when necessary, seeks advice from tax professionals in order to address the issue. When the issue is deemed to be one of significant importance, it is reported to top management who then decide on a course of action.

Proper Payment of Taxes

Legal and regulatory compliance is Sharp's top priority, endeavoring to fulfill all fair and appropriate tax obligations. When filing tax returns, we do not seek to evade the legislative intent of the tax system nor engage in tax avoidance in violation of international tax rules. Sharp endeavors to appropriately meet its tax obligations while making use of preferential tax measures available to it as part of normal business operations.

In fiscal 2020, Sharp paid 14.2 billion yen[*] (Japan: 73%, overseas: 27%[*]) in corporate income tax.

[*] Based on Country-by-Country Report submitted to the tax authority.

Compliance with Transfer Pricing Rules

Regarding transactions with parties related to the Sharp Group, appropriate pricing is established based on the arm's-length principle, in line with OECD transfer pricing guidelines and in accordance with each company's functions and risks. Sharp also draws up transfer pricing documentation based on the laws and regulations of each country. Also, for important transactions, Sharp takes steps, such as actively working with tax authorities to make use of APAs (Advance Pricing Arrangements), to reduce tax-related uncertainty, and to prevent double taxation.

Relationship with Tax Authorities

In order to maintain good relations with tax authorities, Sharp endeavors to be diligent and responsive to the requests of tax authorities in each country, such as by providing them with information in an appropriate and timely manner. Whenever tax authorities raise questions about Sharp's filing and payment of taxes, Sharp examines the validity of their claims and, if it has an objection, may opt to formally file a petition against the tax authority with regard to the matter. However, if any corrective action is required, such action will be promptly implemented.

Governance: Innovation Management

Corporate R&D Initiative

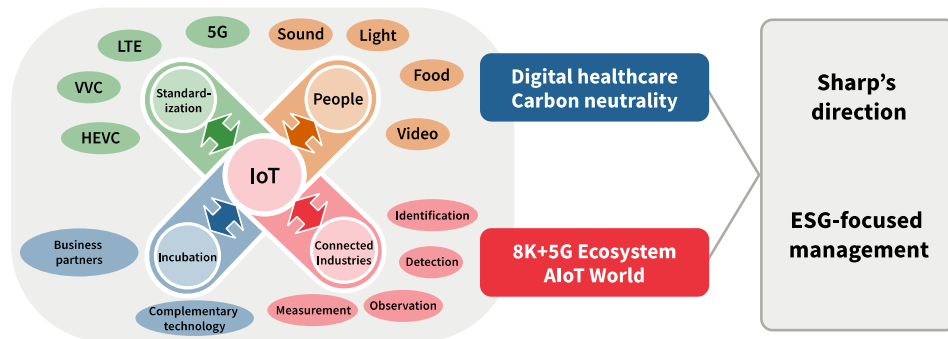### Corporate Research and Development Business Unit[*1] Initiatives and the Development System

The Corporate Research and Development Business Unit, which plays a central role in the R&D that will support Sharp in the future, is pursuing a mission to develop pioneering, groundbreaking, proprietary technology that creates new ecosystems and new and expanded businesses contributing to the realization of a sustainable society.

In addition to giving shape to the goal of "Changing the world with 8K+5G and AIoT" based on the proprietary technologies it has developed to date, the Business Unit is working to create proprietary technologies to support ESG-focused management by accelerating development of new businesses in the digital healthcare field through close "One Sharp" partnership and collaboration and by strengthening contributions to carbon neutrality.

Going forward, it will give shape to Sharp's continued growth through new value creation as it pursues R&D dedicated to realizing innovative services and solutions that will support the post-pandemic "new normal" and a sustainable society founded on an understanding of the changes taking place in the world.

■ Priority Initiatives

Pursuing R&D centered on "IoT × Standardization," "IoT × Incubation," "IoT × People," and "IoT × Connected Industries" and focusing on advancing solutions businesses related to the 8K+5G Ecosystem, AIoT World, digital healthcare, and carbon neutrality.

Notable Initiatives

Drawing on the synergistic effects of combining the Corporate Research and Development Business Unit's proprietary technologies with the sensor devices and communications modules that embody the entire company's distinctive technologies, Sharp will work to accelerate the social implementation of digital healthcare technologies—one of its priority policies—and further strengthen its healthcare-related businesses. In addition to expanding its DX solutions business in industry and social infrastructure in ways that will accommodate the shrinking and aging of Japan's society as well as workstyle reforms, Sharp will focus on creating new businesses centered on Green DX, which will contribute to carbon neutrality.

