

2017

SUSTAINABILITY REPORT



Changing the World
with 8K and AIoT

SHARP

Be Original.

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Editorial Policy

- ◇ Policy for Information Disclosure : The Sharp Sustainability Report 2017 discloses information on Sharp’s corporate social responsibility (CSR) efforts, which contribute to creating a sustainable society.
- ◇ Period Covered : Fiscal 2016 (April 2016 to March 2017)
- ◇ Coverage : Sharp Corporation, along with its domestic and overseas subsidiaries and affiliates.
- ◇ Referenced Guidelines : • G4 Sustainability Reporting Guidelines (Japanese), Global Reporting Initiative (GRI)
• Environmental Accounting Guidelines 2012, Ministry of the Environment, Japan
- ◇ Scheduled Publication Date for Next Report : September 2018 (published annually since 1999)

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. In 1973, 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

Top Message

We Will Create Innovation with 8K and AIoT and Contribute to the Improvement of People's Lifestyles and the Sustainable Development of Society



J. W. Tai
President & CEO



Ever since the introduction of the new company organization in August last year, we have been forcing through structural reforms in quick succession. We were able to achieve a positive operating income in the second quarter and a net profit in the second half of the year. In the future, in line with our Fiscal 2017–2019 Medium-Term Management Plan formulated in May 2017, we will review all manner of transformations—namely businesses, target markets, and operations—and shift our focus from defense to offense and from structural reform to business expansion.

Changing the World with 8K and AIoT

Our slogan for this business expansion is Sharp's new business policy of "Changing the world with 8K and AIoT," which was stated in our Medium-Term Management Plan.

With AIoT, which combines AI (artificial intelligence) with IoT (Internet of things), Sharp will enrich people's lives with personal devices that will serve as their new familiar partners. In other words, we will realize "people-oriented IoT." Furthermore, with our 8K ultra-high-definition imaging technology as the core, we will build an 8K Ecosystem that will create new industries and generate innovation, not only in the area of broadcasting, but also in various other fields such as medical care and security. Through these initiatives, Sharp aims to deliver a better lifestyle to the people of the world.

Corporate Social Responsibility

Sharp is also committed to fulfilling its social and environmental responsibilities (SER) in such corporate activities, and we enacted our SER Policy in December 2016. Sharp has established three principles—value the rights of our employees and ensure their health and safety, fulfill our environmental responsibilities in our business activities and manufacturing processes, and build and operate an SER management system based on international standards, regulations, and client requests. We will work to realize them through the activities of the SER Committee and fulfill our corporate social responsibility.

We will continue to support the 10 principles of the United Nations Global Compact*, which covers areas such as human rights, labor, the environment, and anti-corruption.

* Sharp joined the UN Global Compact in June 2009.

Top Message

Towards the Next 100 Years

Ever since its establishment, throughout its over 100-year history, Sharp has produced various highly original world-first and Japan-first products, and it has contributed to the creation of new markets, technological advancements, and social development. This is because the corporate creed of “Sincerity and Creativity” and the wishes of our founder—with regard to manufacturing that we “make products that others want to imitate”—have been passed down through the years. This spirit will remain unchanged for the future, and this determination is underscored in our corporate motto “Be Original.,” which we unveiled last November.

Sharp will once again return to this starting point as we look towards the next 100 years. Through the steady implementation of our Medium-Term Management Plan, we will aim to contribute to the improvement of people’s lives and the further development of society and to be a company that can continue to achieve sustained growth into the future.

“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.

“Be Original.” Corporate Motto

“Be Original.” Products

Sharp has over the years come out with a string of unique products by sticking to the founder’s words of “Make products that others want to imitate.” Let’s take a look at some of those products.

Japan’s First Crystal Radio (1925)



In April 1925, Sharp made history as it succeeded in assembling Japan’s very first crystal radio.

Japan’s First TV Set (1953)



At the end of 1952, Sharp put Japan’s first TV sets on the market. And in 1953, it became the first company in Japan to mass-produce them. This marked the dawn of the age of television in Japan.

Japan’s First Mass-Produced Microwave Oven (1962)



Sharp developed Japan’s first microwave oven in 1961. The following year, Sharp became the first company to mass-produce them. Confident that someday this non-flame cooking appliance would be a standard product in homes, Sharp embarked on steady efforts to popularize its use.

Solar Module (1963)



Sharp began research into solar power in 1959 and started mass production of standardized solar modules in 1963.

World’s First Calculator to Incorporate LSI Chips (1969)



Sharp released an electronic calculator incorporating a MOS-LSI chip, a world-first for a consumer product. This state-of-the-art LSI chip enabled Sharp to make a calculator that could be held in the palm of one’s hand.

World’s First LCD Calculator (1973)



Thanks to the tireless efforts of Sharp’s engineers, the company achieved the first practical application of LCDs. The COS-type pocket calculator introduced in 1973 was the first product on the market to use LCDs.

Japanese Word Processor (1979)



Following the successful development of the industry’s first Japanese word processor prototype, Sharp commercialized the product in 1979. At the time, the product adopted a stylus input method.

World’s First PC-TV Set (1982)



Sharp created a buzz with the release of the PC-TV set, the world’s first product merging the personal computer and the TV.

Electronic Organizer (1987)



This product had kanji display capability and five major functions—calendar, memo pad, phone book, scheduler, and calculator—that could be further expanded. This hit product was perfectly timed for the dawn of a new information age.

World’s First 14-Inch Color TFT LCD (1988)



By continuously building on the R&D efforts that had led to the introduction of the LCD pocket calculator in 1973, Sharp ultimately succeeded in producing a prototype 14-inch color TFT LCD. That development represented a significant milestone for Sharp LCD technology.

“Be Original.” Corporate Motto

Dual-Swing Door Refrigerator (1989)



Sharp developers took inspiration from a brooch pin to develop a refrigerator that opens from either the right or left—an industry-first. Users loved how the product could be placed in any corner of the kitchen and opened without revealing the contents to guests.

LCD ViewCam (1992)



Sharp created a sensation with the ViewCam, a video camera with an LCD viewfinder that users could watch while taking video. With never-before-seen features such as instant playback and self-shooting, the LCD ViewCam was a huge success.

World’s First 1-Bit Amplifier (1999)



To convert an analog audio signal to digital form, 1-bit amplifier technology sampled signals 2.8 million times per second—64 times faster than CD sampling. This high sampling rate made it possible to reproduce sound as close to the original as possible.

Industry’s First Camera-Equipped Mobile Phone (2000)



This was the first mobile phone to feature a 110,000-pixel CMOS imager that allowed users to instantly send photos they took.

Air Purifier Using Plasmacluster Ion Technology (2000)



This air purifier was the first product on the market to utilize Sharp’s proprietary Plasmacluster Ion technology.

AQUOS LCD TV (2001)



Sharp released the AQUOS LCD color TV, the ideal TV for the household of the 21st century.

HEALSio Superheated Steam Oven (2004)



Sharp’s innovative Superheated Steam Oven used a newly developed superheated steam generator to “roast” foods with water. The oven won over countless consumers looking for a healthy way to cook.

LED Ceiling Light (2010)



Sharp introduced the LED ceiling light, designed to serve as the new main lighting source in homes. The thin design was made possible by Sharp’s proprietary light diffusion technology. Along with energy-saving functions, this light featured dimming and color adjustment functions that combined to offer 110 different levels of color and brightness.

Microbe Sensor (2013)



Sharp focused on the fluorescent light given off by microbes under certain conditions to develop a microbe sensor that made it possible to visualize contamination risks posed by airborne bacteria. It quickly and automatically measures the amount of airborne microbes, such as bacteria and mold spores.

RoBoHoN Mobile Robot Phone (2016)



RoBoHoN is one in a series of “friendly” appliances for a new era. It’s a companion humanoid robot phone that users can have fun communicating with.

Sharp's Vision for the Future: Fiscal 2017–2019 Medium-Term Management Plan

Aiming to Realize People-Oriented IoT and an 8K Ecosystem

Sharp's Vision for the Future

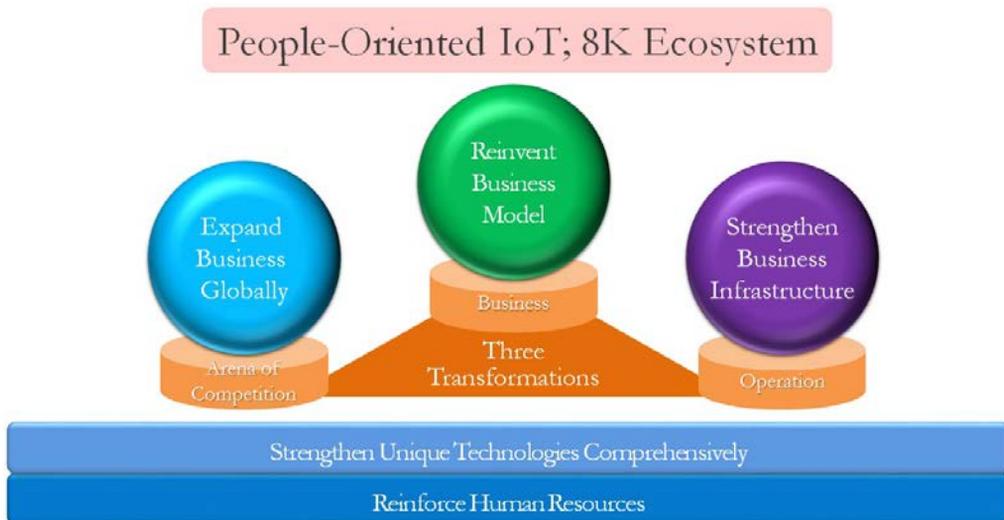
Sharp envisions a society in which people-oriented devices will enrich our lives as new partners. A future where 8K technology will bring about various innovations that will change people's lives.

Expanding Business under the "One Sharp" Concept

In order to realize such a future, Sharp has defined four target business domains: 1) Smart Homes, 2) Smart Business Solutions, 3) Advance Display Systems, and 4) IoT Electronics Devices. Sharp has also established two new cross-organizational offices—the AIoT Business Strategy Office and the 8K Ecosystem Business Strategy Office—to promote the One Sharp business concept.



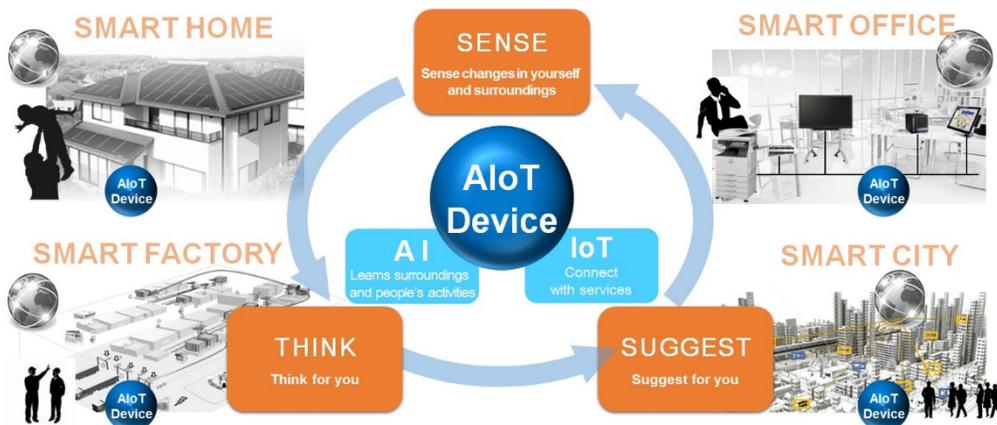
Sharp is striving to transform itself in three areas—business, markets, and operations. Specifically, it will reinvent the Sharp business model, expand business globally, and strengthen the Sharp business infrastructure. It is also strengthening proprietary technologies and human resources. Through these five basic strategies, Sharp aims to transform into a company that will realize people-oriented IT and an 8K Ecosystem and expand its business.



Sharp's Vision for the Future: Fiscal 2017–2019 Medium-Term Management Plan

People-Oriented IoT

AIoT devices are devices that integrate AI (artificial intelligence) and IoT (the Internet of things). And when these AIoT devices serve as people's new partners to detect changes in people and their environment, think about them, and connect with a variety of services via the Internet to make optimal suggestions, they become what Sharp calls "people-oriented IoT." Sharp will extend this technology to various areas, such as smart homes, smart offices, smart factories, and smart cities, and it will aim to realize a smart society where people play the leading role.

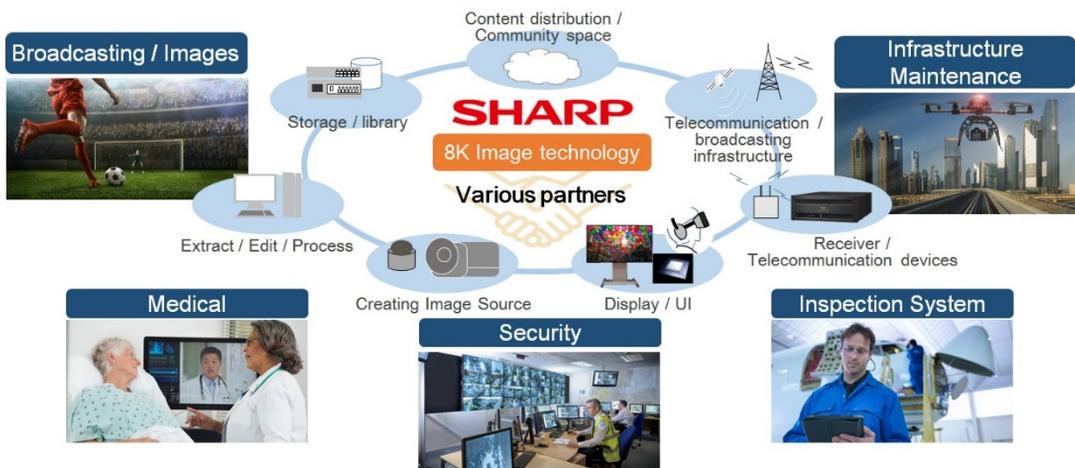


AIoT is a registered trademark of Sharp Corporation.

8K Ecosystem

8K has 16 times the resolution of full HD. This ultra-high definition offers viewers two unprecedented experiences. One is incredible realism. 8K produces images that are so lifelike, the viewer experiences an astonishingly realistic, immersive sensation. The other is new discoveries. 8K can display intricate details that were up to now impossible to reproduce. This allows 8K to be applied in never-before-seen usages.

The 8K Ecosystem is Sharp's strategy aimed at sparking innovations in society by creating the seeds of new industries centered on 8K ultra-high-definition technology. Specifically, Sharp is working with various business partners in building a value chain that covers everything from video image creation and processing to transmission and display. The goal is to achieve major innovations in various fields of industry, not only in broadcasting, but also medicine, security, inspection, and infrastructure maintenance.



Sharp's Vision for the Future: Fiscal 2017–2019 Medium-Term Management Plan



Towards Smart Homes and Smart Towns That Will Enrich People's Lives

Sharp's idea of a smart home is one where people can live a new lifestyle in which they can communicate with their devices via voice and have a variety of services provided for them.

To make this vision come true, Sharp is creating a string of AIoT home appliances and creating various new lifestyle services. In the process, it is transforming home appliances from things that people simply use to "lifestyle partners with a heart." Such appliances are capable of understanding a person's tastes, behaviors, and living environments and proposing ways to live healthier and more comfortable. In addition, Sharp will be establishing an AIoT open platform so that it can collaborate with various business partners in creating the systems for smart homes and smart towns that can provide better living and realize a better society.



BLACKSOLAR
GOOD DESIGN AWARD
2015 年賞受賞

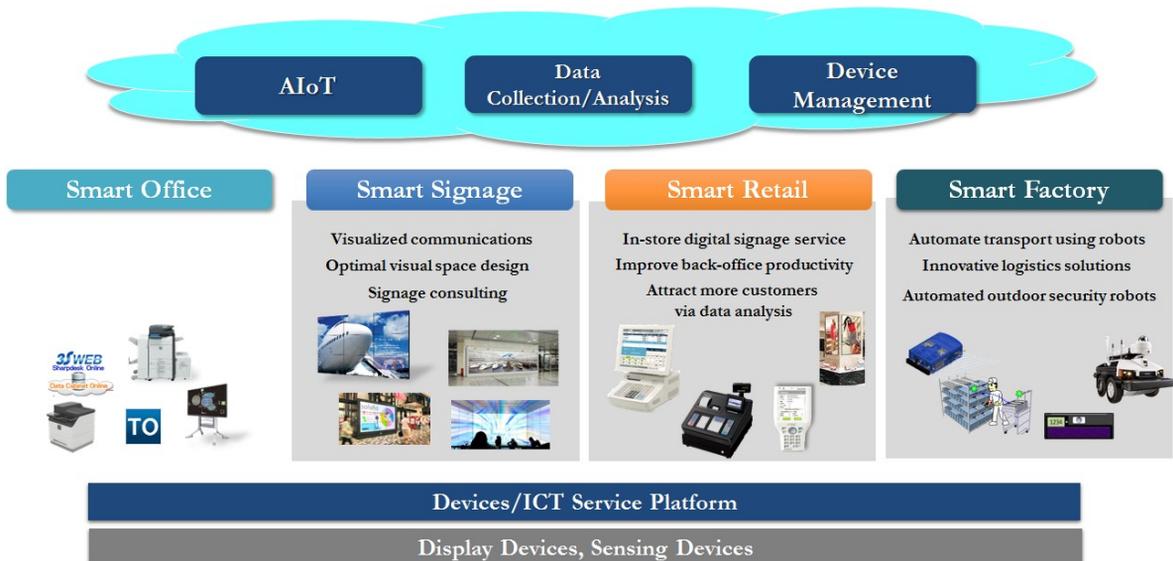
Sharp's Vision for the Future: Fiscal 2017–2019 Medium-Term Management Plan

Smart Business Solutions

Leveraging AIoT and Data Analysis to Bring About Business Innovation

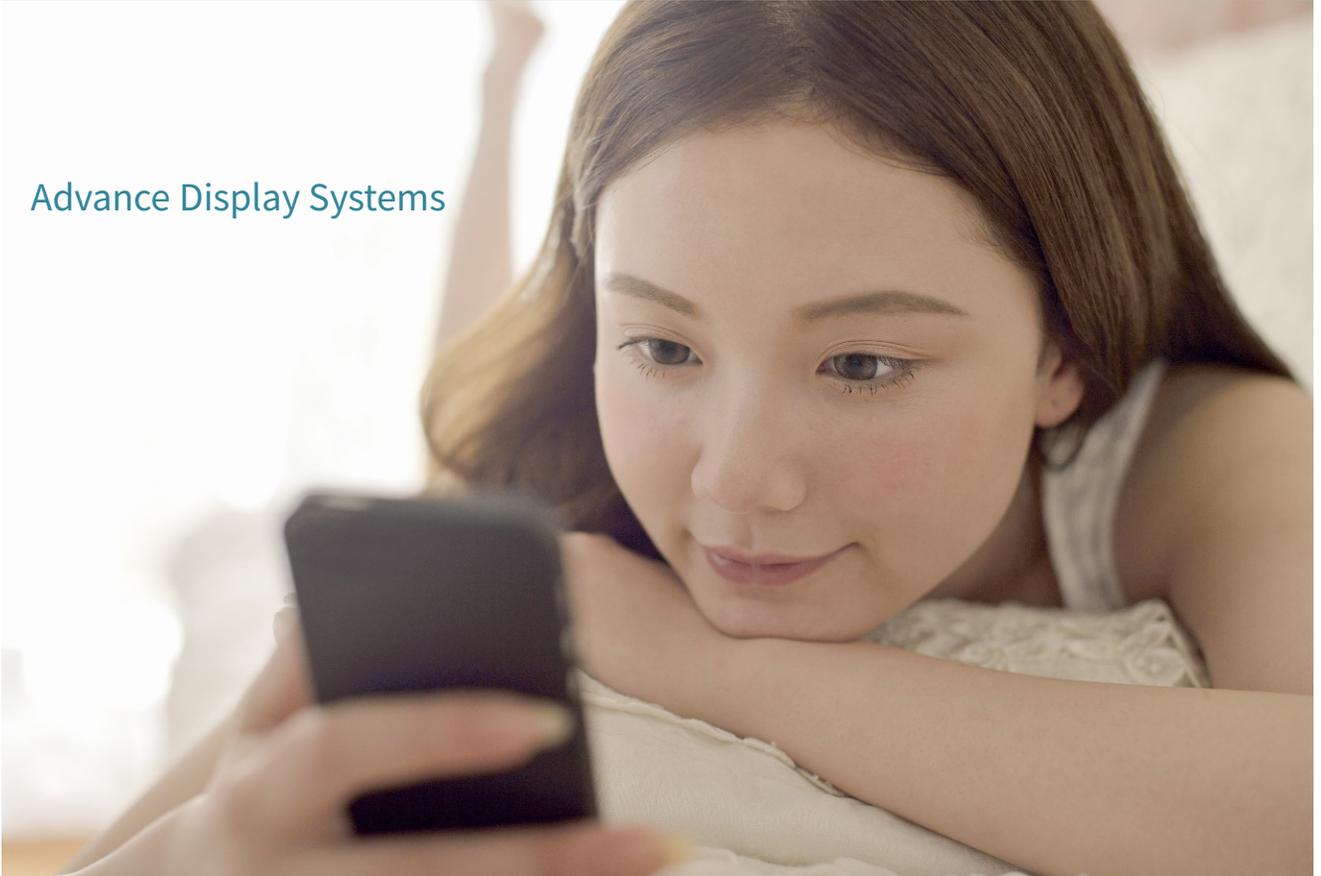
The business world is currently under pressure to make major changes. For example, offices are demanded to reform work styles, boost productivity, and generate innovation. And stores are facing challenges such as a decrease in the working population and the diversification of shopping styles.

In response to these challenges, Sharp is leveraging AIoT and data analysis in addition to conventional equipment and services to provide solutions in four areas: smart office, smart signage, smart retail, and smart factory.



Sharp's Vision for the Future: Fiscal 2017–2019 Medium-Term Management Plan

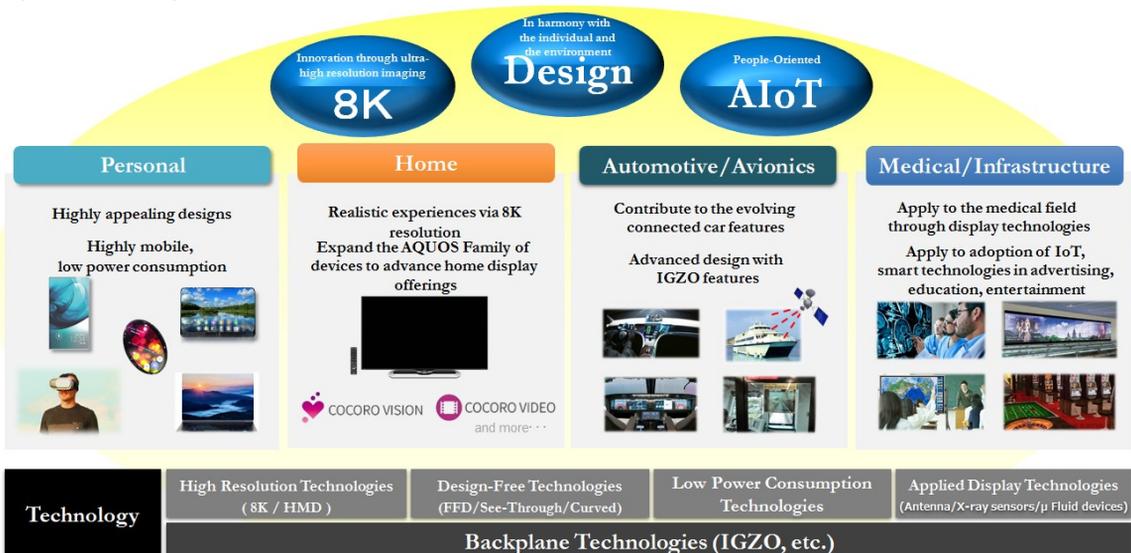
Advance Display Systems



Connecting People and Devices with Advanced Displays to Enrich Lifestyles

Sharp will evolve displays in three different directions by leveraging its unique, high technical capabilities. The first is giving displays 8K ultra-high definition. The second is creating more stylish, flexible designs. The third is making displays into the all-important interface between AIoT devices and people.

Through such evolution, Sharp will bring forth stylish personal mobile devices and advanced smart TVs. It will also achieve innovation in various areas such as automobiles, aircraft, medicine, education, and public infrastructure so that it can contribute to solving social challenges.



Sharp's Vision for the Future: Fiscal 2017–2019 Medium-Term Management Plan

IoT Electronics Devices



The Keystone of One Sharp—Creating New Applications One after Another, Built around Unique Devices

State-of-the-art device technology is indispensable to making people-oriented IoT and the 8K Ecosystem a reality. Sharp has contributed to the development of society by developing various devices and modules, such as sensors, processors, and controllers, by leveraging the advanced proprietary technologies that it has cultivated over many years.

Going forward, Sharp will refine these technologies, as they are the keystone of the One Sharp concept. And it will continue to focus on the three areas of 8K, IoT, and in-vehicle devices, for which dramatic evolution is expected in the future.

8K Ecosystem	IoT	Automotive
<p>Uniquely developed devices for creating 8K ecosystem</p> 	<p>IoT devices for supporting safe, secure, healthy and comfortable life</p>  <ul style="list-style-type: none"> • Sensor (environment/human/distance) • Micro processing • Image processing 	<p>Contribute to the rapidly increasing evolution of automotive</p>  <ul style="list-style-type: none"> • ADAS (LiDAR/ToF /automotive car/electric mirror) • R/G/B/IR laser
<p>Semiconductor Technology</p> <p>Optoelectronics technology : laser / CIS,CCD / optical sensor</p> <p>Process technology : low on resistance / low cost (low mask) process / low defect / low power consumption / low noise / color filter / micro lens / global shutter</p>		

Policy on CSR Activities

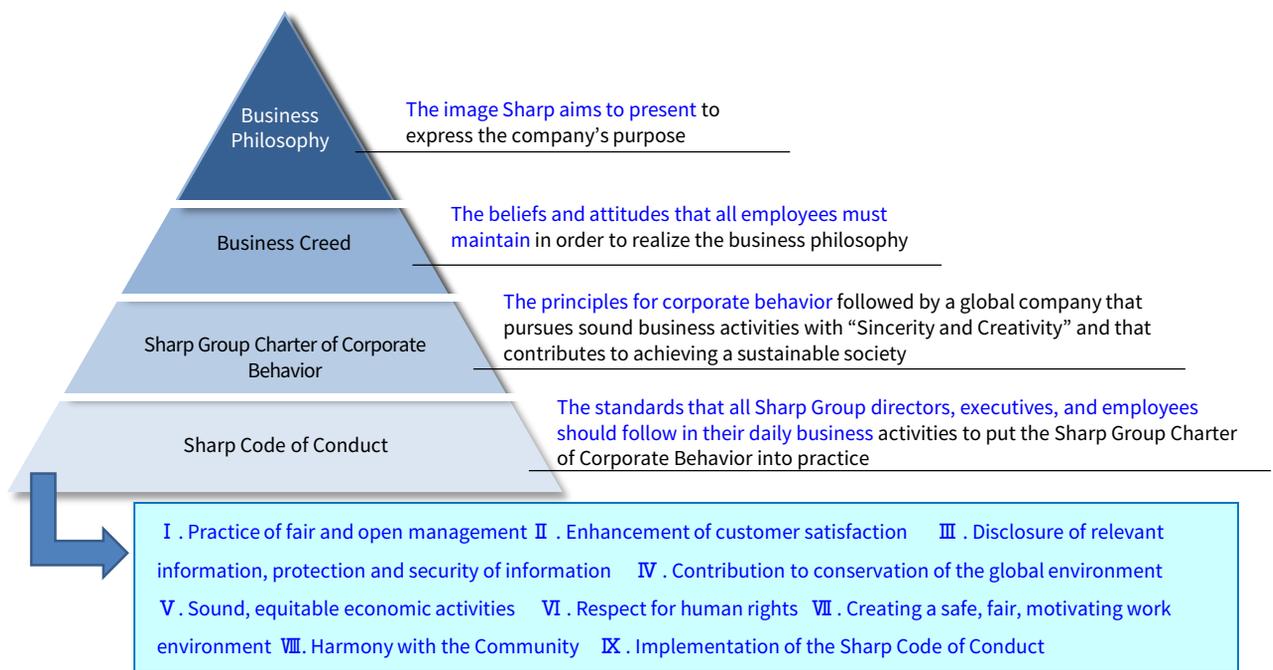
Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct

Sharp's CSR activities are founded on its business philosophy and business creed. To realize this business philosophy and put this business creed into practice, Sharp has established the Sharp Group Charter of Corporate Behavior, the principles of corporate behavior of all Sharp Group companies, and the Sharp Code of Conduct, the standards of conduct for all directors and employees.

Sharp is a global company committed to achieving a sustainable society. Reflecting this, the Sharp Group Charter of Corporate Behavior sets nine principles to ensure that the Sharp Group fulfills its responsibility as a member of society and that it carries out sound business activities in line with its corporate creed of "Sincerity and Creativity."

The Sharp Code of Conduct dictates how all Sharp Group directors, executives, and employees should act in putting the Sharp Group Charter of Corporate Behavior into practice. All realms of the Sharp Group's business activities are required to pursue actions in line with this code.

The Charter of Corporate Behavior and Code of Conduct are reviewed as needed to accommodate changes in the business environment. This includes changes in the law and changes in what society and stakeholders expect of companies. The boards of directors of Sharp Group companies around the world have passed resolutions to adopt the Charter of Corporate Behavior and Code of Conduct. Sharp is also working to thoroughly communicate their content through training held every year.



Related information : >[Sharp Group Charter of Corporate Behavior, Sharp Code of Conduct](#)

ISO 26000 and the United Nations Global Compact

Sharp is pursuing CSR activities by making full use of international guidelines such as the United Nations Global Compact, the OECD Guidelines for Multinational Enterprises, and ISO 26000, an international standard providing guidance on social responsibility.

Sharp became a participant in the Global Compact in June 2009. Since then it has been implementing measures to support the 10 principles of the Global Compact in the areas of human rights, labor, the environment, and anti-corruption.

Sharp will expand and continuously improve its CSR measures in Japan and overseas to provide effective solutions to various social problems, such as labor issues in developing countries and human rights violations in conflict-torn regions.

Related information : >[United Nations Global Compact](#)

Policy on CSR Activities: Initiatives to Strengthen Social and Environmental Responsibility

Sharp SER* Policy

Coinciding with the transition to its new management structure in 2016, Sharp reviewed its CSR promotion structure in line with its new basic management policy. Sharp formulated the SER Policy in December 2016 in order to fulfill the social and environmental responsibilities of the Sharp Group.

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.

* Social and Environmental Responsibility

Sharp SER Committee

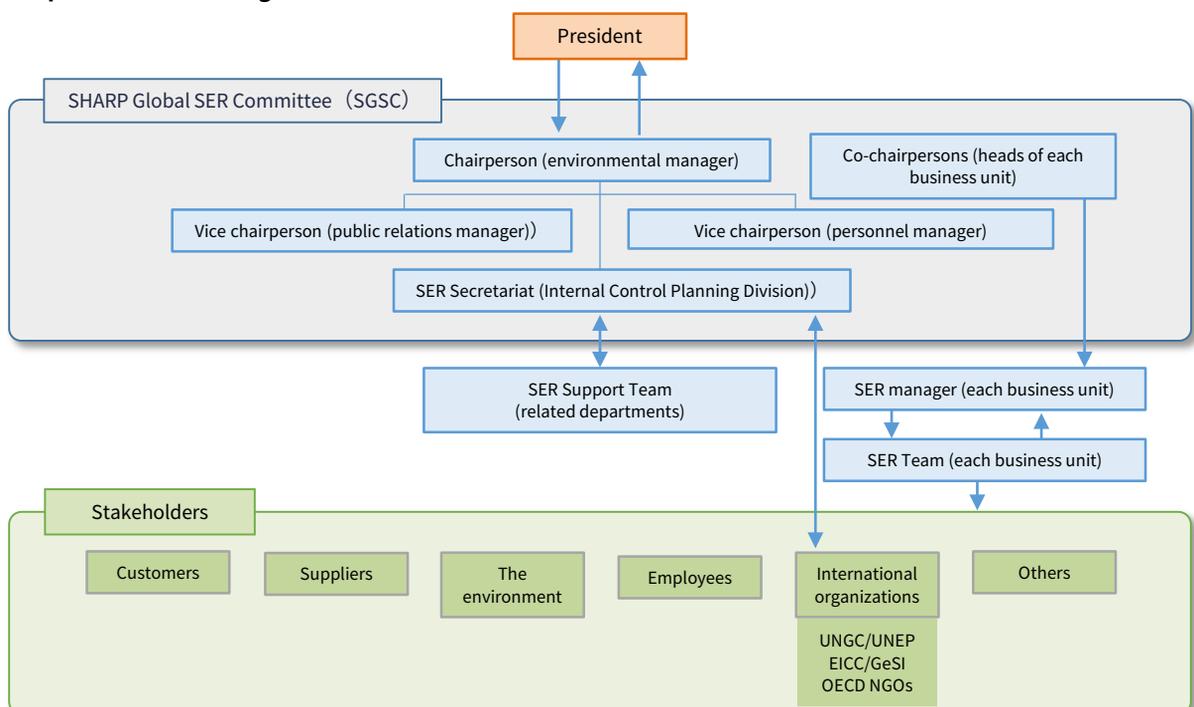
In December 2016, Sharp launched the Sharp Global SER Committee, chaired by the director of environmental affairs, to implement the SER Policy. It also formulated the Sharp SER Committee Operational Guidelines, which outline how the committee should be run.

The SER Committee makes decisions on items related to the promotion of SER activities throughout the Sharp Group. Activities include formulating SER guidelines, relaying them to each business unit, disclosing information to outside the company, and communicating with stakeholders. Additionally, by building an SER management system, the committee supports each business unit so that they can advance SER measures on their own initiative.

In addition, Sharp regularly holds an SER Conference with the participation of the co-chairpersons (the heads of each business unit) in order to deliberate and decide on important matters relating to SER and to promote their companywide deployment.

Going forward, Sharp will effectively promote SER initiatives, which emphasize safety, health, and environmental responsibility, via the SER Committee and steadily fulfill its corporate social responsibility.

■ Sharp SER Committee Organization Chart

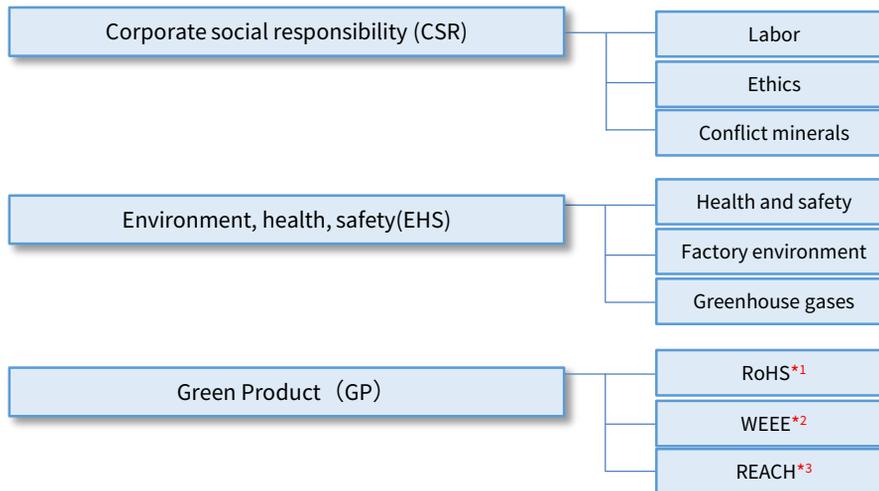


Policy on CSR Activities: Initiatives to Strengthen Social and Environmental Responsibility

Promoting SER Measures

With regard to specific measures for promoting SER activities, the SER Secretariat and the SER Support Team have formulated SER policy guidelines related to the following themes, in collaboration with each business unit.

■ Themes



Each business unit selects the SER policy guideline that is most important to them and formulates and promotes its own SER measures (targets, key performance indicators, scope, and execution plan, etc.).

Every quarter, the SER Committee confirms the status of promotion of the SER measures in each business unit and conducts appropriate follow-ups as necessary.

■ SER Policy Guidelines (Excerpt)

Theme	Policy	Scope
Labor, health, and safety	Restrict long working hours that can lead to health problems	All employees in Japan
Labor and ethics	Prevent harassment	All employees in Japan
Labor and ethics	Respect for human rights at overseas bases	Employees at overseas bases
Factory environment	Reduce and recycle waste	All production sites
Greenhouse gases	Suppress greenhouse gas emissions associated with business activities (improve energy use efficiency)	All production sites
RoHS	Eliminate the use of newly restricted substances*4 under the EU RoHS directive	All business units
WEEE	Comply with requirements set by the waste electrical and electronic equipment recycling laws of each country, such as the EU WEEE directive	All business units
REACH	Manage substances of very high concern*5, as stipulated by the EU REACH regulations	All business units
Conflict minerals	Conform with conflict mineral related laws and regulations and respond effectively	Applicable business units
General	Restructure supplier SER management system	Suppliers
General	Respond to survey and audit requests from clients	All production sites and consolidated production subsidiaries in Japan

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

*2 An EU directive on waste electrical and electronic equipment

*3 A set of EU regulations on the registration, evaluation, authorization, and restriction of chemicals

*4 Four phthalate esters (DEHP, BBP, DBP, and DIBP) mainly used as plasticizers for resins

*5 Substances that may have serious effects on human health and the environment

Identifying Material Issues in CSR

For the sustainable development of stakeholders and the Sharp Group, Sharp believes that it should engage in CSR activities and fulfill its social responsibility while incorporating the opinions and expectations of stakeholders. Sharp understands the effects of its business activities on its stakeholders, and it has extracted key CSR themes while sorting out the opinions and expectations of stakeholders. It then identified CSR material issues and incorporated them into the CSR management PDCA cycle.

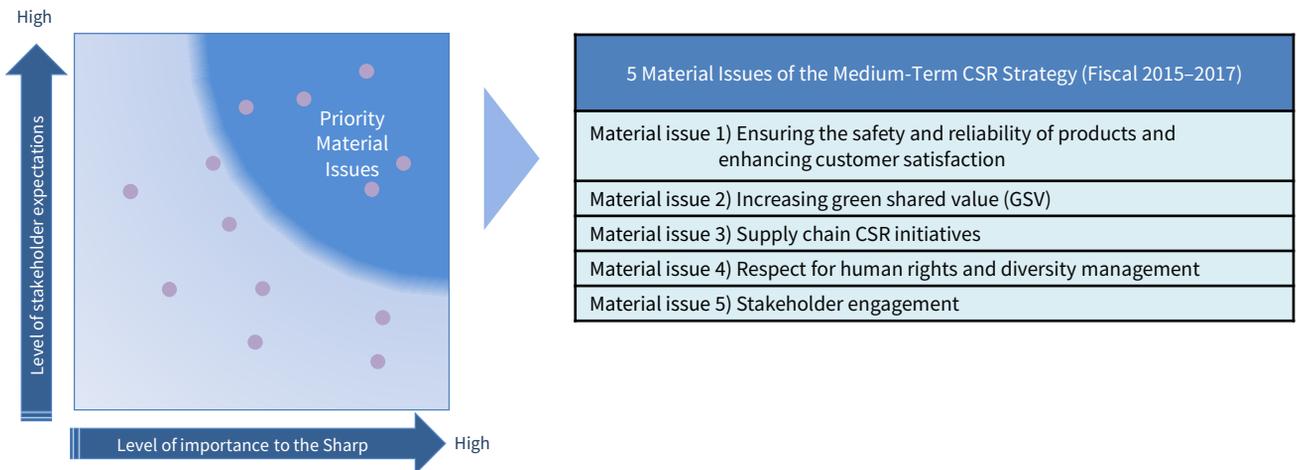


Confirming Major CSR Themes

Sharp has distilled its major CSR themes by sorting out the opinions and expectations of various stakeholders (customers, local communities, business partners, shareholders, investors, and employees) while also taking into consideration various survey results and the moves of other companies.

Identifying Material Issues in CSR

The major CSR themes (extracted as described above) have been reorganized into CSR material issues (materiality) based on two axes: the level of importance to society (level of expectations from stakeholders) and the level of importance to the Sharp Group. They were then prioritized and mapped out as shown in the diagram below.



Incorporating into CSR Management

Sharp organized the identified CSR material issues in line with the Sharp Group Charter of Corporate Behavior. It then formulated the Medium-Term CSR Strategy (fiscal 2015–2017), bearing in mind the characteristics of the company’s businesses and the regions where it does business.

Under the Medium-Term CSR Strategy, each relevant department sets key performance indicators (KPI), incorporates them into the CSR management PDCA cycle, and practices PDCA (plan, do, check, act). Sharp reviews each measure as necessary in accordance with changes in society.

5 Material Issues (Materiality) in CSR

Material Issue 1: Ensuring the Safety and Reliability of Products and Enhancing Customer Satisfaction

With increased awareness of consumer issues, the Sharp Group is focused on achieving customer satisfaction (CS). As a rule, Sharp is always thinking about the customer—developing and providing products and services from the customers’ perspective. Going forward, Sharp will continue to place customers first, in the belief that it is the company’s mission to provide safe, comfortable products and services while minimizing risks, to avoid any negative impact on society.

Material Issue Goals of the Medium-Term CSR Strategy

Earn customer trust by ensuring product safety and reliability while enhancing customer satisfaction

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

Fiscal 2016 Measures	Fiscal 2016 Achievements	Self Evaluation*
Create products that customers can use with peace of mind by ensuring the safety and reliability of products and improving user-friendliness	<ul style="list-style-type: none"> Improved quality through product safety assessment, reliability tests, and usability review Held product safety technical training for design engineers Established guidelines for reliability design Strengthened efforts in user-centered design (UCD) through usability review and training 	★★
Increase after-sales customer satisfaction	<ul style="list-style-type: none"> Japan/overseas: Achieved target for customer satisfaction level by enhancing service capabilities and customer response skills Japan: Held training based on actual customer response cases at service bases nationwide Overseas: CS mind training conducted at major ASEAN nations 	★★
Fiscal 2017 Measures	Management Indicators	Scope
Create products that customers can use with peace of mind by ensuring the safety and reliability of products and improving user-friendliness	Number of serious incidents related to quality issues	Japan/overseas
Increase after-sales customer satisfaction	Customer satisfaction level	Japan/overseas

Material Issue 2: Increasing Green Shared Value

As the world experiences population growth and economic development, the consequences of a range of environmental issues are becoming increasingly visible. These issues include increasing rates of energy consumption, shortages of raw minerals and water, and destruction of the natural environment. Against this backdrop, the Sharp Group is pursuing business activities based on its environmental policy of increasing Green Shared Value (GSV).

One of the most pressing issues is realizing a low-carbon society. To contribute to this effort, Sharp is focusing on expanding the development of environmentally conscious products, and raising and maintaining a high level of efficiency for energy use in its business activities.

Material Issue Goals of the Medium-Term CSR Strategy

Contribute to the realization of a low-carbon society by expanding the development of environmentally conscious products and raising and maintaining a high level of efficiency for energy use in its business activities

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

Fiscal 2016 Measures	Fiscal 2016 Achievements	Self Evaluation*
Expand the development of environmentally conscious products	<ul style="list-style-type: none"> Super Green Products (Japan): Certified 55 products 	★★
Raise and maintain a high level of efficiency for energy use in business activities	<ul style="list-style-type: none"> Maintained an appropriate level of efficiency for energy use at all 13 plants in Japan 	★★
Fiscal 2017 Measures	Management Indicators	Scope
Expand the development of environmentally conscious products	Number of Super Green Products	Japan/overseas
Raise and maintain a high level of efficiency for energy use in business activities	Improvement rate of energy use efficiency (over fiscal 2012 level)	Japan/overseas

5 Material Issues (Materiality) in CSR

Material Issue 3: Supply Chain CSR Initiatives

There is increased awareness of social issues affecting the global supply chain, such as human rights, labor standards, and environmental problems such as the destruction of nature. The Sharp Group recognizes the importance of meeting society's expectations towards Sharp regarding the contribution it should make, as a global company, to address such issues.

Through CSR initiatives in the supply chain, Sharp is responding appropriately to changing circumstances and strengthening its relationships of trust with stakeholders such as clients and suppliers.

Material Issue Goals of the Medium-Term CSR Strategy

Obtain the trust and high estimation of external organizations, including clients, by strictly executing CSR procurement surveys at the plants of Sharp and its suppliers, CSR procurement risk assessment, and audit functions

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

Fiscal 2016 Measures	Fiscal 2016 Achievements	Self Evaluation*
Expand the scope of and firmly establish CSR surveys at Sharp plants	■ Expanded CSR surveys to 25 Sharp plants in Japan and overseas (9 plants in the previous fiscal year)	★★
Firmly establish CSR/green procurement surveys of suppliers	■ Conducted CSR/green procurement surveys of suppliers at Sharp plants in Japan and overseas; achieved target for supplier response rate	★★
Conformity of client companies to CSR standards	■ Number of items pointed out during CSR audits of client companies decreased	★★
Fiscal 2017 Measures	Management Indicators	Scope
Firmly establish CSR surveys at Sharp plants and continuously improve performance	Number of plants that had CSR surveys conducted Assessment score of plants responding to surveys	All production sites and consolidated production subsidiaries in Japan
Fully revamp system toward improving CSR/green procurement surveys of suppliers	Operation of new system and trials at certain Sharp plants	Certain Sharp plants
Conformity of client companies to CSR standards	Number of items pointed out during CSR audits of client companies	Plants identified as critical

Material Issue 4: Respect for Human Rights and Diversity Management

The increased globalization of business has greatly expanded the number of opportunities for employees from different cultures and customs to work together. Accordingly, companies are required to pay attention to a more diverse and complex range of human rights issues. In the Sharp Group, strategic diversity management is an important task. The priority of this management style is to promote and retain capable personnel, regardless of such factors as nationality, gender, or age.