Turning to communications technology, Sharp holds more than 6,000 patents of critical importance for communications standards in more than 50 countries worldwide, and it grants licenses to numerous leading companies. Recognizing that these patents are an important management resource, we actively negotiate licensing agreements with licensees.

In addition, Sharp was selected to carry out contract research for the R&D of Beyond 5G (B5G) IoT, SoC[*2], and IoT Solution Building Platforms Enabling Continuous Evolution, a program of the National Institute of Information and Communications Technology (NICT). We are developing devices for next-generation mobile communications systems in partnership with industry, government, and academia.

Through this research, Sharp will look to contribute to the expansion of B5G applications and their adoption while boosting its international competitiveness in the B5G field.

In addition, as part of its open incubation activities, Sharp is working to accelerate collaboration with different industries, including by creating a dedicated team in the Corporate Research and Development Business Unit to oversee outside partnerships so that it can bring the fruits of its R&D efforts to new business domains. This will both strengthen the level of business development support that Sharp provides to startups, as well as accelerate collaboration between companies that will spur technological innovation.

*1 Company name is current as of September 30, 2022
*2 System on a chip. A component that implements multiple functions necessary for system operation in a single semiconductor.

Governance: Innovation Management

Intellectual Property Protection

Intellectual Property Strategy and Management System

Sharp regards its intellectual property strategy as one of its critically important management strategies, and it is promoting it together with its business strategy and R&D strategy. By aggressively obtaining patents, Sharp is boosting the superiority of its product and device businesses and strengthening its business foundation. The company's intellectual property department was spun off into ScienBiziP Japan Co., Ltd. (SBPJ) in 2016, with a view to making it a profit center of Sharp. Because SBPJ is well versed in Sharp's products, technologies, and businesses, it can offer a high level of specialized service and improved efficiency. SBPJ gives Sharp more driving force in its intellectual property management, generating strong patents and economic value from Sharp's state-of-the-art technologies.

Regarding patent applications, Sharp defines core technology areas with respect to each business and strategically files patent applications that are tightly coupled with its business development. Sharp is also acquiring useful patents invented in cooperation with other companies or derived from the activities of alliances, such as industry-university cooperation.

 In addition, Sharp is filing applications and registering rights for designs and trademarks globally under its brand strategy.

Protecting Intellectual Property

Sharp maximizes the use of its intellectual property by linking it to its business strategy and R&D strategy. It is also firmly committed to protecting its own intellectual property rights, while also respecting the intellectual property rights of others. While Sharp takes an amicable approach to resolving issues of infringement, it is the company's policy to seek the judgment of a third party, such as the courts, when its intellectual property rights are not respected.

Sharp is also working to bolster protection for trade secrets and to prevent unauthorized disclosure of production technologies and manufacturing know-how, particularly those that are unique or critically important to Sharp. Further, counterfeit Sharp-brand products have had a growing impact in overseas markets in recent years, and Sharp is taking measures to counter these imitations through cooperation with industry groups and with regulatory authorities taking enforcement actions.

Governance: Information Security

Information Security

Fiscal 202 Objectives	Fiscal 2021 Achievements	Self-Evaluation	Priority Objectives for Fiscal 2022
■ Pass the recertification for ISO 27001 ■ After holding training for employees aimed at dealing with new types of malware email, hold individual preventative training for employees who had inadvertently opened the malicious emails sent during training. Also, progressively expand training to overseas bases as well	■ Maintained ISO 27001 certification (renewed June 12, 2021) ■ After holding training for employees aimed at dealing with Emotet and other types of malware emails, held individual preventative training for employees who had inadvertently opened the malicious emails sent during training	★★	■ Pass the certification renewal screening for ISO 27001 ■ To raise employee awareness of information security, reinforce education for employees who inadvertently opened malicious emails sent as part of a previous training exercise. Also expand the number of overseas bases holding training on targeted email attacks

Self-evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Sharp is working to ensure information security by setting forth a Global Basic Policy on Information Security for the safe and appropriate management and use of information and information systems.

As part of its efforts to enhance information security, Sharp also acquired ISO 27001 (IS 635826) certification on June 30, 2015 and has secured an appropriate information security management system.

■ Summary of Certification Activities

Organization	Sharp Corporation
Scope of Certification	• The planning, management and operation of call center service, taking care of users' complaints. • The administration and operation of an affiliated web site. • The implementation of in-company information management.
Certification Number	IS 635826
Certification Body	BSI Group Japan K.K.
Initial Certification Date	June 30, 2015

Related Information: > Global Basic Policy on Information Security

Information Security Measures

In Japan, e-learning on information security is provided annually to all employees. Sharp has also worked to keep employees aware and informed by promptly sharing information company-wide about the characteristics, as well as actual examples, of targeted email attacks that have caused data security breaches to companies and organizations around the world. Sharp also developed and introduced its own training system to tackle these targeted email attacks and held training four times for all employees in fiscal 2021.

We also sent out training emails mimicking the Emotet* malware emails, which are still wreaking havoc globally, along with other types of malicious emails. Any employees who opened the file attachment or accessed the link in the training emails were provided with educational content to help them become more knowledgeable and vigilant. Sharp will continue to stay abreast of the increasingly sophisticated attack methods being used. We will continue to adapt our training to mimic the latest attack patterns, while expanding this training at Sharp bases in Japan and overseas to ensure a more robust and global preparedness.

Sharp is also continuing with strengthening measures, such as a vulnerability assessment of publicly accessible websites. It is also addressing the issue of information leaks caused by targeted cyber-attacks as well as the accessing of illicit websites. The company is putting in place hacking countermeasures and using log analysis for early detection of fraudulent actions. In addition, to verify company-wide information security measures, Sharp implements information security self-checks, and seeks to maintain and improve its level of information security.

*A sophisticated, targeted email attack that uses content from actual emails sent and received by recipients in order to fool them.

Governance: Export and Import Control

Export and Import Control

Security Export Control

The security environment worldwide is characterized by instability and growing uncertainty in the international order, including in the form of moves to strengthen military capabilities by some states, for example through the development of nuclear weapons, missiles, and other weapons of mass destruction; the pursuit of military action against other countries; territorial disputes among states; and the threat of international terrorism. Looking to implement export controls to ensure security, Japan has adopted the Foreign Exchange and Foreign Trade Act ("FEFTA") and put in place stringent procedures to prevent the proliferation of weapons of mass destruction as well as ordinary weapons. Against this backdrop, Sharp has long engaged in security-related export controls, including by becoming one of the first companies in Japan to incorporate provisions adopted by the Coordinating Committee for Multilateral Export Controls (so-called COCOM regulations) into its own internal rules during the Cold War.

As technology advances and the line between civilian and military technologies blurs, the number of items of concern, for example dual-use products that potentially allow civilian technologies to be harnessed for military purposes, is growing. Adherence to security-related export controls is becoming more complex as countries impose sanctions in response to a variety of geopolitical tensions and strengthen associated export control laws.

To accommodate this state of affairs, the companies of the Sharp Group have incorporated thorough compliance with security-related export controls as a model for behavior into the Sharp Code of Conduct. The company has also formulated the Sharp Compliance Program on Export Control based on FEFTA to govern export controls.

When exporting products overseas, Sharp conducts an internal investigation to determine whether controls apply to goods and technologies; to confirm destinations, counterparties, and end-users; and to assess whether there are any concerns about applications and uses. Sharp strives for legal compliance by reviewing internal rules in a timely manner whenever export control laws are revised. Sharp also strictly complies with the Export Administration Regulations of the U.S.

To maintain export control structures like these, Sharp regularly offers various export control-related education programs, including with e-learning components, for all employees.

Sharp will maintain and further improve these systems to secure comprehensive export control.

Trade Control

The Customs Act and other laws of Japan require proper export and import controls (trade controls). In particular, there is a strong need for appropriate logistics control regarding the security of imported and exported goods, for example to stop the flow of supplies to domestic and international terrorist groups and to address the problem of illegal cross-border movements of goods like illegal drugs and products violating intellectual property rights, a major social issue. Sharp strives to ensure its import and export operations are conducted in an appropriate manner by maintaining licensing as an AEO (authorized economic operator) exporter* and importer* and by strictly observing laws and regulations across every import/export process, including management of security, distribution, and customs clearance procedures as well as payment of import consumption tax and duties. This approach provides benefits such as simplification of customs procedures while helping ensure the safety of the global supply chain. When it comes to a diverse range of export/import items other than those described above—for example, international courier/mail or hand luggage carried by business trip travelers and visitors—Sharp has put in place compliance structures to ensure appropriate import and export controls and strengthened internal management, including reviewing and updating operational rules, making a database of export/import records, and conducting thorough training.