Material Issue Goals of the Medium-Term CSR Strategy

Provide more innovative, value-added products and services by enhancing the capabilities and motivation of employees; invigorate organizations by promoting diversity

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

Fiscal 2016 Measures	Fiscal 2016 Achievements	Self Evaluation*
Promote measures in line with action plan for Act on Promotion of Women's Participation and Advancement in the Workplace	■ Percentage of female managers 3.3% as of April 1, 2017 (same as previous year)	★★
Maintain employment rate for the disabled	■ employment rate for the disabled : 2.47%	★★
Prevent abuse of authority	■ Employee satisfaction with workplace and management indicated in workplace-satisfaction surveys Up 0.01 points for workplace satisfaction level; up 0.03 points for management satisfaction level (over fiscal 2014 levels)	★
Fiscal 2017 Measures	Management Indicators	Scope
Promote measures in line with action plan for Act on Promotion of Women's Participation and Advancement in the Workplace	Have at least 5% of managers be women (by the end of fiscal 2019)	Sharp Corporation
Maintain employment rate for the disabled	Employment rate maintained at 2.4%	Sharp Corporation, Sharp Tokusen Industry Co., and certain affiliated companies in Japan* ¹
Prevent abuse of authority	Improvement of employee satisfaction with workplace and management indicated in surveys* ²	Employees of the Sharp Group in Japan and on temporary transfer to overseas bases

*¹ Target scope defined by the public sector

*² Workplace-satisfaction surveys

5 Material Issues (Materiality) in CSR

Material Issue 5: Stakeholder Engagement (Contributing to Local Communities)

To achieve sustainable development of its business activities and of the regions in which it does business, the Sharp Group is pursuing activities that are oriented toward community involvement and development^{*1}. Sharp will apply what it has gained from collaborations and dialogues with the residents of local communities to its business activities, so that it can achieve further growth.

Material Issue Goals of the Medium-Term CSR Strategy

By properly holding communications with local communities, Sharp will establish good relationships as a people-friendly company. Furthermore, Sharp will enhance the creation of value by reflecting feedback from such activities in its business activities.

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

Fiscal 2016 Measures	Fiscal 2016 Achievements	Self Evaluation*
Participate in local social action programs	<p>■ Maintained the number of Sharp Green Club (SGC) activities^{*2}</p> <p>Activities to protect biodiversity and the environment, community collaborative activities: Held 1,098 times with the participation of a total 17,871 people (including Sharp employee family members and others)</p>	★★
Fiscal 2017 Measures	Management Indicators	Scope
Continue participation in local social action programs	Number of social action programs maintained	Sharp Group in Japan

*1 One of the seven core subjects of social responsibility in ISO 26000.

*2 A joint Sharp labor-management volunteer organization that conducts activities such as forest preservation and cleanups.

Management



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Management: Corporate Governance

Corporate Governance

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

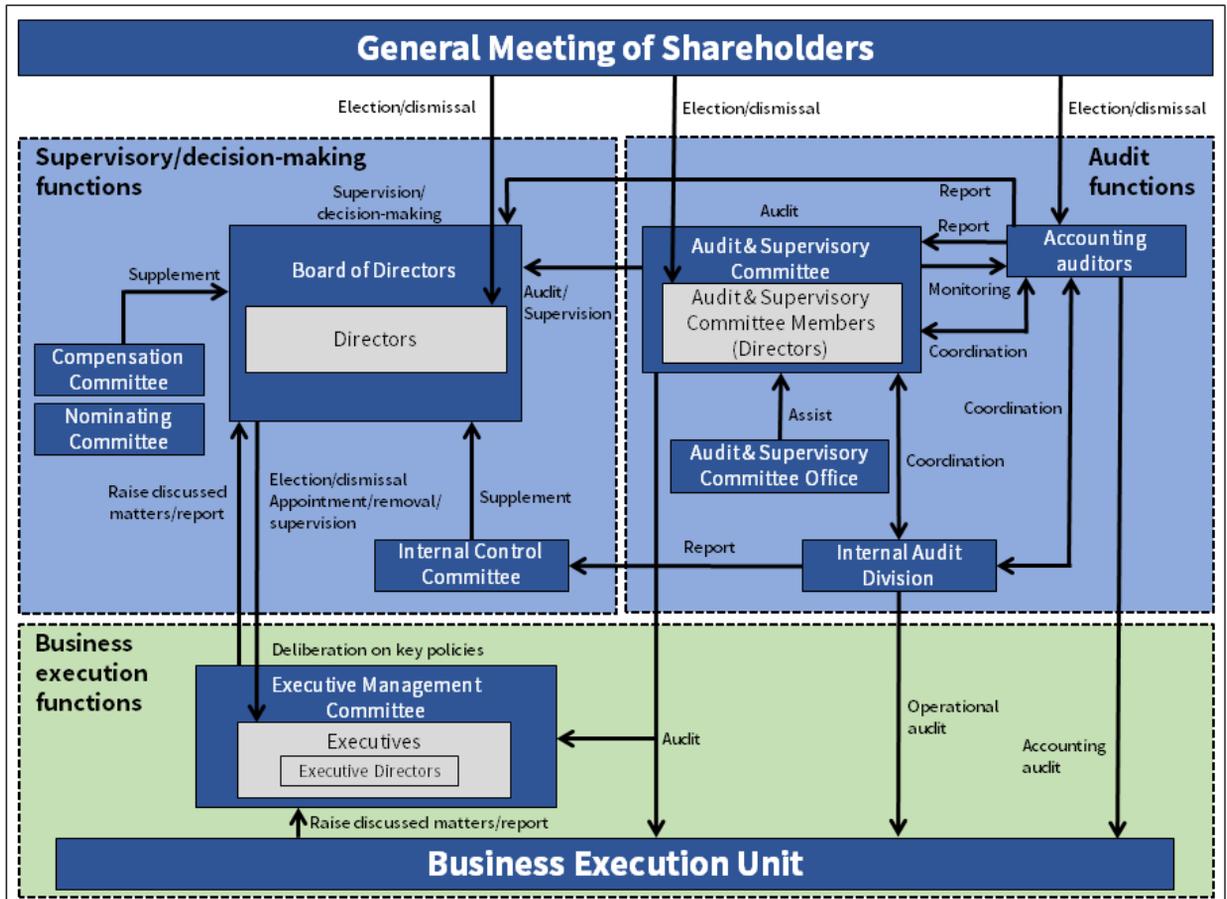
Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<ul style="list-style-type: none"> Reorganize each in-house company into business units (BUs) broken down by line of business; conduct detailed business operations that match the market and business environment of each BU 	<ul style="list-style-type: none"> Revamped business organization in August 2016 and promoted divisionalized management, where each BU assumes responsibility for their earnings 	★★
<p>Priority Objectives for Fiscal 2017</p>	<ul style="list-style-type: none"> Shift to a company with audit and supervisory committee and restore executive officer system in order to strengthen supervisory functions and flexibility of business execution 	

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.

Corporate Governance System

As of June 20, 2017, Sharp Corporation shifted to a company with audit and supervisory committee, so that it can strengthen supervisory functions over the Board of Directors and enhance flexibility in decision-making.

Corporate Governance System of Sharp Corporation



* As of June 20, 2017

Management: Internal Control

Internal Control

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<ul style="list-style-type: none"> ■ Thoroughly develop and maintain various measures related to internal control, based on Basic Policy for Internal Control; complete those measures as initially scheduled ■ Continue intensive efforts to resolve important items (problem items) in each internal control area, and submit Internal Control Report in June 2017 	<ul style="list-style-type: none"> ■ Thoroughly affirmed operational status of measures related to internal control and completed those measures as initially scheduled ■ Reviewed measures and conducted intensive efforts to resolve important items (problem items), and submitted Internal Control Report in June 2017 	★★
<p style="text-align: center;">Priority Objectives for Fiscal 2017</p>	<ul style="list-style-type: none"> ■ Thoroughly develop and maintain various measures related to internal control, based on Basic Policy for Internal Control; complete those measures as initially scheduled ■ Continue intensive efforts to resolve important items (problem items) in each internal control area, and submit Internal Control Report in June 2018 	

As one way to ensure that its corporate governance is functioning effectively, Sharp is developing and maintaining its internal control system to ensure that the entire Sharp Group engages in fair and appropriate business practices based on the provisions of Japan's Companies Act and of the Internal Control Reporting System falling under the Financial Instruments and Exchange Act.

In response to the enactment of the Companies Act in 2006, the Board of Directors passed a resolution to adopt a basic policy related to the development and maintenance of systems necessary to ensure the propriety of business practices (Internal Control System) and the company is working to properly maintain and operate those systems. 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 policy measures related to the internal control system, while also affirming their operational status.

In June 2017, Sharp revised its Basic Policy for Internal Control. It thoroughly affirmed the development and operational status of various measures in line with this Basic Policy, and made sure the measures were established across the company. And in response to the Financial Instruments and Exchange Act, the Sharp Group has been evaluating the effectiveness of its internal control system with respect to financial reporting. It has also taken steps to reduce various business risks through the sound operation of its internal control system.

In fiscal 2016, Sharp implemented various measures to boost the control functions of each internal control area as well as the efficiency with which internal control system effectiveness is evaluated. Sharp also mounted intensive efforts to resolve critically important items and submitted an Internal Control Report in June 2017.

For fiscal 2017, Sharp will identify and focus on the important processes for each business unit to boost the effectiveness of the internal control system.

Management: Risk Management

Risk Management

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<ul style="list-style-type: none"> ■ Review PDCA cycle for risk management and policy for identifying risks <ul style="list-style-type: none"> • Put into writing risk identification method and risk management operational rules 	<ul style="list-style-type: none"> ■ Reviewed PDCA cycle for risk management and policy for identifying risks <ul style="list-style-type: none"> • Put into writing risk identification method and risk management operational rules (reflected into risk management-related rules) 	★★
Priority Objectives for Fiscal 2017	<ul style="list-style-type: none"> ■ Practice efficient risk management by having risk management-related rules firmly established 	

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 policy for risk management. In the Rules, risk items that could have a major impact on management are identified as “specific risks.” For each specific risk, a functional department responsible for risk management across the entire company and a company/business unit responsible for risk management in their respective business domains collaborate to continuously minimize risks and to prevent risks from actually occurring.

In addition, 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.

Periodic Review of Specific Risks

According to the Rules of Business Risk Management, specific risks must be periodically reviewed (adding new risks, changing risk items), given scores, and ranked in order of priority by the department in charge.

In fiscal 2017, Sharp will practice efficient risk management by having these risk management-related rules firmly established.

Promoting Business Continuity Management

Sharp’s major business sites and group companies have formulated BCPs (business continuity plans) that assume the occurrence of emergency situations, such as a large-scale disaster or an outbreak of an infectious disease. This effort is intended to expedite the continuation or early recovery of business when such emergencies occur. By regularly reviewing BCPs and holding training sessions, Sharp works to maintain and improve the business continuity capacity of the organization.

For fiscal 2016, each business site and group company did a self-check on whether they have been continuously reviewing and revising their BCPs in response to organizational changes and changes in the business description. They also enhanced awareness for such ongoing reviews to be prepared for emergency situations.

Management: Compliance

Compliance

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<ul style="list-style-type: none"> ■ Conduct compliance training 	<ul style="list-style-type: none"> ■ Held training (e-learning) on antitrust laws, bribery, and personal information protection for all employees ■ Held training (e-learning) on antitrust laws, the Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors, the Act against Unjustifiable Premiums and Misleading Representations, and practical contract signing for newly appointed managers 	★★
<p>Priority Objectives for Fiscal 2017</p>	<ul style="list-style-type: none"> ■ Strengthen compliance-promotion system ■ Hold compliance training and audits, and put in place rules 	

System to Promote Compliance

Sharp defines compliance as “observing social codes of conduct and company regulations, including laws and corporate ethics.” Accordingly, Sharp is pursuing management practices that give priority to compliance.

The person most responsible for leading compliance at Sharp is the general manager 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 general manager of the President’s 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, he or she draws up corrective measures where necessary and makes sure they are thoroughly executed. Under these two general managers, the general managers of the business units are responsible for compliance within their respective organizations. The business unit general managers are also responsible for guiding and supervising compliance measures at subsidiaries and affiliated companies (hereinafter referred to as “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 critical categories of laws and regulations, the company sets up a dedicated department to achieve compliance with these laws and regulations. Each dedicated 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, and communicates these changes to executives and employees.

In fiscal 2017, Sharp will continue to work to improve and strengthen its system for dealing with compliance.

Consultation Hotline for Compliance Issues

Sharp Corporation and its affiliated companies in Japan have set up a hotline to provide counseling services for problems in the workplace, such as compliance issues. The company has also set up an antitrust law hotline, which serves as a contact point specifically for issues related to antitrust laws. These hotlines are accessible inside the company and externally (via an outside law firm providing legal counsel) to enable employees and temporary staff—as well as employees of business partners*—to ask questions or request a consultation in line with the spirit of Japan’s Whistleblower Protection Act. Sharp also has a consultation service dedicated to addressing workplace harassment (which includes sexual harassment, pregnancy discrimination, and abuse of authority).

In fiscal 2016, the compliance hotline received about 60 reports and requests for consultation. As a result, a violation by an employee was revealed, and the person received disciplinary action after being deliberated by the disciplinary committee.

The Sharp Code of Conduct clearly stipulates that the privacy of individuals who report compliance violations or seek consultation will be strictly protected and that those persons will suffer no unfavorable treatment or penalties.

Similar reporting and consultation services have been set up at Sharp’s major overseas bases, and early actions are being taken to resolve problems.

* Only the compliance hotline is available for use by employees of business partners.

Management: Compliance, Intellectual Property Protection

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.

In March 2015, Sharp instituted Rules for Prohibition of Bribery governing both executives and employees, with a view to preventing corrupt practices such as bribery. By setting up a clear system of checks, the company is working to prevent acts of bribery. In addition, the company produces guidebooks and training materials and also conducts training sessions.

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 March 2014, Sharp further tightened the assessment criteria to ensure fairer reviews. In fiscal 2016, there were 19 cases of such reviews.

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.

Management: Information Security Strategies

Information Security Strategies

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<ul style="list-style-type: none"> ■ Have departments that handle personal information maintain certification for ISO 27001, an international standard for information security management systems ■ Promote security measures to prevent information leakage from MFPS at overseas bases 	<ul style="list-style-type: none"> ■ Passed review for maintaining ISO 27001 certification ■ Conducted company-wide self-checks as in previous years to affirm the status of security measures, and surveyed the management systems 	★★
<p style="text-align: center;">Priority Objectives for Fiscal 2017</p>	<ul style="list-style-type: none"> ■ Be reviewed for maintaining ISO 27001 certification ■ Develop system to prevent sending e-mail to wrong destination; use it to reduce such occurrences 	

Strengthening Information Management Systems

A department promoting information management from a company-wide perspective was created under the President's Office. This department promotes various measures based on the Global Basic Policy on Information Security to appropriately manage and handle confidential and personal information. It also works for the streamlined and effective operation of information management as an office for ISO 27001 certification.

Information Security Measures

In Japan, online sessions on information security are provided annually to all employees. In fiscal 2016, employees learned about targeted e-mail attacks using actual incidents that occurred outside the company as case studies. This helped raise employees' awareness of and preparedness for such threats in their daily work. In addition, information security self-checks are conducted to affirm company-wide status of information security measures. For fiscal 2016, Sharp affirmed the actual status of information security at each base in an effort to boost and maintain security levels company-wide.

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 e-mail 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. These measures ensure a safe business environment for Sharp.

Management of Personal Information

In Japan, the revised Act on the Protection of Personal Information came into full force on May 30, 2017. The strict management of personal information is demanded now more than ever. In response, Sharp has strengthened its measures for preventing leakage of personal information by introducing new management rules in line with the amended law to all departments that handle personal information. In addition, Sharp holds e-learning sessions on personal information protection once a year for all employees in Japan. It also conducts self-checks and on-site audits of departments handling personal information to affirm their management status.

Management: Export and Import Control

Export and Import Control

Security Export Control

Missiles and nuclear threats, terrorist attacks in various regions by groups, and other such issues have made global security unpredictable. This has necessitated the implementation of even stricter export controls. Sharp was one of the first companies in Japan to consistently engage in export control. This dates back to the Cold War, when COCOM regulations were in effect.

In the past, it was obvious which cutting-edge technologies could be applied for military purposes. But today, with the advance of technology, there is an increasing number of cases of consumer-use technologies and products being diverted for use in a military or weaponry context. Manufacturers are required to pay the utmost attention when exporting products and components and transferring technologies.

In line with the Japanese Foreign Exchange and Foreign Trade Act (Foreign Exchange Act), each Sharp Group company, including domestic and overseas subsidiaries, has a system in place for secure export control based on the Sharp Code of Conduct and Sharp Compliance Program on Export Control. Through this system, Sharp strictly monitors goods and technologies that fall under local export control regulations, while rigorously screening the destination and the end use of Sharp products and technologies. In addition to observing the Foreign Exchange Act, Sharp also complies with the Export Administration Regulations of the United States on re-exporting US-origin products. These regulations are also applicable in countries outside of the US.

The key to Sharp's stringent export control is education. Sharp has various education programs that foster awareness of export control for all employees.

Sharp will maintain and further improve this policy and system for secure export control.

Trade Control

Exporting and importing require proper control in compliance with the Customs Act and the Customs Tariff Act of Japan. In particular, there is a strong need for appropriate logistics control regarding the safety of goods for export and import. This is to prevent illegal cross-border trade in weapons by international terrorist groups and to ensure border control of illegal drugs, a major social issue.

Regarding export, Sharp has been certified as an AEO (authorized economic operator) exporter*. It strives for appropriate export standards by strictly observing laws and regulations in the control of distribution, security, protocols, and other procedures in the export of goods. When it comes to export/import items other than AEO exports—for example, international courier/mail or hand luggage carried by business trip travelers and visitors—Sharp has in place a system to ensure compliance with relevant export/import laws and regulations. As well as strengthening its internal control organization, Sharp reviews and updates current internal operational rules, makes a database of export/import records, and conducts thorough training.

Sharp will continue to conduct appropriate export/import control.

* An exporter recognized by the Japan Customs as having a system for security control and compliance in place.

Environmental Initiatives



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> Product Manufacture	P.43
> Logistics	P.51
> Recycling	P.52
> Biodiversity Protection / Communication with Local Communities	P.55

Environmental Initiatives: Environmental Policy

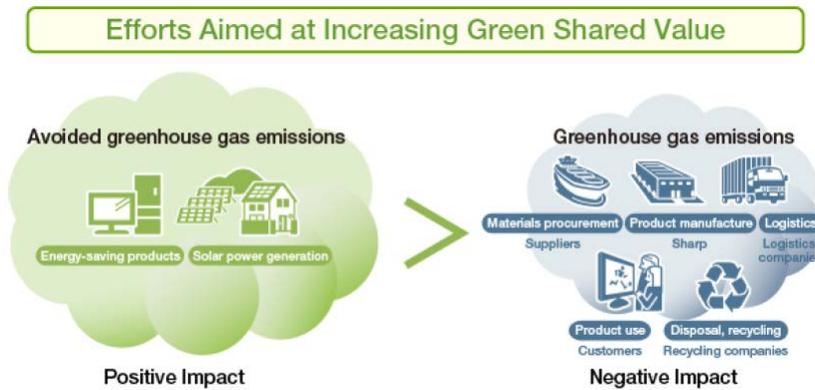
Increasing Green Shared Value

Sharp places the fulfillment of society’s needs regarding environmental matters in close alignment with its strategy for business growth, with a view to achieving success in both areas. Sharp defines the value thus created as “Green Shared Value” and it has established an environmental policy of increasing this value.

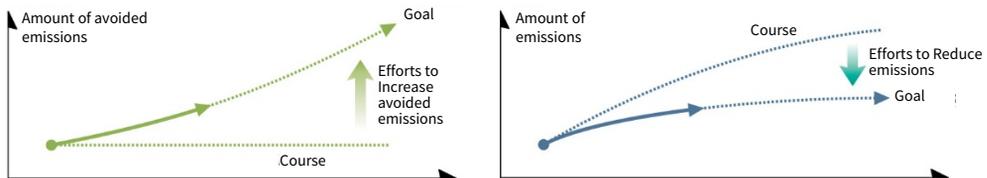
In an effort to foster a low-carbon society—a key environmental goal for all—Sharp is controlling its greenhouse gas (GHG) emissions in conformity with the GHG Protocol Corporate Value Chain (Scope 3) Standard. This covers emissions not only in product manufacture, but also throughout the entire supply chain, from materials procurement to product use.

With a view to increasing Green Shared Value, Sharp is furthering its environmental initiatives by striving always to make the positive impact of its avoidance of GHG emissions—achieved through customer use of energy-creating and energy-saving Sharp products—more than balance out the negative impact of GHG emissions from its business activities.

Specific actions include developing green products and devices, green procurement, saving energy, reducing waste, and reusing and recycling on an ongoing, proactive basis.



■ Avoided GHG Emissions and GHG Emissions (Conceptual Image)



Achievements for Fiscal 2016

In fiscal 2016, Sharp’s positive impact (i.e., avoided GHG emissions) was equivalent to 24.8 million tons CO₂, while the company’s negative impact (i.e., GHG emissions) was 24.43 million tons CO₂. As a result, the GSV index (the ratio of positive impact to negative impact) was 1.02 (i.e., 24.8 million tons CO₂ divided by 24.43 million tons CO₂).

Sharp will continue to develop energy-saving and energy-creating products and work for their widespread use, while pushing forward with more efficient use of energy in its business activities.

■ Breakdown of Avoided GHG Emissions and GHG Emissions

Avoided GHG Emissions (Positive Impact)	Thousand tons CO ₂
Energy-saving products	16,610
Solar power generation	8,190
Total	24,800

GHG Emissions (Negative Impact)	Thousand tons CO ₂
Materials Procurement	2,140
Product manufacture	1,130
Logistics	120
Product use	21,030
Disposal, recycling	10
Total	24,430

Environmental Initiatives: Environmental Sustainability Management

Putting Environmental Sustainability 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.

Promoting Environmental Sustainability Management

Sharp Corporation has set up the Quality and Environmental Promotion Group as an organization to decide on and promote environmental policies and other important items for the entire Sharp Group. Critical policies, strategies, and measures relating to environmental sustainability management are referred to the Group-Wide Conference. With the approval of corporate executives, these initiatives are thoroughly communicated across the entire Sharp Group via the basic environmental policy meetings. This information is then shared with relevant parties at the sites where Sharp’s manufacturing takes place (for example, the product design and manufacturing departments).

Sharp also holds joint environmental manager meetings and product/plant environmental manager meetings. At these meetings, participants review and discuss environmental solutions and the progress being made on each of the environmental measures being taken at each department and base. In this way, Sharp has a system in place to put environmental sustainability management into practice across its entire organization.

Promoting an Environmental Management System

Sharp has been operating an environmental management system (based on ISO 14001) worldwide since 1995. 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 plant and office.