Sharp will continue to conduct appropriate export/import control.

* An exporter or importer recognized by the Japan Customs as having put in place a system for security control of goods and compliance.

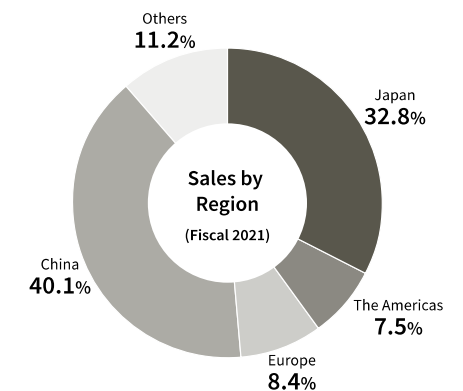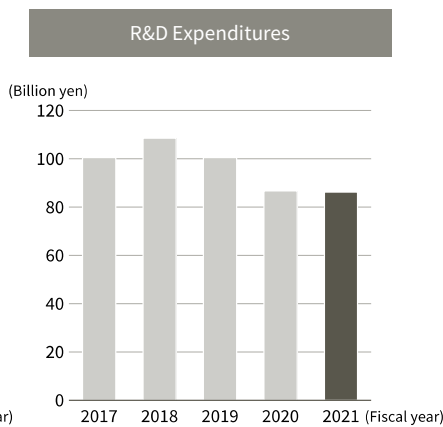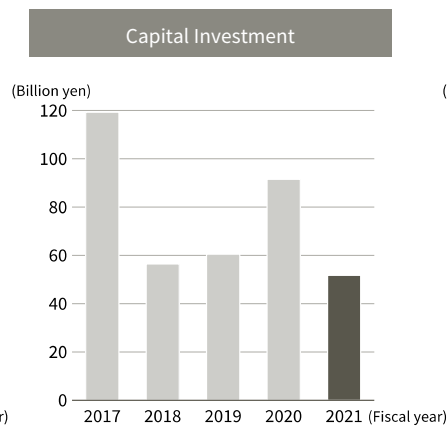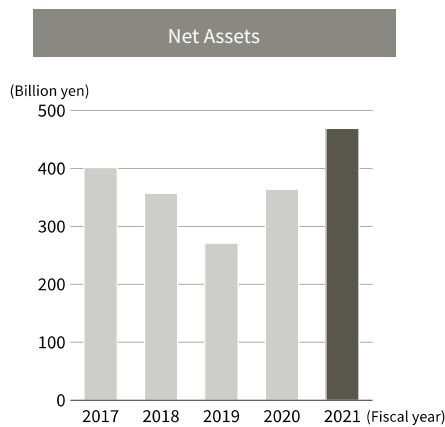# Company Information: Outline of Sharp Group / Main Data
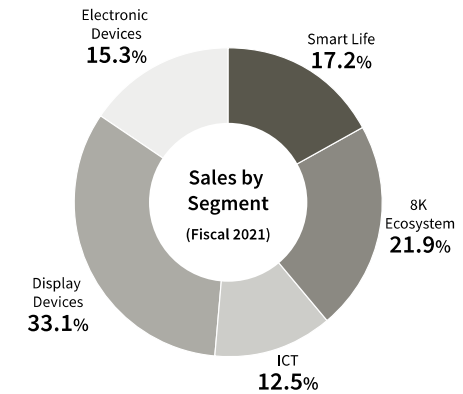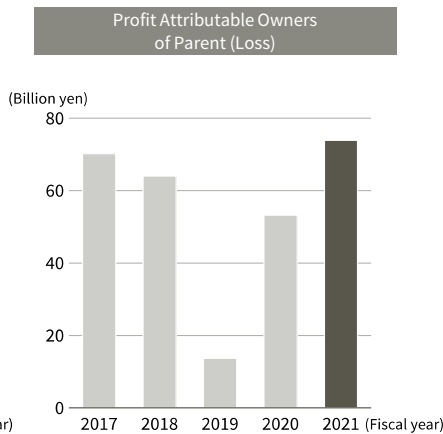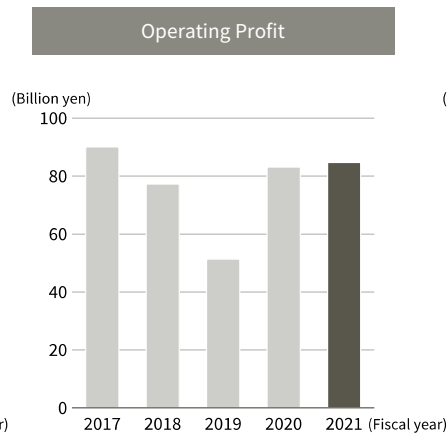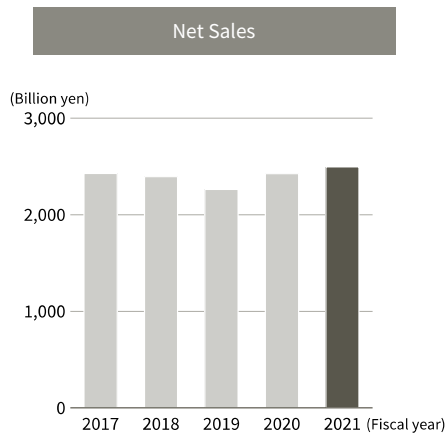
Outline of Sharp Group