Basic Environmental Philosophy

Creating an Environmentally Conscious Company with Sincerity and Creativity

The Sharp Group Charter of Corporate Behavior

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

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

■ ISO 14001-Certified Bases (As of March 31, 2017)

Region	Number of Bases
Japan	12
Americas	5
Europe	11
China	6
ASEAN, Middle East, Oceania	13
Total	47

Environmental Initiatives: Environmental Sustainability Management

Promoting Environmental Education

Sharp aims to foster environmental awareness among its employees by conducting basic environmental training for general employees. It also provides specialized training, covering such matters as environmental laws and regulations and chemical substance management to improve employees' environmental knowledge and foster their awareness of compliance issues. In addition, Sharp has reformed its existing environmental education system, enriching the educational content and expanding education methods.

Sharp will continue to promote environmental education according to the work content and work roles of employees under this new environmental education system.



Training on environmentally friendly products (Katsuragi Plant)

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 conducts environmental safety operation audits at its plants, aimed at ensuring compliance and operational safety in environmental safety work. The company checks the operation of environmental safety work in each field, such as pollution prevention, waste disposal, and emergency response, as well as the status of compliance with environmental laws and regulations. In fiscal 2016, Sharp reflected the requirements of the EICC* international standard for electronics industry supply chains in its audit guidelines.

* EICC: Electronic Industry Citizenship Coalition. Established in 2004 by electronic device manufacturers such as Hewlett Packard Enterprise, IBM Corp., and Dell Inc., it creates standards for social, environmental, and ethical issues in the electronic industry's supply chain.

Environmental Performance Data Management System

To support environmental sustainability management, Sharp has established a system for managing data on Sharp's environmental performance. With high levels of precision and speed, this system compiles data on the environmental burden caused by Sharp's business activities via energy consumption, waste generation, and water usage, for example. This system is in operation at all Sharp bases worldwide.

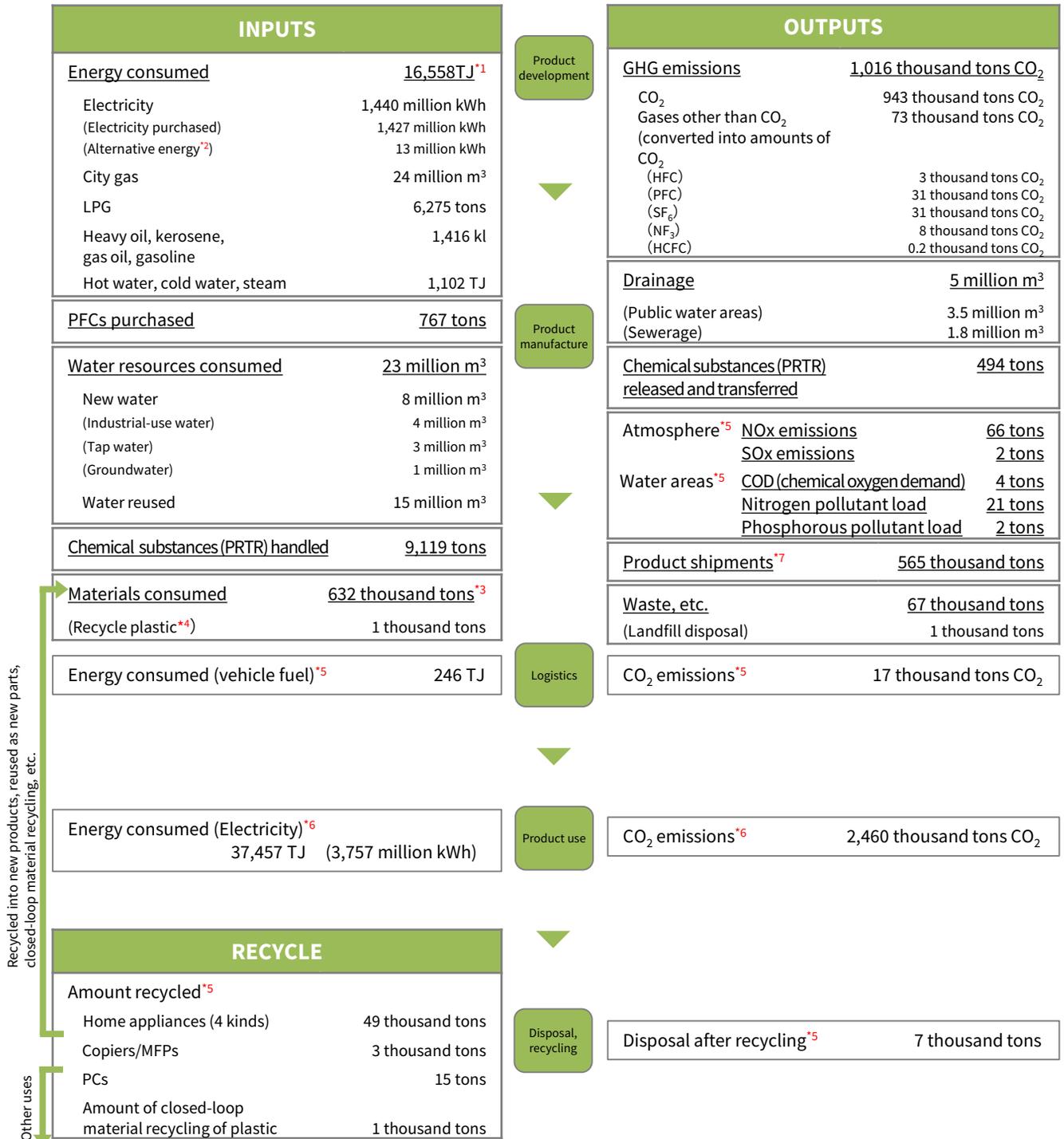
By collecting this data, Sharp is able to effectively grasp the current state of its environmental sustainability management, identify problems, and formulate measures.

Environmental Initiatives: Environmental Sustainability Management

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. The calculation standards for each item are listed on the following page.

■ Material Balance in Business Activities (Fiscal 2016)



*1 TJ (Tera joule) = 10¹² Joules *2 Amount of solar power generated; amount of green power certificates purchased. *3 Total weight of product shipments and waste, etc. (estimate). *4 Amount recycled through closed-loop plastic material recycling technology. *5 In Japan. *6 Annual energy used and amount of CO₂ emitted by products in the 13 major categories sold in the reporting year (estimate). *7 Total weight of products in the 13 major categories sold in the reporting year and packaging materials used (estimate).

Environmental Initiatives: Environmental Sustainability Management

Boundary of Environmental Performance Data, Calculation Standards for Environmental Performance Indicators

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

< Period Covered, Coverage >

Please refer to the editorial policy.

■ Calculation Standards for Environmental Performance Indicators

Environmental Performance Indicators		Unit	Calculation Method	
INPUTS	Product manufacture	Energy consumed	TJ	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
		Water resources consumed	Million m ³	Consumption and recycled use of industrial-use water, tap water, and groundwater
		PFCs purchased	Tons	HFCs, PFCs, sulfur hexafluoride (SF ₆), nitrogen trifluoride (NF ₃), and HCFCs purchased annually
		Chemical substances (PRTR) handled	Tons	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
		Materials consumed	Thousand tons	Total weight of products in the 13 major categories ^{*1} sold in the reporting year (estimate), plus waste, etc. generated
	Logistics	Energy consumed	TJ	Revised ton-km method
	Product use	Energy consumed	TJ (million kWh)	Estimate of annual energy used by products in the 13 major categories ^{*1} 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).
	Disposal, recycling	Home appliance (4 kinds) ^{*2}	Thousand tons	Amount of used home appliances (4 kinds) recycled
		Copiers/MFPs	Thousand tons	Amount of recycled copiers and MFPs
		PCs	Tons	Amount of recycled PCs
		Closed-loop plastic material recycling	Tons	Amount of recycled plastic used, which was produced through closed-loop material recycling

*1 LCD TVs, air conditioners, refrigerators, washing machines, air purifiers, microwave ovens, LED lights, Blu-ray Disc recorders, facsimiles, mobile phones, LCD monitors, copiers/MFPs, solar cells

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

Environmental Initiatives: Environmental Sustainability Management

Environmental Performance Indicators		Unit	Calculation Method	
OUTPUTS	Product manufacture	Greenhouse gas emissions	Thousand tons CO ₂ <ul style="list-style-type: none"> • CO₂ emissions from purchased electricity Japan: Using CO₂ emission coefficient (adjusted) published by Japan's Electric Power Council for a Low Carbon Society (ELCS) Overseas: Using GHG Protocol Calculation Tools (GHG emissions from purchased electricity) • CO₂ 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 CO₂ Using global warming potential published in the 4th Assessment Report by the Intergovernmental Panel on Climate Change (IPCC) 	
		Drainage	Million m ³	Annual drainage into public water areas and sewer system
		Chemical substances (PRTR) released and transferred	Tons	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
		NOx emissions	Tons	Annual emissions
		SOx emissions	Tons	Annual emissions
		COD (chemical oxygen demand)	Tons	Drainage into public water areas
		Nitrogen pollutant load	Tons	Drainage into public water areas
		Phosphorous pollutant load	Tons	Drainage into public water areas
		Waste, etc.	Thousand tons	Industrial waste + general office waste + valuable resources recovered
		Final landfill disposal	Thousand tons	Final landfill disposal of industrial waste + final landfill disposal of general office waste
	Product shipments	Thousand tons	Total weight of products in the 13 major categories* sold in the reporting year, plus packaging material used (estimate)	
	Logistics	CO ₂ emissions	Thousand tons CO ₂	Revised ton-km method
	Product use	CO ₂ emissions	Thousand tons CO ₂	Amount of CO ₂ emitted by products in the 13 major categories* sold in the reporting year, based on their energy consumption (estimate)
Disposal, recycling	Disposal after recycling	Tons	[Weight of 4 kinds of home appliances, PCs, and copiers/MFPs collected] – [Weight recycled into new products or materials, or reused]	

* LCD TVs, air conditioners, refrigerators, washing machines, air purifiers, microwave ovens, LED lights, Blu-ray Disc recorders, facsimiles, mobile phones, LCD monitors, copiers/MFPs, solar cells

Environmental Initiatives: Environmental Sustainability Management

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.

■ Greenhouse Gas Emissions by Scope 1/2/3 Categories Based on the GHG Protocol Initiative (Fiscal 2016)

Scope	Emissions (Thousand tons CO ₂)	Notes
Scope 1 (direct GHG emissions from business activities)	149	Emissions from combustion of fuel, etc.
Scope 2 (indirect GHG emissions from energy usage in business activities)	867	Emissions from the use of electricity
Scope 3 (indirect GHG emissions from areas outside the scope of business activities)	27,797	Calculated for categories such as procurement, employee commuting and business trips, shipping and distribution, and product usage

■ Greenhouse Gas Emissions by Scope 3 Category Based on the GHG Protocol Initiative (Fiscal 2016)

Classification	Category	Emissions (Thousand tons CO ₂)	Notes
Upstream	Purchased goods and services	2,840	CO ₂ emissions from the manufacture of materials procured for products in the 13 major categories ^{*2} that the Sharp Group sold in the reporting year
	Fuel- and energy-related activities not included in scope 1 or 2	90	CO ₂ emissions from transmission losses of electricity purchased by the Sharp Group
	Upstream transportation and distribution	20	CO ₂ emissions from transportation and distribution of materials procured by the Sharp Group
Sharp	Business travel	10	CO ₂ emissions from business travel by all employees of Sharp Corporation
	Employee commuting	20	CO ₂ emissions from commuting by all employees of Sharp Corporation
	Leased assets	—	Included in scope 1 and 2 CO ₂ emissions
Downstream	Waste generated in operations	5	CO ₂ emissions from waste disposal and treatment by the Sharp Group
	Processing of sold products	200	CO ₂ emissions from processing at destination of Sharp Group products
	Downstream transportation and distribution	160	CO ₂ emissions from transportation and distribution of products manufactured by the Sharp Group
	Use of sold products	24,450	Lifetime CO ₂ emissions ^{*3} from the use of products in the 13 major categories ^{*2} that the Sharp Group sold in the reporting year
	End-of-life treatment of sold products	2	CO ₂ emissions from recycling 4 types of appliances ^{*4} that Sharp Corporation sold in Japan
Total		27,797	

^{*2} LCD TVs, air conditioners, refrigerators, washing machines, air purifiers, microwave ovens, LED lights, Blu-ray Disc recorders, facsimiles, mobile phones, LCD monitors, copiers/MFPs, solar cells

^{*3} Annual power consumption of each product × number of units sold × product life × CO₂ emission coefficient

^{*4} TVs (CRT TVs, flat-panel TVs), air conditioners, refrigerators/freezers, washing machines/dryers

Environmental Initiatives: Environmental Sustainability Management

Environmental Accounting

Sharp uses environmental accounting to provide a quantitative assessment of the costs and benefits of its environmental conservation activities and applies the results to environmental sustainability management.

Environmental Conservation Costs

In fiscal 2016, Sharp's environmental conservation investment was approximately 0.8 billion yen, and environmental conservation expenditures were approximately 22.8 billion yen. Costs associated with "Planning and Design (research and development)" made up a large percentage of these figures.

Explanation of Terminology

< Environmental Conservation Costs >

Overhead costs, personnel expenses, and investment associated with environmental conservation activities, in addition to attendant depreciation.

Sites Covered

The Sharp Group in Japan

Period Covered

April 1, 2016 to March 31, 2017

Referenced Guidelines

Environmental Accounting Guidelines 2005 published by the Ministry of the Environment, Japan

Environmental Initiatives: Environmental Sustainability Management

Environmental Accounting

Classification ^{*1}	Main Activities	Environmental Conservation Costs (Unit: ¥ million)		Environmental Conservation Effects
		Investment	Expenses	
Environmental Sustainability Management (management activities/social responsibility)	<ul style="list-style-type: none"> Promote environmental sustainability management Operate environmental management system Environmental education Social contribution activities 	27	2,535	Promote environmental sustainability management Number of ISO 14001-certified sites: 47 sites Environmental social contributions Number of employees who attended SGC ^{*2} activities (total): 18,000 persons
Planning and Design (research and development)	<ul style="list-style-type: none"> R&D on solar power systems Promote closed-loop recycling of plastic materials R&D on environmental related technologies 	680	8,705	Supply environmentally conscious products <ul style="list-style-type: none"> Number of Super Green Products: 52 models CO₂ emissions reduced by solar power systems^{*3}: 8 million tons CO₂ CO₂ emissions reduced by energy-saving products^{*4}: 17 million tons CO₂
Manufacturing	Reduce GHG emissions (global environmental conservation)	54	2,552	electricity and fuel consumption <ul style="list-style-type: none"> CO₂ emissions reduced: 26,000 tons CO₂ PFC emissions reduced: 1,000 tons CO₂ Energy costs reduced by controlling electricity and fuel consumption: 590 million yen
	Minimize and recycle waste (recycle resources)	2	5,185	Waste recycled or sent for appropriate disposal <ul style="list-style-type: none"> Waste recycled: 47,000 tons Recycled and reused water: 15 million m³ Economic benefits from recycling waste into valuable resources and using recycled water: 901 million yen
	Prevent pollution (prevent pollution)	61	3,737	<ul style="list-style-type: none"> Observe environmental laws and regulations Prevent air/water pollution and noise/vibration Promote risk management Chemical substances properly managed and their discharge reduced Reduce risk of soil contamination
Recycling/Logistics (upstream/downstream)	<ul style="list-style-type: none"> Collect used products Promote proper recycling of used products 	0	41	Collection, recycling, and proper disposal of used products <ul style="list-style-type: none"> Used home appliances (4 kinds) recycled: 49,000 tons Used copiers/MFPs recycled: 3,000 tons Used PCs recycled: 15 tons Environmental burden during distribution reduced <ul style="list-style-type: none"> Rate of modal shift: 24.5% Percentage of low-pollution vehicles: 99.9%
Total		824	22,755	

*1 Parentheses indicate category based on the Environmental Accounting Guidelines, Ministry of the Environment.

*2 A joint labor-management volunteer organization.

*3 Amount reduced by solar power systems sold in the reporting year, assuming that they will be in operation for the next 20 years.

*4 Amount reduced by products in the four major categories (LCD TVs, air conditioners, refrigerators, copiers/MFPs) sold in the reporting year, assuming that they will be used for the next 10 years.

Environmental Initiatives: Product Development

Developing Environmentally Conscious Products and Devices

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self Evaluation*
■ Super Green Products (Japan): Certify 50 products	■ Certified 52 products	★★★
Priority Objectives for Fiscal 2017	■ Super Green Products (Japan): Certify 50 products (criteria and evaluation content to be revised each year)	

Developing Green Products

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, with those achieving the standards being awarded GP status.

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.

■ 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

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 2016, 52 product models—such as a refrigerator and a washing machine/dryer—were certified as SGP. Sales of those products reached 162.3 billion yen, with SGP sales accounting for 31% 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 2016



SJ-GT42C-R
Refrigerator



ES-ZP1
Front-loading washing machine/dryer



KI-GS70
Humidifying air purifier



AX-CA300
Superheated steam oven



JD-XF1CL
Digital cordless phone

Environmental Initiatives: Product Development

< Case Study >

SGP Developer Interviews

Sharp launched the website “Going Green Everywhere,” which features interviews with product planning staff, engineers, designers, salespersons, and other staff involved in SGP development. The site conveys their commitment to environmentally conscious manufacturing and the difficulties they have faced. Through this site, Sharps aim to boost the added value of products by communicating the products’ appeal from an environmental perspective.

In fiscal 2016, the site featured MFPs, storage batteries, solar charging stations, and cordless vacuum cleaners.

Related information: > [Going Green Everywhere website](#)



Solar charging station development team

Developing Green Devices

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 specific objectives according to the GD Standard Sheet, and it determines how well the actual device has met these objectives, with those achieving the standards being named GD.

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 Device Concepts

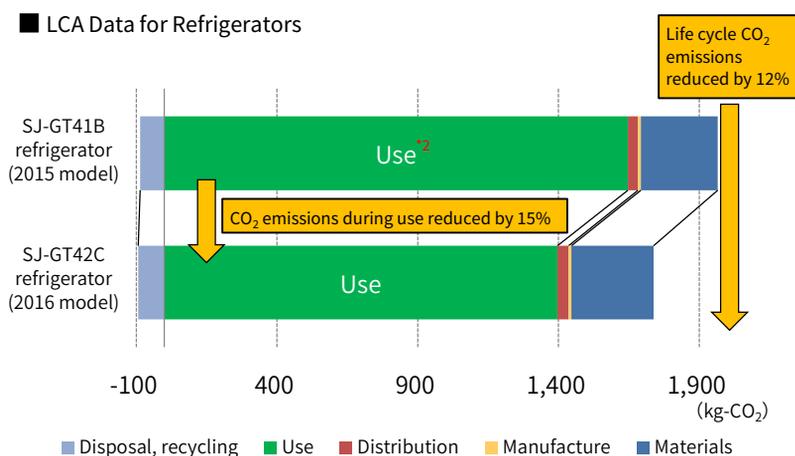
- Energy Efficiency** Devices with superior energy efficiency and that consume less energy
Reduce power consumption during operation and in standby mode; other measures
- Resource Conservation** Devices designed to conserve resources
Reduce device weight or volume; other measures
- Recyclability** Devices 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

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. Converting this impact into CO₂ emissions provides a quantitative measure that Sharp uses in its efforts to reduce environmental impacts.

For example, refrigerators and other consumer electronics have a large impact during use. Thus, by focusing on improving their energy savings, overall environmental impact can be effectively reduced.

LCA Data for Refrigerators



*1 The life of a product from materials and parts procurement to manufacture, distribution, use, disposal, and recycling.

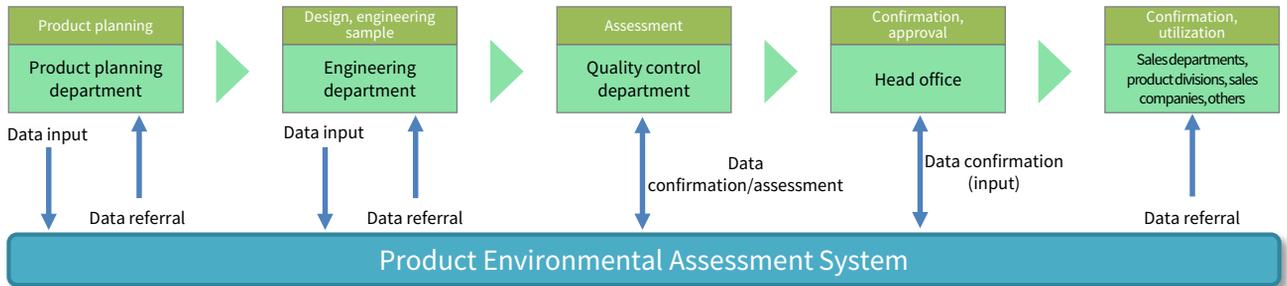
*2 CO₂ emissions during use are calculated using a CO₂ emission coefficient (adjusted) announced by Japan’s Electric Power Council for a Low Carbon Society (ELCS).

Environmental Initiatives: Product Development

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 GP and GD development know-how and design data from all Sharp design and development bases. The database is used to raise design standards as well as to standardize in-house life cycle assessments (LCA). This way, the system is contributing to the creation of environmentally conscious Sharp products and devices. In fiscal 2016, Sharp strengthened the function for checking products' compliance with environmental laws and regulations.

■ System Flow



Reducing Environmental Impact in the Supply Chain

Sharp promotes green procurement to reduce environmental impact throughout the entire supply chain. In its comprehensive material-procurement process, Sharp not only considers quality, cost, and delivery times, it also adds environmental consciousness to the selection criteria. In fiscal 2000, Sharp issued the first edition of the Green Procurement Guidelines. In fiscal 2005, contracts with Sharp's suppliers were amended to require compliance with the Green Procurement Guidelines. In fiscal 2011, Sharp revised the guidelines to include biodiversity protection as an evaluation item. In fiscal 2015, Sharp revised the guideline content again, to be in compliance with the EICC Code of Conduct^{*1}. In doing so, Sharp integrated its green procurement survey and CSR procurement survey, which were conducted separately, into a single CSR/green procurement survey. Sharp and its suppliers are thus continuing their efforts to reduce environmental impacts.

^{*1} Code of conduct established by the EICC (Electronic Industry Citizenship Coalition, an influential international organization) to promote CSR throughout the supply chain. The Code is made up of five sections: labor, health and safety, the environment, ethics, and management systems.

Managing Chemical Substances in Products

Electric appliances contain a variety of chemicals. Countries around the world have enacted laws and regulations that bring these chemicals under control. In the EU, for example, the RoHS directive^{*2} restricts the use of specified chemicals in products, while REACH regulations^{*3} require companies to convey and disclose information on chemicals used throughout the supply chain. Countries such as Japan and China also have laws requiring companies to disclose information on certain chemicals contained in products.

Sharp has its own standards for managing chemicals contained in parts and materials used for its products to ensure the safety of products during use and to reduce the environmental impact at the time of disposal. Based on these standards—which are stricter than voluntary industry standards or standards stipulated by laws and regulations—Sharp introduced its original Chemical-Product Assessment (C-PA) system to evaluate the safety of chemicals in the product development and design stages.

Sharp also established an IT system to manage information on chemicals contained in materials, so that it can appropriately manage chemicals in the supply chain. Through this system, Sharp cooperates with suppliers to collect data on chemicals contained in products. Sharp is continuing to expand the database. In fiscal 2016, Sharp upgraded the system to accommodate chemSHERPA^{*4}, a new scheme for sharing information on chemicals contained in products.

^{*2} An EU directive on the "Restriction on the use of certain Hazardous Substances." RoHS restricts the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl (PBB), and polybrominated diphenyl ether (PBDE) in electrical and electronic equipment entering the EU market after July 1, 2006. After July 22, 2019, the use of four additional substances will be restricted: bis(2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP), and diisobutyl phthalate (DIBP).

^{*3} REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) is a set of EU regulations covering chemicals produced in and imported into the EU. (Took effect in 2007.)

^{*4} A scheme for sharing information on chemicals contained in products, developed under the initiative of the Japanese Ministry of Economy, Trade, and Industry. Conforms to IEC 62474, an international standard for the electrical and electronics industry on material declaration.

Environmental Initiatives: Product Development

< Case Study >

Construction of a Mega Solar Power Plant (Mongolia)

Since first embarking on solar cell development in 1959, Sharp has been working for more than half a century to develop and spread the use of solar power systems. Sharp is a global total energy solutions provider, involved in the development and production of solar cells, system design, construction and maintenance of power plants, and management as an IPP (independent power producer). It also provides energy management systems utilizing storage batteries.

In January 2017, Mongolia's first-ever^{*1} mega solar power plant^{*2} went into commercial operation in Darkhan, located about 230 km north of the country's capital, Ulaanbaatar, and a completion ceremony was held. Solar modules (10 MW each) supply renewable energy on an approximately 290,000 m² site (equivalent to about 40 soccer grounds). The power generated is equivalent to reducing greenhouse gas emissions of approximately 15,000 tons of CO₂ per year. This project was selected for the Financing Program for JCM Model Projects^{*3} run by the Japanese Ministry of the Environment, and it will also contribute to the achievement of Japan's greenhouse gas emission reduction targets. At the completion ceremony, Sharp's engineers were honored for their contribution to the development of the energy industry in Mongolia.

Sharp has also contributed to the improvement of the energy situation in Mongolia in other ways. Efforts include engaging in a solar power electrification project for a non-electrified village in 2003.

*1 As of January 19, 2017; based on Sharp research.

*2 A joint project between Shigemitsu Shoji Co., Ltd., local company Solar Power International LLC, and Sharp.

*3 A program for implementing CO₂ reduction projects that utilize Japan's superior technologies in developing countries. The program measures, reports on, and verifies the projects' greenhouse gas emission reduction effects. Based on the premise that the calculated amount of emission reductions will be counted as a reduction in Japan's emissions through the joint crediting mechanism, businesses are provided with facility subsidies of up to one-half of the initial investment cost.



Mega solar power plant in Darkhan, Mongolia



Construction completion ceremony



Award and medal presented to Sharp

Environmental Initiatives: Product Manufacture

Curbing Greenhouse Gas Emissions

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

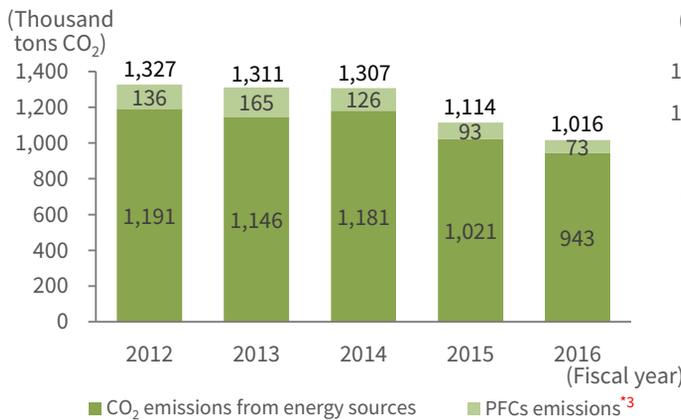
Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self Evaluation*
<p>■ Energy intensity: Improve by 25% (baseline year: fiscal 2012)</p>	<p>■ Improved by 11% (baseline year: fiscal 2012)</p>	★
<p>Priority Objectives for Fiscal 2017</p>	<p>■ Energy intensity: Improve by 20% (baseline year: fiscal 2012)</p>	

Sharp Group Activities to Control Greenhouse Gas Emissions

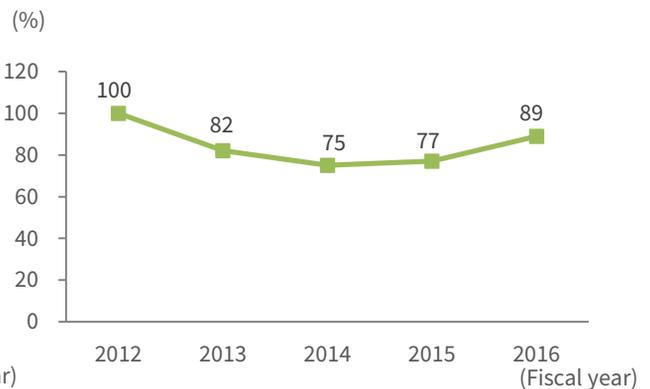
Sharp is taking active measures to curb greenhouse gas (GHG) emissions resulting from its business activities in an effort to contribute to the realization of a low-carbon society. The Sharp Group's GHG emissions in fiscal 2016 decreased by 8.9% (down 98,000 tons CO₂) compared to the previous fiscal year. However, due to a decrease in production volume, the improvement rate of energy intensity was 11%, compared to the baseline year of 2012.

Each Sharp plant 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 pursue further energy-saving measures and boost production efficiency in line with its business expansion.

■ Amount of GHG Emissions



■ Energy Intensity (Baseline Year: Fiscal 2012)

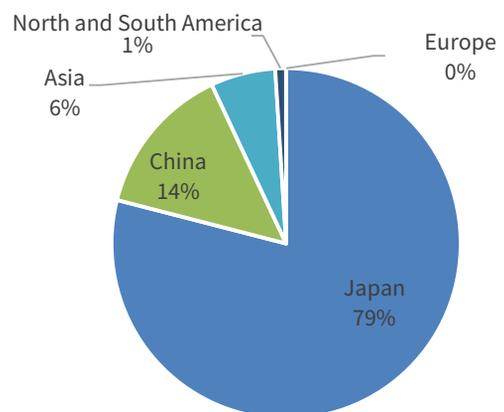


*1 A device to control the number of motor rotations.

*2 A room where the temperature, humidity, and cleanliness are kept at controlled levels.

*3 HFCs, PFCs, sulfur hexafluoride (SF₆), nitrogen trifluoride (NF₃), HCFCs

■ GHG Emissions by Region (Fiscal 2016)



Environmental Initiatives: Product Manufacture

< Case Study >

Reducing Air-Conditioner Power Consumption (Kameyama Plant)

The Kameyama Plant (Kameyama, Mie Prefecture) manufactures LCDs with various functions and sizes for use in smartphones, tablets, and TVs. In order to maintain the state of the clean rooms^{*1} necessary for the production of LCDs, air conditioned by the outdoor-air processing units is fed in by blowers. In fiscal 2016, installing inverters^{*2} on the blowers and reducing electricity usage resulted in an annual reduction of approximately 1,000 tons of CO₂.

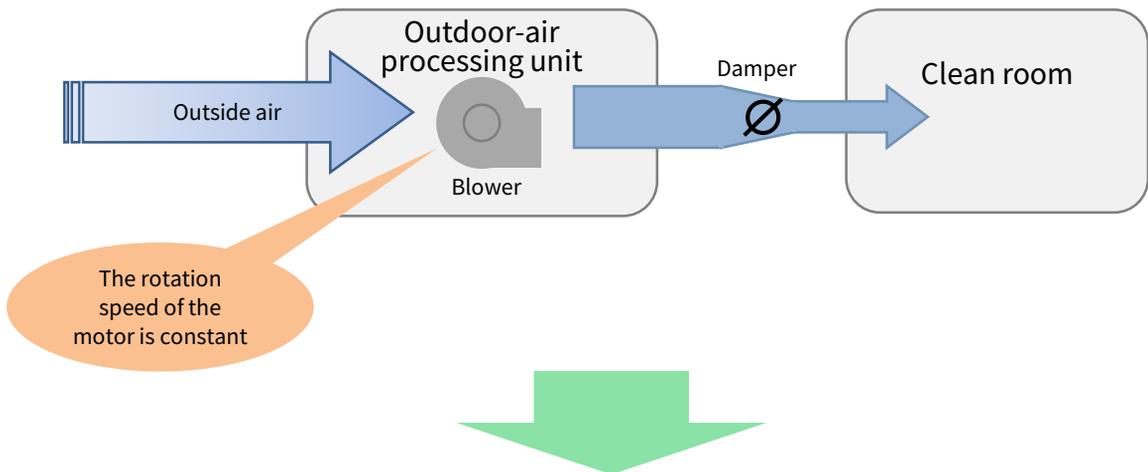


Outdoor-air processing units on the rooftop of the plant

*1 A room where the temperature, humidity, and cleanliness are kept at controlled levels.
*2 A device to control the number of motor rotations.

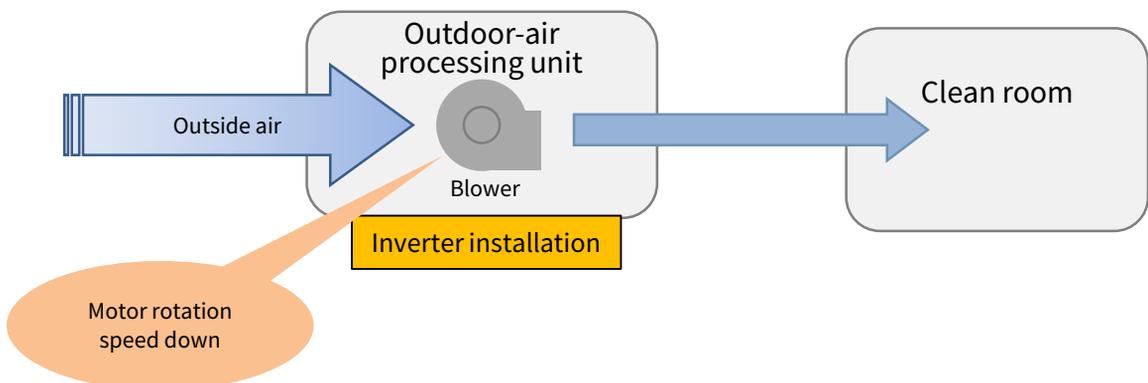
< Before improvement >

The rotation speed of the blower motor is kept constant and air volume is adjusted with a damper (on/off valve).



< After improvement >

The inverter lowers the motor rotation speed to adjust air volume, reducing the power consumption of the blower.



Environmental Initiatives: Product Manufacture

Minimizing and Recycling Waste

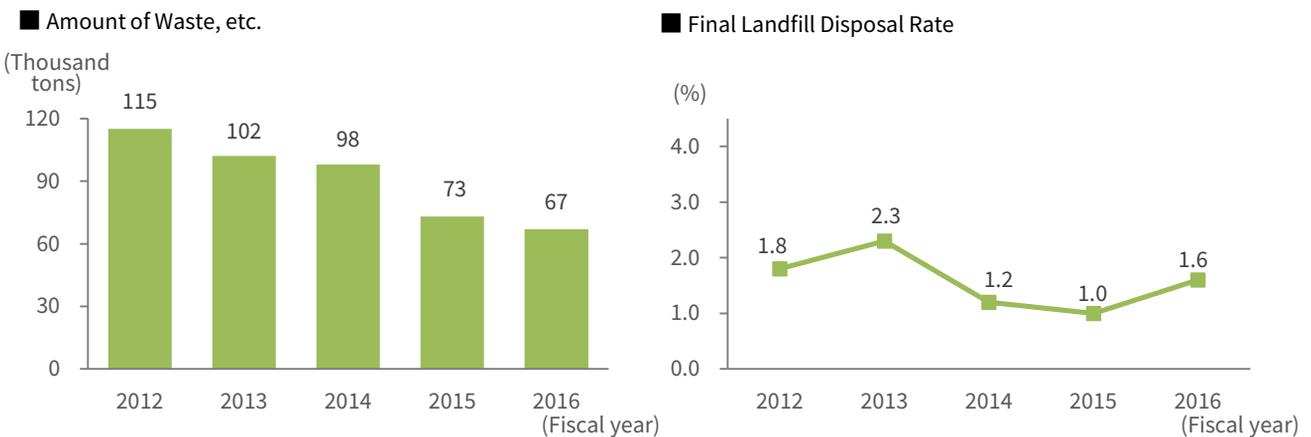
* Self evaluation: ★★★ Achieved more than targeted / ★★ Achieved as targeted / ★ Achieved to some extent

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self Evaluation*
■ Final landfill disposal rate of 1.0% or less	■ Final landfill disposal rate of 1.6%	★
Priority Objectives for Fiscal 2017	■ Final landfill disposal rate of 1.3%	

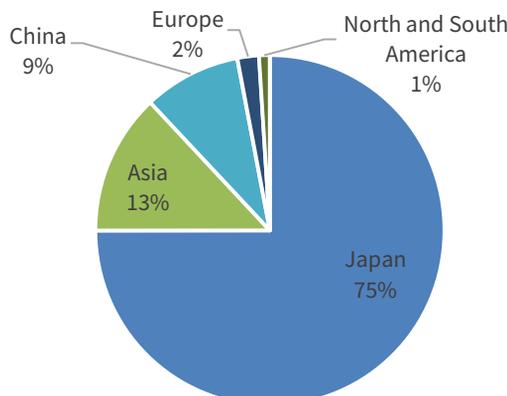
Curbing the Amount of Waste, etc. Generated by the Sharp Group

Sharp has been working to reduce waste and to recycle as much of it as possible in an effort to contribute to building a resource-recycling society. In fiscal 2016, the amount of waste, etc. generated by the Sharp Group decreased by 9% (down 6,000 tons) compared to the previous fiscal year, but the final landfill disposal rate was 1.6%. Meanwhile, as a result of ongoing efforts to recycle solid and liquid waste and to recover valuable resources, in fiscal 2016 Sharp production plants in Japan achieved a final landfill disposal rate of 0.002%. This marks zero discharge to landfill* for the 16th consecutive year, starting from fiscal 2001. Going forward, Sharp will strengthen waste reduction efforts at overseas bases and work to reduce the final landfill disposal rate 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 × 100.



■ Waste, etc. by Region (Fiscal 2016)



Environmental Initiatives: Product Manufacture

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.

< Case Study >

Converting Styrene Foam into a Valuable Resource (Tochigi Plant)

At the Tochigi Plant (Yaita, Tochigi Prefecture), Sharp is working on resource recycling by converting the styrene foam discharged from the LCD TV production process into a valuable resource. In the past, the styrene foam used as packaging material for purchased components was disposed of as industrial waste. However, Sharp has succeeded in turning it into a valuable resource by introducing a special machine that melts the styrene foam into a small mass of polystyrene. As a result, in fiscal 2016, about 95% of the waste styrene foam was turned into a valuable resource, allowing Sharp to save on waste disposal costs. Reducing the volume of styrene foam also saves storage space and improves transportation efficiency.



Large quantities of styrene foam



Melted and solidified



Turned into valuable polystyrene

Environmental Initiatives: Product Manufacture

Effectively Using Water Resources

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self Evaluation*
<p>■ Water intensity: Improve by 22% (baseline year: fiscal 2012)</p>	<p>■ Water intensity: Improved by 9% (baseline year: fiscal 2012)</p>	★
<p>Priority Objectives for Fiscal 2017</p>	<p>■ Water intensity: Improve by 20% (baseline year: fiscal 2012)</p>	

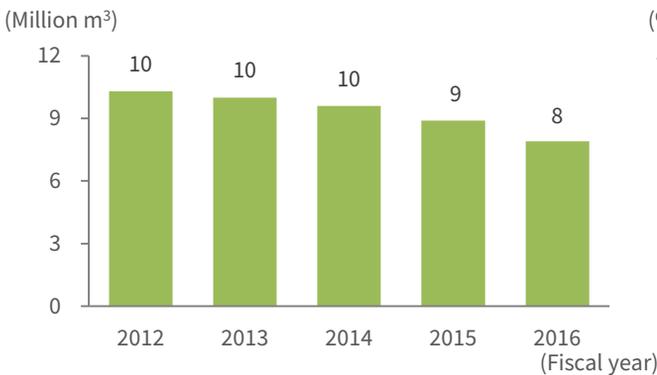
Sharp Group Reducing the Amount of New Water Used and Using More Recycled Water

Sharp is striving to make effective use of water resources by reducing the amount of new water (i.e., water from the water supply system) it uses and by increasing the use of recycled water. The volume of new water used by the Sharp Group in fiscal 2016 decreased by 11% (down 1 million m³) compared to the previous fiscal year. However, due to a decrease in production volume, the improvement rate of water intensity was 9%, compared to the baseline year of 2012.

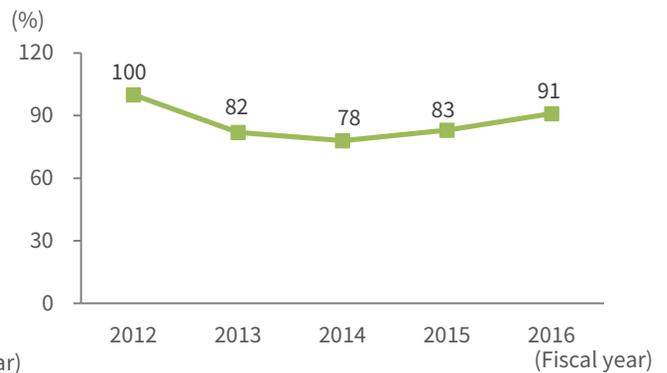
The Kameyama Plant (Kameyama, Mie Prefecture, Japan) and the Mie Plant (Taki District, Mie Prefecture, Japan) require a large amount of water in the production process for LCDs. At both plants, Sharp has adopted a closed-loop water recycling system that recovers and reuses nearly 100% of the water discharged from the production process. 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 and boost production efficiency in accordance with business expansion.

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

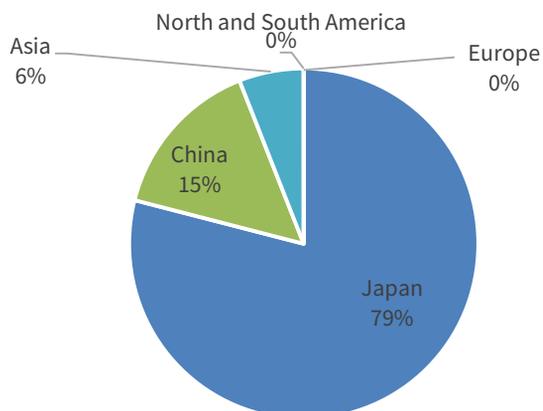
■ Volume of New Water Used



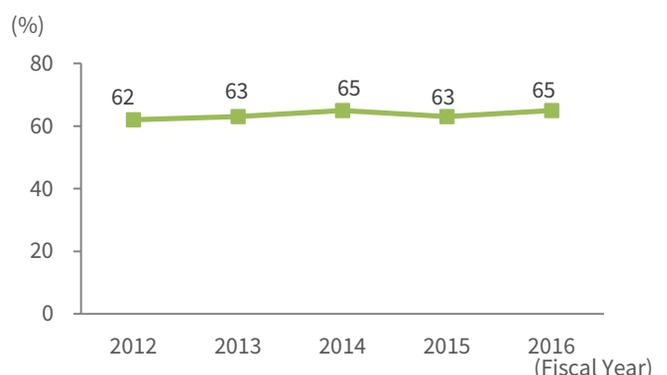
■ Water Intensity (Baseline Year: Fiscal 2012)



■ New Water Used by Region (Fiscal 2016)



■ Water Recycling Rate



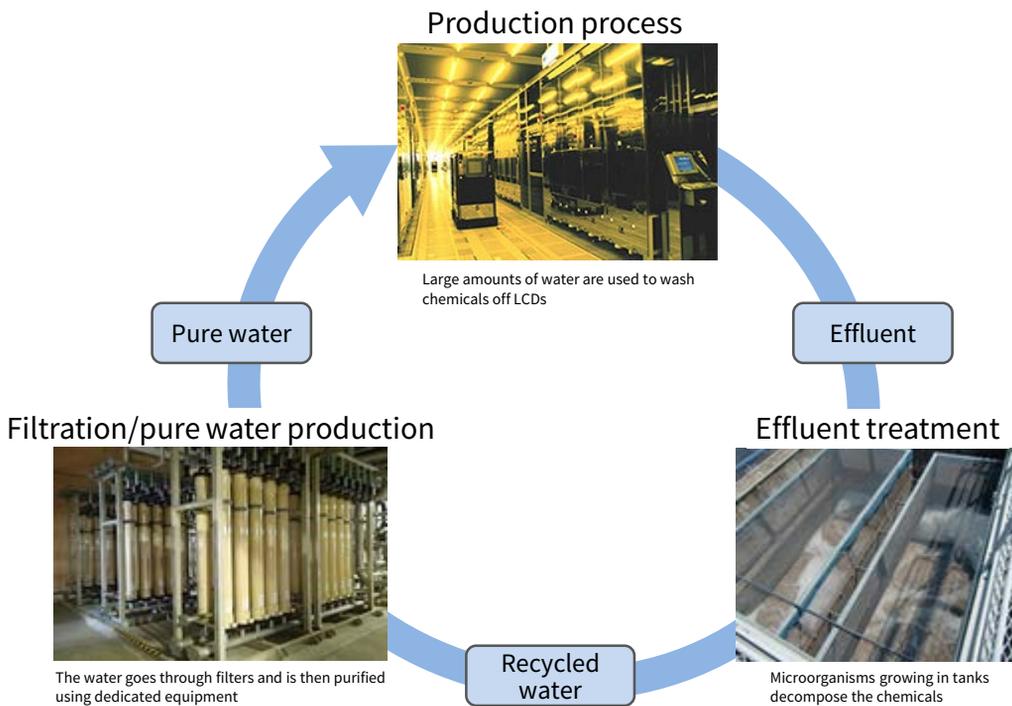
Environmental Initiatives: Product Manufacture

< 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 LCDs. 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



Environmental Initiatives: Product Manufacture

Effective Management of Chemical Substances and Risk Management

Sharp meticulously controls chemical substances used at its plants. When introducing new chemical substances and new handling equipment, Sharp uses its own process assessment system^{*1} to evaluate the hazardousness of these substances and establish safety measures. To ensure employees' safety and to minimize the environmental impact, employees handling these substances go through regular education and drills. They are also given regular health checks. Sharp also monitors and reports the release and transfer of chemical substances covered by the Japanese PRTR Act^{*2}. Of these PRTR chemicals, 16 were handled in Japan and nine overseas^{*3} in quantities of 500 kg or more by one or more plants during fiscal 2016.

^{*1} An in-house system for preliminarily assessing and confirming the safety, environmental load, and other factors of chemical substances and their handling equipment.

^{*2} 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.

^{*3} Sharp defines target substances based on laws in Japan.