Sharp's business activities comprise "electric and electronic application equipment" (i.e., end-user consumer products and information electronics) and "Electronic Components" (i.e., key components of electronic products).By undertaking the development both of key devices based on proprietary technologies and of products in which these devices and technologies are applied, Sharp aims to inspire and impress its customers. The company is working actively to develop its business by pioneering new markets and by bringing forth never-before-seen, uniquely featured products and devices

Corporate Name ： Sharp Corporation

Head Office ： 1 Takumi-cho, Sakai-ku, Sakai City, Osaka 590-8522, Japan Tel. +81-72-282-1221

Management Representative ： Po-Hsuan Wu, President & Chief Executive Officer Masahiro Okitsu, Executive Vice President

Business Activities ： Mainly manufacturing and sales of telecommunications equipment, electric and electronic application equipment, and electronic components.

Founding ： September 15, 1912

Origin of Company Name ： Mr. Hayakawa continued to research and improve the techniques for making metal writing instruments, and in 1915, he invented a mechanical pencil that, after further improvements, would take the world by storm. In 1916, Mr. Hayakawa's mechanical pencil was named the "Ever-Ready Sharp Pencil." The present name of the company and its trademark are derived from that product.

Incorporation ： In May 1935, the structure of the company was modified to become a joint-stock corporation under the name Hayakawa Metal Works Institute Co. (capitalization: 300,000 yen.)

Capital Stock ： 5 billion yen (as of March 31, 2022)

Sales ： 2,495,588 million yen (consolidated) 563,030 million yen (unconsolidated) (Fiscal 2021 Financial Results)

Employees ： Consolidated：47,941 （as of March 31, 2022） Japan: 17,840 （Sharp Corporation 5,674 / other Consolidated 12,166） Oversea: 30,101

Company Information: Outline of Sharp Group / Main Data

Main Data

Net Sales

(Billion yen)

Operating Profit

(Billion yen)

Profit Attributable Owners of Parent (Loss)

(Billion yen)

Sales by Segment (Fiscal 2021)

- Electronic Devices **15.3**%
- Smart Life **17.2**%
- 8K Ecosystem **21.9**%
- ICT **12.5**%
- Display Devices **33.1**%

Net Assets

(Billion yen)

Capital Investment

(Billion yen)

R&D Expenditures

(Billion yen)

Sales by Region (Fiscal 2021)

- Others **11.2**%
- Japan **32.8**%
- The Americas **7.5**%
- Europe **8.4**%
- China **40.1**%

Related Information : > Financial Data

Company Information: Main Products and Services

Main Products and Services (Brand Businesses)

Smart Life

AIoT-compatible smart appliances

Industrial solar power system

8K Ecosystem

8K LCD TV

Digital MFP

COCORO OFFICE

ICT

5G smartphone

dynabook

Medical Listening Plug

Company Information: Main Products and Services

Main Products and Services (Device Businesses)

Display Devices

PCAP (projected capacitive) Hover Touch Display

Transparent Display Partition

Electronic Devices

Smartphone with 1-inch sensor camera module

Various sensors
(optical sensor, others)