PRTR Data for Japan (Fiscal 2016)

(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	
20	2-Aminoethanol	3,883,934	503	174	0	119,905	0	3,101,383	661,969
44	Indium and its compounds	12,451	0	0	0	3,362	374	8,715	0
71	Ferric chloride	103,941	0	0	0	0	0	76,222	27,719
232	N, N-dimethyl formamide	5,934	0	0	0	0	0	0	5,934
272	Copper salts (water-soluble, except complex salts)	5,255	0	0	0	5,013	0	0	242
332	Arsenic and its inorganic compounds	583	0	0	0	558	15	10	0
343	Pyrocatechol	1,214	0	0	0	1,214	0	0	0
368	4-tert-butylphenol	1,081	19	0	0	1,062	0	0	0
374	Hydrogen fluoride and its water-soluble salts	498,873	306	0	0	317,445	0	113,037	68,085
401	1,2,4-benzenetricarboxylic 1,2-anhydride	668	0	0	0	35	633	0	0
405	Boron compounds	1,521	101	0	0	927	493	0	0
407	Polyoxyethylene alkyl ether	900	0	27	0	0	0	0	873
412	Manganese and its compounds	23,677	0	0	0	0	23,565	112	0
438	Methylnaphthalene	11,130	56	0	0	0	1,993	0	9,081
448	Methylenebis (4,1-phenylene) diisocyanate	448,321	0	0	0	0	448,321	0	0
453	Molybdenum and its compounds	11,652	0	0	0	2,381	350	8,921	0
Total		5,011,135	985	201	0	451,902	475,744	3,308,400	773,903

Overseas PRTR Data (Fiscal 2016)

(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	3,908	0	0	0	39	2,602	1,267	0
104	Chlorodifluoromethane	56,045	190	0	0	0	55,855	0	0
291	1,3,5-tris (2,3-epoxypropyl)-1,3,5- triazine-2,4,6 (1H,3H,5H)-trione	3,921	0	0	0	39	2,611	1,271	0
300	Toluene	5,440	5,440	0	0	0	0	0	0
355	Bis (2-ethylhexyl) phthalate	15,740	0	0	0	14,790	0	950	0
384	1-bromopropane	1,883	0	0	0	19	955	909	0
392	N-hexane	1,139	1,139	0	0	0	0	0	0
413	Phthalic anhydride	2,614	0	0	0	26	1,740	848	0
448	Methylenebis (4,1-phenylene) diisocyanate	4,017,093	0	0	0	19,570	3,997,523	0	0
合計		4,107,783	6,769	0	0	34,483	4,061,286	5,245	0

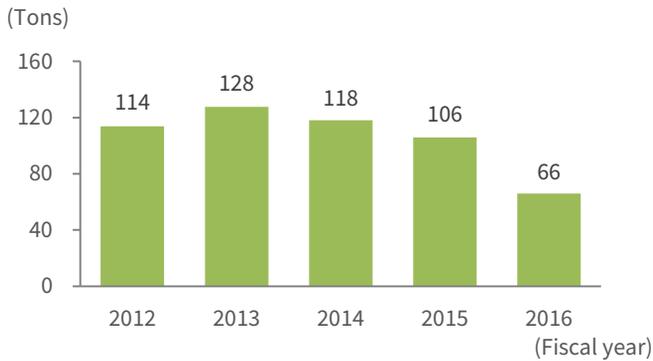
Environmental Initiatives: Product Manufacture

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.

Atmospheric Emissions in Japan

■ NOx Emissions



■ SOx Emissions

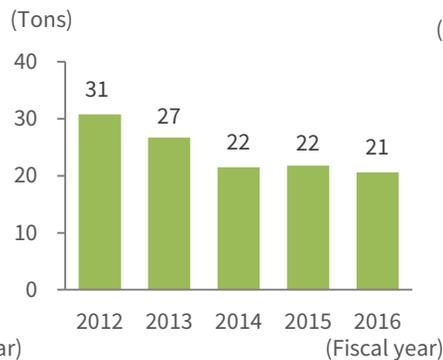


Emissions into Water Areas in Japan

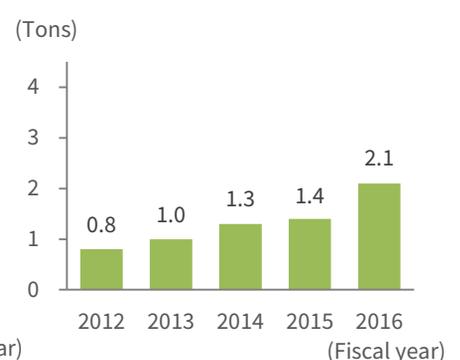
■ COD (Chemical Oxygen Demand)



■ Nitrogen Pollutant Load



■ Phosphorous Pollutant Load



Risk Management of Soil and Groundwater Pollution

Sharp set in-house standards in 1999 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 residents of the cleanup progress.

< Case Study >

Analyzing Plant Wastewater Samples (Sharp Yonago Corporation)

Sharp Yonago Corporation (Yonago, Tottori Prefecture) collects and analyzes plant wastewater four times a year in the presence of local city officials. The results are shared with local residents and used to confirm the plant's operational status. This also provides Sharp the opportunity to foster good relations with the local community.



Wastewater sampling at the plant

Environmental Initiatives: Logistics

Reducing Logistics-Related Environmental Impact

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self Evaluation*
<p>■ Energy intensity: Improve by average of 1% each year (average for fiscal 2012 to 2016)</p>	<p>■ Energy intensity: Improved by average of 6.5% each year (average for fiscal 2012 to 2016)</p>	★★★
<p>Priority Objectives for Fiscal 2017</p>	<p>■ Energy intensity: Improve by average of 1% each year (average for fiscal 2013 to 2017)</p>	

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 by improving transport and load efficiencies and by shifting to environmentally friendly modes of transport (modal shift)^{*1}.

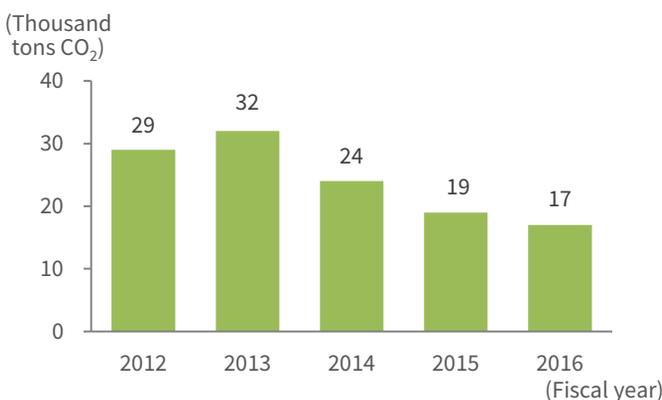
In fiscal 2016, Sharp Group greenhouse gas (GHG) emissions from shipping activities in Japan were 17 thousand tons (down 14% from the previous fiscal year). For Sharp Corporation, energy intensity was improved by an average of 6.5% for the most recent five years (fiscal 2012 to 2016). Sharp is steadily shifting 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 shipment of mobile phones, 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)



Eco Rail Mark on mobile phone packaging

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 2016, GHG emissions from international transport by Sharp were 139 thousand tons, up 4% over the previous fiscal year.

Environmental Initiatives: Recycling

Expanding the Recycling of Used Products

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self Evaluation*
■ Construct high-efficiency recycling line to deal with an increase in flat-panel TVs sent to recycling	■ Installed advanced shredding/sorting system and developed new dismantling method	★★★
Priority Objectives for Fiscal 2017	■ Improve and expand high-efficiency recycling line for flat-panel TVs; raise value of collected materials	

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 19 recycling plants in Japan. In fiscal 2016, Sharp collected 1.493 million units (up 4% 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 49,000 tons (up 2% over the previous fiscal year). For all four appliance types, the B Group’s rate of recycling exceeded the legally stipulated levels.

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

■ Sharp Corporation’s Recycling Results for 4 Home Appliance Types (Fiscal 2016)

	Unit	Air Conditioners	CRT TVs	Flat-Panel TVs	Refrigerators/Freezers	Washing Machines/Dryers	Total
Units collected from designated collection sites	Thousand units	218	159	407	355	354	1,493
Processed and recycled units	Thousand units	214	161	405	357	349	1,486
Processed and recycled weight	Tons	8,808	3,941	7,940	21,821	13,080	55,590
Recycled weight	Tons	8,354	2,997	7,211	17,751	12,288	48,601
Recycling rate	%	94	76	90	81	93	—
Legally required recycling rate	%	80	55	74	70	82	—

Effectively Using Resources and Improving Recycling Efficiency at the Recycling Plant

Sharp and Kansai Recycling Systems Co., Ltd.^{*2} are joining forces to make effective use of resources and to improve recycling efficiency. With the 2020 Tokyo Olympics coming up, growing demand is expected for replacement TVs. There is expected to be an accompanying increase in used flat-panel TVs being sent to recycling plants. In fiscal 2016, Kansai Recycling Systems installed an advanced shredding/sorting system. It also developed a new dismantling method for flat-panel TVs, in which the TV is dismantled from the front and the dismantling procedure from the back can be omitted. As a result, Kansai Recycling Systems was able to shorten dismantling time by about 30%.



Shredder for flat-panel TVs

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

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. In fiscal 2016, approximately 26,000 used copiers and MFPs were collected for either reuse or recycling. 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.

Environmental Initiatives: Recycling

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

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self Evaluation*
<ul style="list-style-type: none"> Develop technology for the practical application of recycled plastic materials (flame-retardant HIPS^{*1}) 	<ul style="list-style-type: none"> Imparted flame retardancy to recycled plastic materials (flame-retardant HIPS); established and put into practical use a formula for its repeated recycling <ul style="list-style-type: none"> Material certified for UL94 Adopted for refrigerator terminal box 	★★★
<p>Priority Objectives for Fiscal 2017</p>	<ul style="list-style-type: none"> Practical application of recycled plastic material (recovered composite PP) 	

*1 High-impact polystyrene (general-purpose polystyrene [GPPS] given impact resistance by adding rubber).

Expanding Closed-Loop Plastic Material Recycling Technology

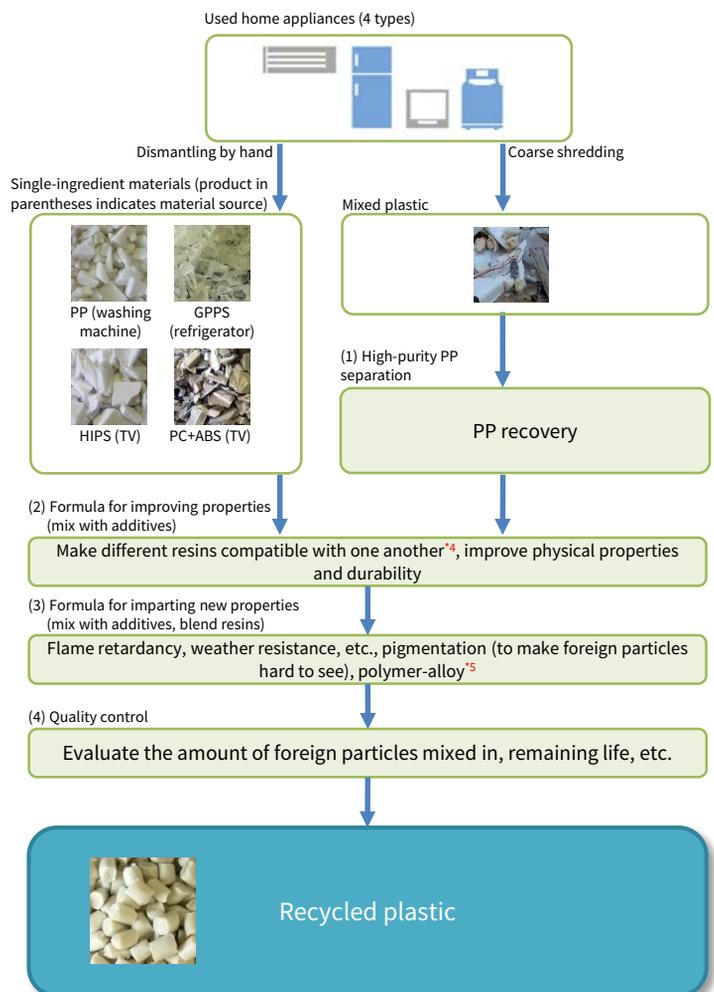
Sharp and Kansai Recycling Systems Co., Ltd.^{*2} jointly developed closed-loop plastic material recycling technology. This technology enables the repeated recovery of plastic from used consumer electronics products as well as the reuse of that plastic in parts of new consumer electronics products for the Japanese market. This technology has been in practical use since fiscal 2001.

The development of new technologies has enabled Sharp to increase the volume of recyclable plastic year after year. These technologies include the following:

- (1) a technology for recovering high-purity PP (polypropylene) from mixed plastic parts and parts that contain metal;
- (2) a technology for improving the properties of recovered PP and PC+ABS^{*3} materials so that their quality is on a par with that of new materials;
- (3) 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;
- (4) 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.

■ Recycling Plastic Recovered from the 4 Types of Home Appliances



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

*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).

*4 Blending multiple types of resins and uniformly dispersing them into each other.

*5 A resin given new properties as a result of mixing in several types of resins.

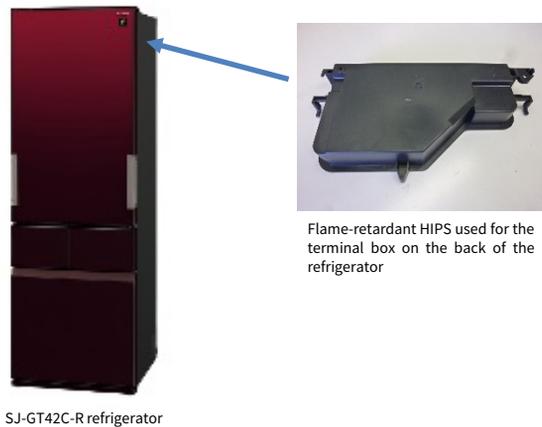
Environmental Initiatives: Recycling

Developing New Recycled-Plastic Material

With rising demand for replacement TVs in the lead up to the Tokyo Olympics in 2020, the volume of used flat-panel TVs recovered is expected to increase sharply. In order to make effective use of recovered materials, in fiscal 2016, Sharp developed a new recycled-plastic material. Sharp took flame-retardant high-impact polystyrene (HIPS) recovered from flat-panel TVs, which has high shock resistance and flame retardancy, and mixed it at an optimal ratio with general-purpose polystyrene (GPPS) recovered from refrigerators, which has high transparency, high rigidity, and good formability. Sharp then used its proprietary processing technology to create a plastic that features the advantages of both materials. This new plastic material retains its physical properties and flame retardancy even when recycled five times. It has been certified for UL94 V0, a flame retardancy standard of the Underwriters Laboratories, a global safety standards certification body.

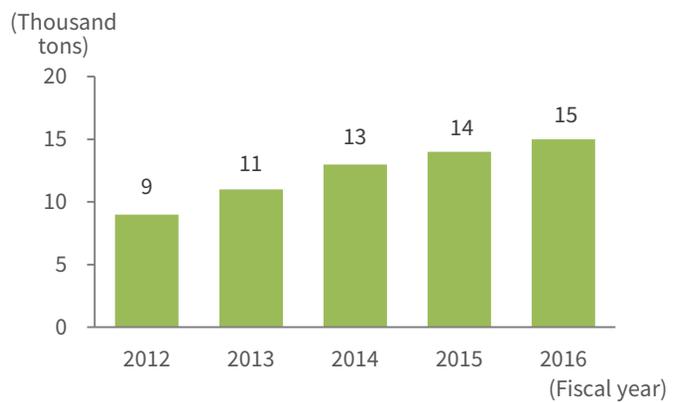
Because this recycled plastic material can be used over and over again, it is used in washing machines and refrigerators in Japan, which are items subject to the Home Appliance Recycling Act. Sharp will continue to develop new technologies based on this technology and pursue the effective utilization of limited resources.

■ Application Example of Flame-Retardant HIPS Recycled Plastic



SJ-GT42C-R refrigerator

■ Amount of Recycled Plastic Used (Cumulative)



Environmental Initiatives: Biodiversity Protection / Communication with Local Communities

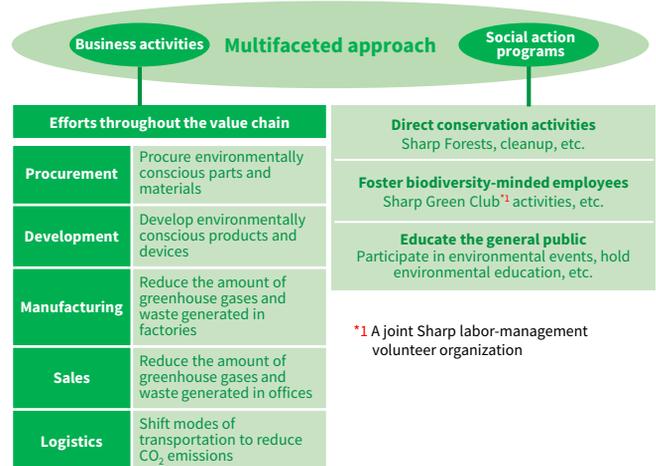
Protecting Biodiversity

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



< Case Study >

Preserving Biodiversity in Cooperation with the Local Community (Mie Plant)

At the Mie Plant (Taki District, Mie Prefecture), Sharp is promoting efforts to conserve biodiversity in cooperation with the local community. The Sanagawa River, which flows close to the plant was once home to many forms of life, but in recent years, their numbers have declined due to environmental changes and other factors. Therefore, Sharp has been engaged in an initiative to protect and breed the fish species that live in the river. The fish are bred in a regulating reservoir^{*2} on the plant grounds and then released into the river, in collaboration with a local organization called the Association for the Beautification of the Sanagawa River^{*3}. In fiscal 2016, about 1,300 fish, including tamoroko, carp, and freshwater prawn, were released into the river. The activities of the Association for the Beautification of the Sanagawa River, including this initiative, were selected for a prize in the general category of the 31st Handmade Hometown Awards^{*4}, sponsored by the Ministry of Land, Infrastructure, Transport, and Tourism.



Releasing fish into the Sanagawa River

^{*2} A pond for regulating the influx of rainwater into rivers.

^{*3} Cleanup activities of the Sanagawa River, launched in 2004 as part of the Mie Plant's local community contribution activities, spread throughout the local community and were inaugurated as a community-led initiative in 2008.

^{*4} The general category prize recognizes quality social capital that creates the charm and unique characteristics of a region and the relevant activities.

Communicating with Local Communities

Sharp is committed to communicating with local communities through plant tours, planning of and participation in events, and providing environmental education. The Nara Plant (Yamato-koriyama, Nara Prefecture) joined forces with the Koriyama Castle Ruins Cherry Blossom Preservation Society, which was established for the purpose of protecting the cherry blossoms around the former site of the Koriyama Castle, and helped clean up the area. This site has been designated as one of Japan's top 100 cherry blossom spots. Meanwhile, Sharp (Phils.) Corporation, a production subsidiary in the Philippines, provided environmental education for elementary school students in the area. SPC employees gave lectures on environmental issues, including climate change.



Cleanup activities by the Koriyama Castle Ruins Cherry Blossom Preservation Society



Environmental education conducted by SPC

Social Initiatives



> Fair and Impartial Procurement Activities	P.57
> Quality	P.60
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> Occupational Safety and Health	P.74

Social Initiatives: Fair and Impartial Procurement Activities

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

Sharp aims for sustainable growth and mutual prosperity with all suppliers in and outside Japan. To this end, Sharp emphasizes maintaining impartiality and fairness in all purchasing activities and chooses who it will procure local parts, materials, and equipment from by providing all Japanese and overseas business partners 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 prohibition 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 Requests to Suppliers

- | | |
|---|---|
| <ul style="list-style-type: none"> ① Compliance with laws and social standards that are applicable in countries and regions where suppliers do business <ul style="list-style-type: none"> • Compliance with laws related to manufacture and distribution of material • 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 | <ul style="list-style-type: none"> 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 |
|---|---|

Related information:>[Basic Purchasing Principles](#)

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.

As in past years, Sharp encouraged internal voluntary reporting of compliance issues and further strengthened precautionary measures to prevent the recurrence of problems. In-house companies, business units, material purchase departments, Head Office groups, and domestic affiliated companies conducted self-audits in which they checked how well they were complying with the Subcontract Act. They also performed periodic internal audits to raise awareness among employees of the importance of complying with the Subcontract Act.

As for education, in fiscal 2016, all Sharp employees in Japan were given e-learning training on the Subcontract Act.

Social Initiatives: Fair and Impartial Procurement Activities

Promoting CSR across the Entire Supply Chain

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<p>■ Develop and test risk assessment process for selecting suppliers to be evaluated, based on survey results and the degree of importance of transactions</p>	<p>■ Tested risk assessment process, based on survey results and the degree of importance of transactions, and conducted CSR/green procurement surveys</p>	★★
<p>Priority Objectives for Fiscal 2017</p>	<p>■ Revamp supply chain CSR management system and test it at certain production bases</p>	

Promoting Awareness among Suppliers and Conducting Surveys

To help its suppliers gain an understanding of Sharp’s CSR philosophy and to promote CSR-related measures among suppliers, Sharp has formulated and distributed*¹ its own Sharp Supply-Chain CSR Deployment Guidebook. The Basic Parts Purchase Agreement also includes articles on CSR initiatives, based on the guidebook, that suppliers are requested to follow.

In April 2015, Sharp fully revised the content of its guidebook to conform with the EICC*² Code of Conduct, a global standard for the electronics industry. In April 2016, Sharp further revised a part of the guidebook in accordance with revisions to the EICC Code of Conduct. In this way, Sharp is keeping up with the increasingly sophisticated international standards for social responsibility.

Every year, Sharp conducts CSR/green procurement surveys of suppliers, based on the guidebook. Suppliers who are given low marks are requested to submit a corrective action plan, and Sharp gives them the necessary support to help them raise their level of CSR initiatives on an ongoing basis.

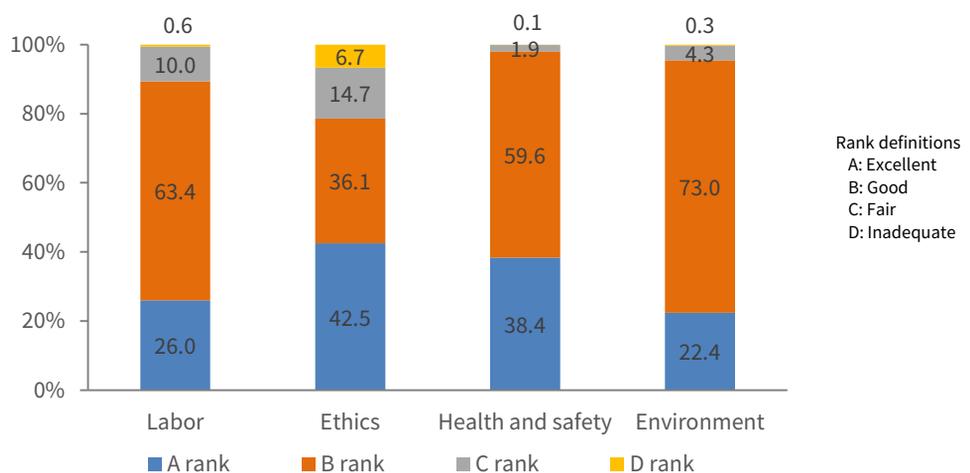
In fiscal 2016, Sharp tested a risk assessment process for selecting suppliers to be evaluated. The trial process incorporated the degree of importance of transactions and results of the CSR/green procurement survey from the previous year. And, based on this trial, Sharp conducted CSR/green procurement surveys.

For fiscal 2017, Sharp will revamp the supply chain CSR management system and plans to introduce it on a trial basis to some production bases. Sharp will continue to further promote CSR initiatives throughout the entire supply chain.

*¹ Downloadable from the “CSR Procurement” page of Sharp’s website (<http://www.sharp-world.com/corporate/eco/supplier/csr/index.html>)
*² Electronic Industry Citizenship Coalition, an influential international organization promoting CSR in the supply chain.

Related information:>[Sharp Supply-Chain CSR Deployment Guidebook](#)

■ CSR/Green Procurement Survey Status (Evaluation results for production bases in fiscal 2016)



Social Initiatives: Fair and Impartial Procurement Activities

Dealing with the Conflict Minerals Issue

Sharp respects the spirit of the Dodd-Frank Wall Street Reform and Consumer Protection Act of the United States, which came into effect in July 2010. It makes it a basic policy^{*1} to not procure or use conflict minerals, and it takes appropriate action in line with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

Since fiscal 2012, Sharp has been participating in the Responsible Minerals Trade Working Group of the Japan Electronics and Information Technology Industries Association (JEITA). In this capacity, Sharp has been collaborating with the CFSI^{*2} and with the Japanese automotive industry to conduct conflict mineral surveys, as requested by client companies. Surveys use the industry-standard conflict minerals reporting template (CMRT^{*3}).

In fiscal 2016, Sharp collaborated with various industries to help address the conflict minerals issue. Activities included using Sharp's own survey system to strengthen the check function of CMRTs collected from suppliers, jointly hosting a survey briefing with JEITA's Responsible Minerals Trade Working Group, and sending outreach letters to overseas smelters and refineries to encourage them to participate in the CFSP^{*4} audit program.

Recently, the range of responsible mineral procurement demanded of companies is expanding. This is due to legal frameworks such as the Dodd-Frank Act and the EU's new Conflict Minerals Regulation. Also, from a CSR perspective, there is a need to include issues such as child labor and environmental destruction at mining sites.

For fiscal 2017, Sharp will continue to improve its survey system. It will also expand and improve due diligence efforts in line with the OECD guidance, while taking into consideration new trends in mineral procurement so that it can procure minerals in a responsible manner.

^{*1} Please refer to [this link](#) for Sharp's basic policy on conflict minerals

^{*2} CFSI: Conflict-Free Sourcing Initiative. JEITA is a partner association.

^{*3} CMRT is a free, standardized reporting template developed by the CFSI.

^{*4} CFSP: Conflict-Free Smelter Program

Social Initiatives: Quality

Ensuring Quality and Safety

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<p>■ Strengthen mechanism for preventing serious quality problems, including legal violations, and develop human resources to this end</p>	<p>■ Strengthened mechanism for preventing serious quality problems, including legal violations, and developed human resources to this end</p> <ul style="list-style-type: none"> • Conducted legal compliance audits, put in place legal compliance checklist • Put in place detailed rules on reporting to top management in the event of a serious quality problem • Held basic training and specialized training to foster quality experts 	★★
<p>Priority Objectives for Fiscal 2017</p>	<p>■ Expand and improve basic training on quality; strengthen efforts to improve product usability</p>	

Basic Stance and Vision on Service and Quality

To gain customer trust and improve customer satisfaction, the Sharp Group meets customer needs and demands and offers high-quality products and services that are safe, reliable, and environmentally friendly.



Basic Stance and Vision on Service and Quality

Sharp specifies the quality levels it provides to customers, thus ensuring that all employees in product planning, design, production, sales, and after-sales service aim for the same targets in their ongoing pursuit of quality improvement. All Sharp Corporation business divisions and all production sites of consolidated subsidiaries in Japan and abroad have obtained the international ISO 9001 certification of quality management.

They have also adopted the SHARP Corporation Standards—the Sharp Group’s proprietary quality assurance standards. And they conduct various quality assurance activities at each stage of the product-making process, from planning, design, and manufacture to testing/evaluation and marketing.

Social Initiatives: Customer Satisfaction

Enhancing Customer Satisfaction

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<ul style="list-style-type: none"> ■ Increase customer satisfaction on a global basis <ul style="list-style-type: none"> • Increase customer satisfaction by enhancing service capabilities and customer response skills • Hold CS mind training in the ASEAN region, make these training take root, and expand them; train local instructors 	<ul style="list-style-type: none"> ■ Increased customer satisfaction on a global basis <ul style="list-style-type: none"> • Japan: Held training based on actual customer response cases at service bases nationwide • Overseas: Held CS mind training at major ASEAN bases 	★★
Priority Objectives for Fiscal 2017	<ul style="list-style-type: none"> ■ Increase customer satisfaction by enhancing service capabilities and customer response skills 	

Aiming for Customer-Oriented Services

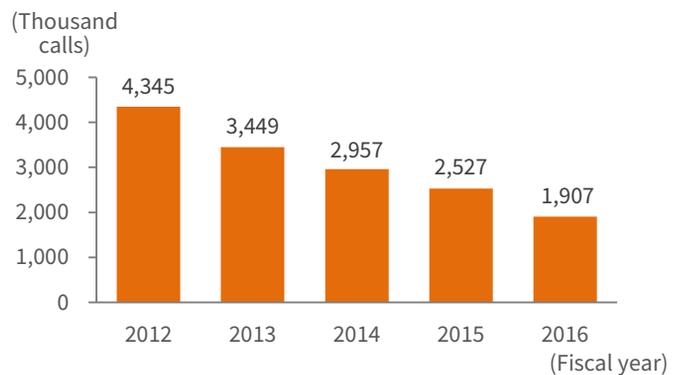
< Customer Assistance Center >

At the Customer Assistance Center, which responds to all customer inquiries concerning Sharp products from even before purchase, Sharp is constantly striving to be customer-oriented in its response.

In order to respond promptly and accurately to inquiries received from customers, in addition to improving staff response skills through product training using the actual products, managers check whether the customers are satisfied with explanations that match the nature of their inquiries, looking at everything from word usage to attentiveness and manner of speaking, in an effort to improve customer service.

In fiscal 2016, Sharp renewed the optional accessories page of its website. In addition to providing information on the model names and prices of optional items, Sharp added inventory information so that availability can be checked in real time, thereby improving convenience for customers. In view of the fact that the number of people accessing the Sharp website using their smartphones is increasing, the company has implemented smartphone support for the main content, such as FAQ and Fault Diagnosis Navigation used for solving problems, and have made the site easier to use. As a result of such efforts, the number of inquiries received by the Customer Assistance Center is going down, and Sharp will continue to promote remedial measures that closely match the needs of its customers.

■ Number of Calls Received at the Customer Assistance Center (Japan)



< Improving the Technical Skills of Customer Engineers >

At Sharp Business Solutions Corporation (SBS), improving customer satisfaction is its number one priority. SBS is striving to improve the quality of its after-sales service by supporting service and communication skills building for customer engineers at authorized service agents.

In fiscal 2017, SBS held the 2nd SPCE* Contest National Finals. Twenty-two of the best customer engineers, who won their district qualifiers, representing 11 agents, were invited to the Makuhari Building where they competed with one another with the customer-service and technical skills acquired through their everyday daily training. In the competition, the winners were chosen via a rigorous screening process, through customer-service role-playing and maintenance work, and the top five were awarded prizes.

In addition to these initiatives, SBS aims to further improve customer satisfaction by enhancing measures to boost the skills of customer engineers, such as enhancing the qualification system for authorized service agents and providing e-learning.



* SPCE: Sharp Premium Customer Engineer. Sharp's own qualification system for Sharp MFP authorized service agents.

Social Initiatives: Customer Satisfaction

Enhancing Customer Satisfaction

Making Easier-to-Use Products

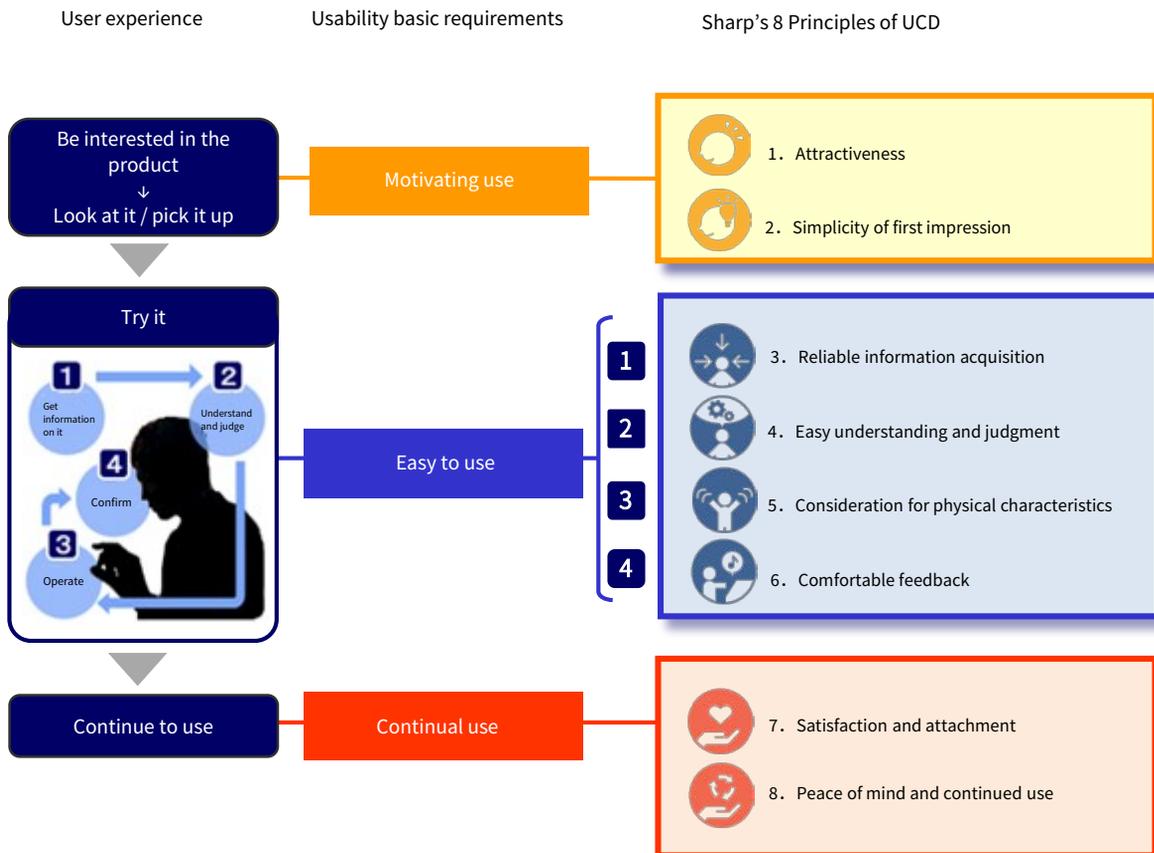
Sharp practices user-centered design (UCD) in order to deliver products that customers find easier to use.

UCD is a concept—as outlined in the international ISO 9241-210 standard—to deliver 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 organization. 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 appealing.

Sharp’s UCD Basic Policy

Sharp aims to offer easy-to-use and appealing products and services through user-centered design (UCD) initiatives.

We will have more users experience excitement through the products and services we offer, and we will contribute to the realization of richer lifestyles.



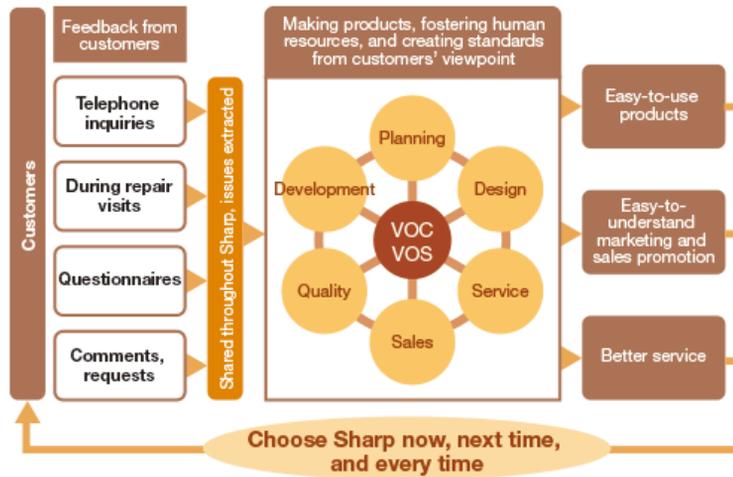
Social Initiatives: Customer Satisfaction

Social Initiatives: Customer Satisfaction

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 manufacturing.

Sharp collects information on how customers interact with products via telephone inquiries to the Customer Assistance Center, repair visits, questionnaires, interviews, and usability tests (observing how customers actually use Sharp products). This information is shared among the relevant departments, while protecting the anonymity of the customer. The feedback is used to understand, from a user's point of view, challenges related to planning, design, development, quality, sales, service, and other areas.



Usability test for an electronic dictionary



Observing the usability test

(Comments from usability test participants)

- I learned for the first time that developing just one product involves so much work, like this survey, to bring customers easy-to-use products. The next time I choose a new product, I'll enjoy trying it out at the store even more. (Customer, woman in 40s)
- We discovered from the test operational procedures that caused some fumbling for the user, which we hadn't expected. We were able to solve this problem before the product was released. We truly realized the effectiveness and the necessity of usability tests. (Sharp product planning staff member)

In line with the UCD Basic Policy, Sharp also takes into consideration universal design, so many more customers—regardless of nationality, age, gender, or disability—can comfortably use its products and services. As of June 2017, 144 models of 17 Sharp products had been recognized as universal design home appliances by the Association for Electric Home Appliances in Japan.

To continue the aforementioned activities company-wide, Sharp also actively fosters human resources through training and actively creates assessment standards that support manufacturing from a user perspective.

Social Initiatives: Shareholders and Investors

Communicating with Shareholders and Investors

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<ul style="list-style-type: none"> Strengthen information transmission by increasing participation in conferences 	<ul style="list-style-type: none"> Strengthened information transmission by continuing analyst briefings for each financial results announcement and increasingly participating in conferences 	★★
Priority Objectives for Fiscal 2017	<ul style="list-style-type: none"> Enhance IR communications by holding management briefings, etc. 	

Sharp is making effort to disclose information adequately as well as enhancing its communication with shareholders and investors through general shareholders' meetings and IR (investor relations) activities that respond to diversifying needs.

In fiscal 2016, Sharp's IR activities included one-on-one meetings with institutional investors and analysts, briefings on financial results, and increased participation in conferences sponsored by securities companies. Detailed financial information was disclosed in IR documents that included summaries of financial results and presentation materials. Moving forward, Sharp will disclose information designated under the laws and regulations of Japan, and it will also actively disclose other information, such as business overviews and management policies.

Sharp holds ordinary general shareholders' meetings earlier than many other Japanese companies, sends out early notices of the meetings, and discloses notices of the meetings before they are sent out. It also strives to create an environment that enables shareholders to easily exercise their voting rights. Efforts include 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 by computer and mobile phone. Sharp strives to provide the accurate information that shareholders need to make appropriate decisions.

Preventing Insider Trading

Sharp has effectuated regulations restricting insider trading, established 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.

SRI (Socially Responsible Investment)

As of June 2017, the following SRI ratings agencies had given Sharp a favorable CSR rating or included Sharp in their SRI indices.

■ FTSE4Good Global Index (UK)



FTSE4Good



FTSE Blossom
Japan

■ FTSE Blossom Japan Index

■ Morningstar Socially Responsible Investment Index (Japan)



Social Initiatives: Social Contribution Activities

Promoting Social Contribution Activities

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<ul style="list-style-type: none"> ■ Firmly establish activities by production bases in Japan and provide feedback on results ■ Establish schemes at sales bases 	<ul style="list-style-type: none"> ■ Provided feedback on environmental social contribution activities by the Sharp Group in Japan ■ Continued social contribution activities 	★
Priority Objectives for Fiscal 2017	<ul style="list-style-type: none"> ■ Continue to have the Sharp Group participate in local social contribution activities 	

Basic Concept of Social Contribution Activities

Sharp carries out activities led by Sharp Green Club (SGC,)^{*1} a volunteer organization composed of Sharp and its labor union. This group pursues environmental conservation activities at domestic business sites and sales and service bases in Japan. The group's activities include the following: Sharp Forest projects conducted in eight areas to protect biodiversity and regenerate *sato-yama* (areas that lie between the foot of a mountain and arable land); and efforts to protect wetlands in accordance with the Ramsar Convention at four locations. In fiscal 2016, 1,098 such activities were conducted with the participation of a total 17,817 people (Sharp executives, employees, family members, and others). Looking ahead, Sharp will continue to contribute to local areas by conducting community-based activities.

Since fiscal 2012, Sharp Corporation and Sharp Tokusen Industry Co., a Sharp special subsidiary^{*2}, have been working together to enhance career education activities conducted at special-needs schools and similar organizations for disabled students. The aim of these activities is to foster a career-minded perspective in students and motivate them to work and achieve greater self-sufficiency. The following courses are provided.

- Workplace tour: Visit the workplace of disabled employees and attend a lecture
 - Workplace experience: Experience work and attend a lecture
 - School visit: Disabled Sharp employee visits school to give a lecture and lead group work
- Through these courses, Sharp visited a total of 23 schools in fiscal 2016, providing lessons for 558 students.

*1 A joint Sharp labor-management volunteer organization that conducts activities such as forest preservation and cleanups.

*2 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).



A classroom lesson by a Sharp employee at a special-needs school



At a seminar hosted by the Nara Labor Bureau on hiring the disabled



Students from Japan Medical Welfare School tour the workplace

Social Initiatives: Social Contribution Activities

Social Welfare and Employee Volunteer Activities

Based on the three points listed below, Sharp works to create an environment where each and every employee can actively participate in community-based social action programs and volunteer activities:

1. Establishing volunteer leave and other company systems;
2. Establishing the Sharp Green Club (SGC) volunteer organization as a joint effort between labor and management;
3. Providing employees opportunities to participate in volunteer activities in coordination with non-profit organizations (NPOs) and other third-party organizations.

In a joint labor/management effort, Sharp works with local governments and NPOs to provide opportunities on its premises for the sale of products, such as bread and cookies, made at vocational training centers for the disabled located in communities near Sharp facilities in Japan. And SHARP Electronics Indonesia (SEID) held an event for the villagers who had flood disaster to support their food needs and also held free service campaign and 50% discount of spare parts to repair their electronics product which has flood damaged.

We will continue to contribute to society through such activities.



Providing sales opportunities for vocational training center products



Handing over staple food to villagers

For Local Communities

Sharp believes social contribution activities to repay its gratitude to local communities are very important since they pass on the founder's gratitude and his DNA of creativity. The bonds that Sharp is able to establish by working with local residents and holding dialogues to address various social issues are an irreplaceable asset when it carries out its business activities.

< Case Study >

Sharp volunteers delivered to local residents a public relations magazine of Nishihara Village located in Aso District, Kumamoto Prefecture, which suffered severe damage in the 2016 Kumamoto Earthquake. They also conducted an audience with the victims to hear what they had to say and moved out furniture and household goods from damaged houses.



Delivering public relations magazines



Weed clearing of iris rossii wild growth area

In the Nutanishi-cho Iris Rossii Preservation Society in Mihara, Hiroshima Prefecture, about 200 people clear weeds from the approximately 3,500 m² wild growth area to create a sunny environment for the short-stemmed *iris rossii*. Sharp employees have also been participating since 2003.

In fiscal 2016, the Kameyama Plant and Mie Plant both received an Excellence Prize in the environmental report category of the 20th Environmental Communication Awards, sponsored by Japan's Ministry of the Environment and the Global Environmental Forum. This was the fourth consecutive year for the Kameyama Plant to receive the award, and the third consecutive year (sixth time) for the Mie Plant.



From left: the Kameyama Plant's Introduction to Environmental Initiatives 2016, the Mie Plant's Environmental and Social Contribution Activities 2016, and the Excellence Prize logo for the 20th Environmental Communication Awards environmental report category

Social Initiatives: Efforts Related to Human Rights

Guiding Principles

The Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct stipulate that the Sharp Group, in all of its business activities, respects the fundamental human rights and the individuality of each employee.

〈Excerpt from the Sharp Group Charter of Corporate Behavior〉

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

〈Excerpt from the Sharp Code of Conduct〉

- 1) We respect—and will not violate—fundamental human rights and the dignity of individuals in all business activities. If it becomes evident that any of our business activities, products, or services has a negative impact on human rights, we will take corrective action.
- 2) We do not allow child labor or any form of forced labor, and we support initiatives for the effective abolition of such labor practices.
- 3) With respect to all corporate activities—including employment practices concerning recruitment, salary, promotion, and training opportunities—we do not discriminate based on nationality, race, ethnic group, color, sex, health status, 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 will refrain from all unacceptable acts and behavior, including any kind of abuse, mocking, verbal insult, sexual harassment, or power harassment.
- 5) On the basis of international standards and applicable laws, we respect employees' right to the freedom of association—for example, their right to join a union, carry out protests, participate in workers' councils, and the like—without being subjected to retaliation, intimidation, or harassment.

Activities Related to Respect for Basic Human Rights and Personal Dignity

In Japan, Sharp continuously carries out human rights education activities, one example being human rights training conducted annually at each site. (A total of 19 sessions were held in fiscal 2016). Overseas, Sharp promotes human rights protection at each site in line with local laws.

Good Labor-Management Relationship through Dialogue

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.

In Japan, Sharp holds monthly meetings with labor-management heads. These include the Central Labor-Management Council, which involves top executives from both sides, and local labor-management meetings at each site and affiliate, where opinions are exchanged on business conditions and on labor-management issues pertaining to the work environment.

In Europe, Sharp holds European Works Council meetings every year to review 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.