IoT module

Company Information: Third-Party Verification

Sharp has undergone independent third-party verification by JACO (Japan Audit and Certification Organization for Environment and Quality) to ensure the reliability of its data on greenhouse gas emissions and environmental and social initiatives.
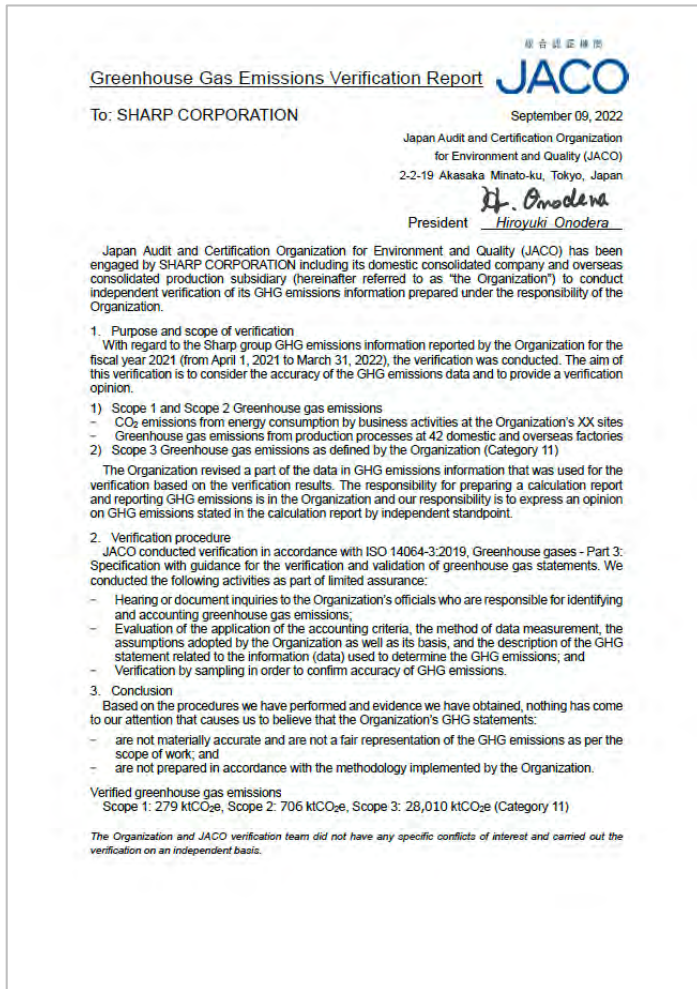
Greenhouse gas emissions verification report
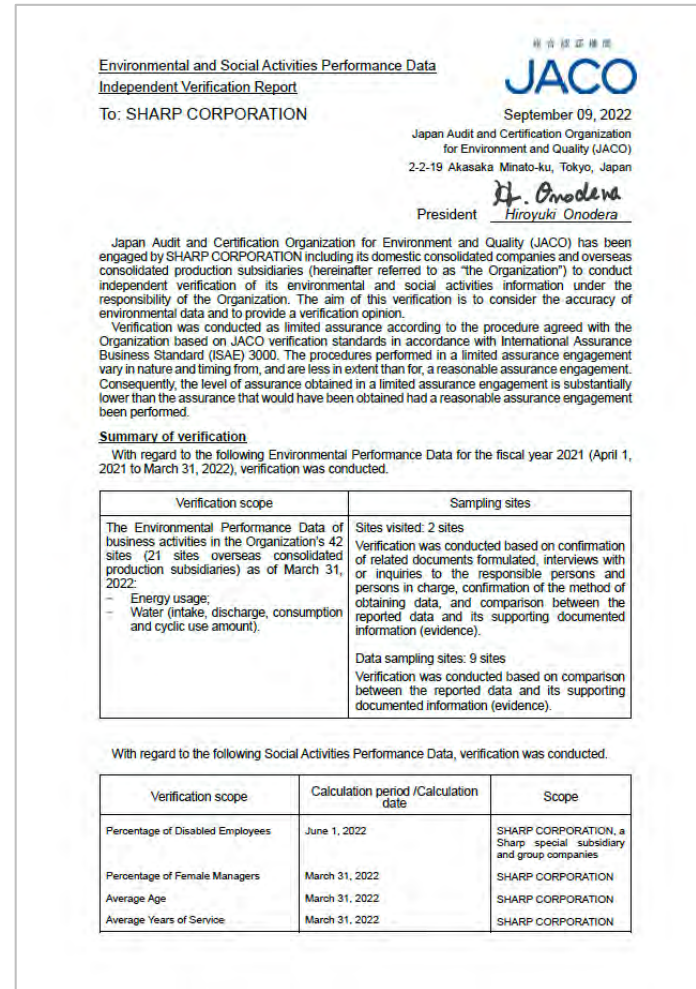
Environmental and social activities performance data independent verification report

Related Information: > Independent Verification Report

SHARP

Be Original.