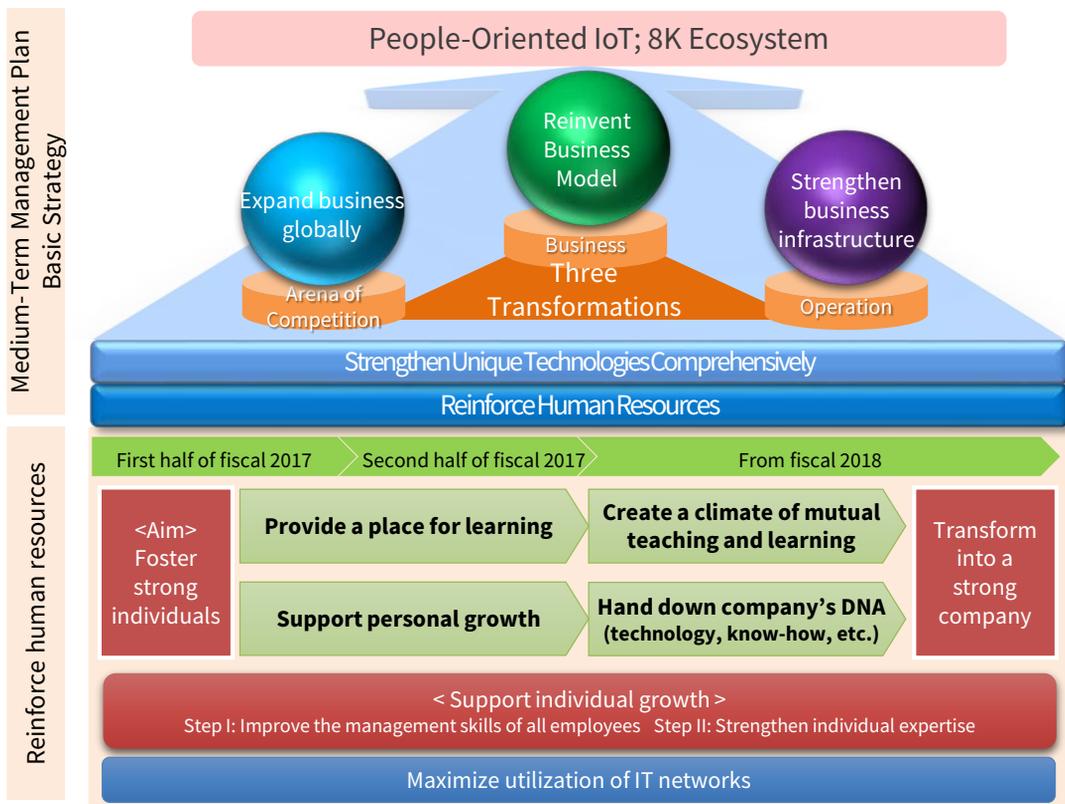
Social Initiatives: Human Resource Development, Personnel System

Human Resource Development

Fiscal 2016 Objectives	Fiscal 2016 Achievements
<ul style="list-style-type: none"> ■ Reform human resource development measures indispensable to company recovery 1. Reconstruct systems for human resource development 2. Take on new measures 3. Establish measures for voluntarily boosting language skills (English and Chinese) 	<ul style="list-style-type: none"> ■ Human resource development measures <ul style="list-style-type: none"> • Because of the management crisis in fiscal 2016, training was temporarily suspended, and the targets were not achieved

Personnel, Education, and Training System for Fostering Strong Individuals

In fiscal 2017, Sharp will enhance training and education to support personal growth to produce “strong individuals.” Sharp will establish training opportunities (e-learning, group training, etc.) for all employees who wish to participate and support employees who are voluntarily working towards personal growth.



Job-Level-Specific Human Resource Development

Sharp provides new employee training after joining the company; job-level-specific training to give systematic training in the knowledge, skills, and management techniques required at each stage; and manager promotion assessment and manager candidate training when promoting employees to managerial positions. In addition, Sharp has introduced e-learning courses for all employees to learn the fundamentals of management on their own initiative.

Social Initiatives: Personnel System, Diversity Management

Personnel System

Talent Development and Motivation-Boosting Programs

- ◇ 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.

Developing Diversity Management

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<ul style="list-style-type: none"> ■ Promote measures in line with action plan for Act on Promotion of Women's Participation and Advancement in the Workplace <ul style="list-style-type: none"> • Continue to strengthen and promote various measures to raise the percentage of female managers to 5% by fiscal 2019 ■ Employment rate for the disabled <ul style="list-style-type: none"> • Maintain 2.3% 	<ul style="list-style-type: none"> ■ Promoted measures in line with action plan for Act on Promotion of Women's Participation and Advancement in the Workplace <ul style="list-style-type: none"> • Percentage of female managers 3.3% as of April 1, 2017 (same as previous year) ■ Maintained employment rate for the disabled <ul style="list-style-type: none"> • 2.47% as of June 1, 2017 	★★
<p style="text-align: center;">Priority Objectives for Fiscal 2017</p>	<ul style="list-style-type: none"> ■ Promote measures in line with action plan for Act on Promotion of Women's Participation and Advancement in the Workplace ■ Maintain employment rate for the disabled 	

Social Initiatives: Diversity Management

Concepts Underlying the Diversity Program

- 1) Diversity management is a human resources strategy for utilizing a diverse range of employees; it is also a business strategy.
- 2) At Sharp, diversity is built upon the company's business philosophy.
- 3) Formulate and pursue programs aimed at capitalizing on the unique individual attributes of various employees—including women, non-Japanese employees in Japan, the disabled, and retirees—and promote their active participation in the company.
- 4) Consistently promote diversity.
- 5) As a foundation for promoting diversity, strive to ensure that systems supporting the balance between work and family life become widespread and take root.
- 6) Work to build a corporate environment that accepts diversity.



Promoting Activities of Female Employees

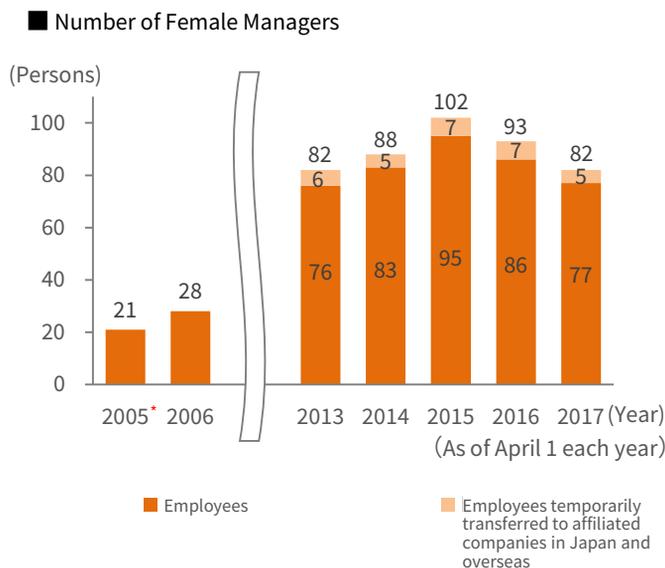
Sharp formulated an action plan based on Japan's Act on Promotion of Women's Participation and Advancement in the Workplace, which came into effect in April 2016. In line with this action plan, Sharp is working to raise the percentage of women in all job categories and increase the number of women in 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.

Goals (by the end of fiscal 2019)

- Have at least 5% of managers be women
- Have at least 20% of all employees use systems for flexible work styles

Expanding the Duties of Female Employees

In fiscal 2014, in an effort to expand the roles of women in the workplace, Sharp launched the Eijo Program, which provides strategic training for female sales personnel. In fiscal 2015, Sharp held sessions on boosting sales skills and networking events for senior and new employees to foster cross-departmental collaboration and networks. For fiscal 2016, Sharp created a handbook to facilitate information sharing among female sales representatives and their supervisors so that women can get greater job satisfaction.



* Corporate Affirmative Action for Women Strategy Program started in 2005.

Social Initiatives: Diversity Management

■ Sharp Corporation Personnel Composition

(Persons)

		Men	Women	Total
Directors, auditors		13	0	13
Employees	Executive officers	1	0	1
	Managers	2,224	77	2,301
	General staff	9,900	1,265	11,165
	Subtotal	12,125	1,342	13,467
Total		12,138	1,342	13,480
Ratio		90.0%	10.0%	100.0%

(As of April 3, 2017)

■ 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	79.9	20.1	70.8	29.2	73.1	26.9
SEE (UK)	Sales, production	81.2	18.8	75.1	24.9	75.9	24.1
SEID (Indonesia)	Sales, production	84.2	15.8	67.8	32.2	68.6	31.4
SATL (Thailand)	Production	76.7	23.3	28.9	71.1	30.3	69.7
SMM (Malaysia)	Production	71.0	29.0	38.2	61.8	44.5	55.5
SOCC (China)	Production	86.8	13.2	28.9	71.1	32.1	67.9
NSEC (China)	Production	58.1	41.9	63.8	36.2	63.3	36.7
WSEC (China)	Production	60.1	39.9	40.6	59.4	41.7	58.3

(As of March 31, 2017)

Supporting Female Employees Returning from Maternity or Childcare Leave

To support employees returning from childcare leave, Sharp launched reinstatement support seminars in fiscal 2014. These seminars involve an explanation of the company's current circumstances and incorporate various support systems related to childbirth and nursing. As well, female 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 about returning to work and encourage active participation in the workplace.

Promoting Childcare Leave for Male Employees

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, for the past three years, an average of 130 male employees per year have taken childcare leave. Sharp will continue to support its employees' active participation in childcare and in family life with their children.

Social Initiatives: 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 2017, there are approximately 120 non-Japanese employees from 14 countries working in various departments.

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. Sharp reviewed its standards in response to the revised Act on Stabilization of Employment of Elderly Persons, which came into effect in April 2013. Sharp now reemploys, until the age of 65, any interested employees who have reached the mandatory retirement age of 60.

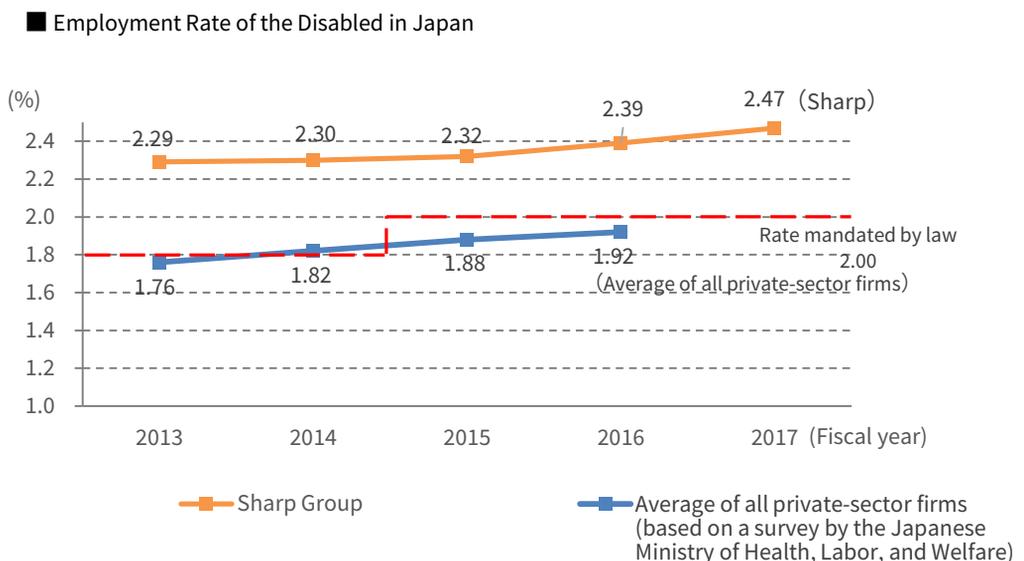
Promoting Employment of the Disabled

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 company an easier place to work at, through the use of support measures such as PC note-taking (a method for conveying audio information by entering it into the keyboard of a PC) during training sessions attended by hearing-impaired participants.

As of June 1, 2017, the Sharp Group employed approximately 340 disabled persons. The percentage of disabled employees among all employees was 2.47%, well over the 2.0% rate mandated by law (as stated in the Act on Employment Promotion etc., of Persons with Disabilities).

* 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

In line with its promotion of diversity, Sharp supports its employees by creating a rewarding, safe, and healthy 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 focusing on childcare and nursing care, and it is distributing guidebooks and providing other information to promote use of the programs. In addition, to help employees achieve an efficient working style that offers satisfaction both at the company and at home, Sharp continuously promotes initiatives like the No Overtime Day and encourages employees to plan for and take their annual paid vacation days.



Work-Life Balance Guidebook and Nursing Care Guidebook

These efforts have earned high appraisal from outside the company, with Sharp receiving certification from the Japanese Ministry of Health, Labor, and Welfare based on the Act on Advancement of Measures to Support Raising Next-Generation Children.

Work-Life Balance Support Programs (Main Programs and Participation at Sharp Corporation)

(Persons)

Program Name	Description	Participation		
		Fiscal 2014 (): Men	Fiscal 2015 (): Men	Fiscal 2016 (): Men
Childcare Leave*	Allows a leave of any length until the last day of March following the child's first birthday or until the child is 18 months old. (To be changed in response to a revision to the Act on Childcare Leave and Caregiver Leave to be enforced Oct. 2017) (In fiscal 2014, 99.6% of those who took childcare leave returned to work.) < Childcare assistance grants > 1) The 10-day period beginning at the start of the childcare leave period is treated as a period with pay. 2) An allowance of 60,000 yen a month is provided during the leave period (excluding the 10-day period when salary is paid).	208 (162)	195 (129)	148 (101)
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 the last day of March after her/his child has reached the sixth year of elementary school.	34	24	15
Childcare Support Work Program	Allows flexible work schedules (work day start and end times) until the last day of March 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.	465	426	358
Nursing Care Leave*	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).	9	8	7
Nursing Care Support Work Program	Allows flexible work schedules (work day start and end times) for nursing care, as needed. Employee can shorten working hours in one-hour units up to an average of three hours per day.	7	5	6

* Personnel evaluations conducted while an employee is on childcare leave or nursing care leave will never work against the employee in terms of receiving a raise, promotion, or bonus.

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, Paternity Leave, Daycare Adaptation Leave, Reemployment after Nursing Care, Reduced-Hours Employment or Reduced Weekly Working Days for Nursing Care, Subsidies for Families of Single Employees Conducting Nursing Care, Travel Expense Subsidies for Single Employees Returning Home for Nursing Care, Nursing Care Leave (in half-day units), Nursing Leave (in half-day 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
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Social Initiatives: Occupational Safety and Health

Promoting Occupational Safety and Health

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

Fiscal 2016 Objectives	Fiscal 2016 Achievements	Self evaluation*
<ul style="list-style-type: none"> ■ Eliminate work accidents and environmental accidents caused by hazardous materials; reduce work accidents and company car accidents ■ Promote measures to reduce percentage of employees taking sick leave due to mental health issues and disorders ■ Make Healthy Sharp 23 (employee health program with targets and measures for reducing obesity, quitting smoking, getting regular exercise, etc. to be achieved by March 31, 2023) an integral part of health management and promote concrete measures 	<ul style="list-style-type: none"> ■ Zero work accidents and environmental accidents caused by hazardous materials like chemical liquids and gases; reduced work accidents; number of company car accidents roughly the same ■ Promoted comprehensive measures to avoid, detect early, treat early, and prevent recurrence of mental health issues and disorders, such as by doing a stress check of all employees as a primary prevention measure ■ Conducted measures such as educating employees on preventing lifestyle diseases by avoiding/treating metabolic syndrome, holding non-smoking campaigns, and organizing company-wide walking events 	★★
<p style="text-align: center;">Priority Objectives for Fiscal 2017</p>	<ul style="list-style-type: none"> ■ Prevent physical and mental health issues and disorders caused by overwork by reducing long work hours ■ Eliminate severe accidents; reduce work accidents and company car accidents ■ Promote efforts for health management (Healthy Sharp 23) 	

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, with the aim of improving levels of safety and health.

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.

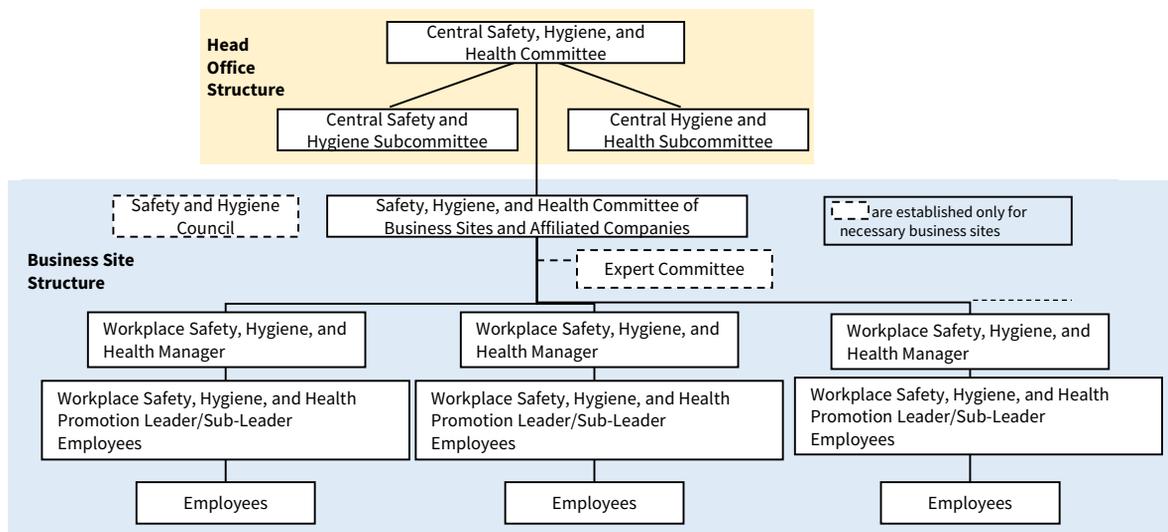
5. Setting Targets and Full Employee Participation in Practical Activities

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

At Sharp, promoting and maintaining the health of its employees and their families has been added to the framework of safety and health activities. In order to show Sharp's commitment, it has changed the names of its organizations and activities from "safety and health" to "safety, hygiene, and health," and it has established an organizational system to promote safety, hygiene, and health.

Social Initiatives: Promoting Occupational Safety and Health



Aiming for a Secure, Safe, and Healthy Workplace

In order to ensure that activities for the maintenance and improvement of safety, hygiene, and health go smoothly at each business site, Sharp holds Central Safety, Hygiene, and Health Committee meetings that bring the company and the labor union together to decide basic measures for safety, hygiene, and health from a company-wide perspective. The Committee formulates annual company-wide policies, decides on goals and priority items, and communicates these to each business site.

Moreover, a Safety, Hygiene, and Health Committee consisting of labor and management representatives at each business site and affiliated company holds a monthly meeting to report and discuss safety, hygiene, and health activities and decide on improvement measures. The contents of the meetings are relayed to the workplace safety, hygiene, and health managers to make these activities well established within each workplace.

Sharp has also established and is promoting an occupational safety and health management system in an effort to further address the potential risk of accidents in the workplace and to firmly set in motion proactive safety activities that prevent or reduce risks.

Sharp aims to help employees avoid mental illnesses or deal with them at an early stage. It also seeks to help employees on medical leave to make a smooth return to work. To achieve these aims, Sharp in Japan conducts stress checks for all employees and provides counseling with medical specialists or industrial counselors at its main offices and plants. It also has a counseling system with outside specialized institutions.

Sharp’s Business Philosophy states that it will “contribute to the culture, benefits, and welfare of people throughout the world.” To this end, Sharp has a health management initiative called “Healthy Sharp 23.” Through this program, Sharp is actively pursuing activities aimed at achieving specific health targets by the end of March 2023.

The result of these continuing measures is that Sharp Corporation’s industrial accident rate (frequency rate of industrial accidents leading to lost work time^{*1}) in Japan in fiscal 2016 was 0.26. This rate is consistently below the national average (1.15)^{*2} for the manufacturing industry.

*1 Indicator that represents the incidence of industrial accidents per million work hours (one day or more of suspended operations)

*2 Averages for all industries and the manufacturing industry are based on a survey by the Japanese Ministry of Health, Labor, and Welfare.

ISO 26000 Content Index

Sharp is pushing forward with CSR* measures, acting in accordance with ISO 26000, an international standard providing guidance on social responsibility.

* Corporate Social Responsibility

Core Subjects	Issues	Relevant Pages	published pages
Organizational governance	Organizational governance	Top Message	3
		Policy on CSR Activities	14~16
		Identifying Material Issues in CSR	17
		Corporate Governance	22
		Internal Control	23
Human rights	<ol style="list-style-type: none"> 1. Due diligence 2. Human rights risk situations 3. Avoidance of complicity 4. Resolving grievances 5. Discrimination and vulnerable groups 6. Civil and political rights 7. Economic, social, and cultural rights 8. Fundamental principles and rights at work 	Risk Management	24
		Top Message	3
		Material Issue 3: Supply Chain CSR Initiatives	19
		Material Issue 4: Respect for Human Rights and Diversity Management	19
		Fair and Impartial Procurement Activities	57
		Promoting CSR across the Entire Supply Chain	58
		Dealing with the Conflict Minerals Issue	59
		Efforts Related to Human Rights	67
		Human Resource Development	68
		Diversity Management	69~72
Activities to Support Work-Life Balance	73		
Labor practices	<ol style="list-style-type: none"> 1. Employment and employment relationships 2. Conditions of work and social protection 3. Social dialogue 4. Health and safety at work 5. Human development and training in the workplace 	Occupational Safety and Health	74~75
		Top Message	3
		Efforts Related to Human Rights	67
		Human Resource Development	68
		Diversity Management	69~72
The environment	<ol style="list-style-type: none"> 1. Prevention of pollution 2. Sustainable resource use 3. Climate change mitigation and adaptation 4. Protection of the environment, biodiversity, and restoration of natural habitats 	Activities to Support Work-Life Balance	73
		Occupational Safety and Health	74~75
		Top Message	3
Fair operating practices	<ol style="list-style-type: none"> 1. Anti-corruption 2. Responsible political involvement 3. Fair competition Promoting social responsibility 4. Promoting social responsibility in the value chain 5. Respect for property rights 	Material Issue 2: Increasing Green Shared Value	18
		Environmental Initiatives (Environmental Policy / Environmental Sustainability Management / Product Development / Product Manufacture / Logistics / Recycling / Biodiversity Protection / Communication with Local Communities)	30~55
		Top Message	3
		Material Issue 3: Supply Chain CSR Initiatives	19
		Compliance	25
		Preventing Corruption in All Forms and Dealing Properly with Donations	26
		Intellectual Property Protection	26
		Export and Import Control	28
		Fair and Impartial Procurement Activities	57
		Promoting CSR across the Entire Supply Chain	58
Dealing with the Conflict Minerals Issue	59		
Consumer issues	<ol style="list-style-type: none"> 1. Fair marketing, factual and unbiased information, and fair contractual practices 2. Protecting consumers' health and safety 3. Sustainable consumption 4. Consumer service, support, and complaint and dispute resolution 5. Consumer data protection and privacy 6. Access to essential services 7. Education and awareness 	Preventing Insider Trading	64
		Material Issue 1: Ensuring the Safety and Reliability of Products and Enhancing Customer Satisfaction	18
		Information Security Measures	27
		Developing Environmentally Conscious Products and Devices	39~42
		Promoting CSR across the Entire Supply Chain	58
		Ensuring Quality and Safety	60
		Enhancing Customer Satisfaction	61
Making Easier-to-Use Products	62		
Community involvement and development	<ol style="list-style-type: none"> 1. Community involvement 2. Education and culture Employment creation and skills development 3. Employment creation and skills development 4. Technology development and access 5. Wealth and income creation 6. Health 7. Social investment 	Material Issue 5: Stakeholder Engagement (Contributing to Local Communities)	20
		Basic Concept of Social Contribution Activities	65
		Social Welfare and Employee Volunteer Activities	66
		For Local Communities	66

United Nations Global Compact 10 Content Index

Sharp joined the United Nations Global Compact in June 2009 and is pushing forward with CSR * measures in line with the Global Compact's 10 principles.

* Corporate Social Responsibility

The Global Compact's 10 Principles		Relevant Pages	published pages
【Human rights】 Principle1: Principle2:	Businesses should support and respect the protection of internationally proclaimed human rights and make sure that they are not complicit in human rights abuses.	Top Message	3
		Material Issue 3: Supply Chain CSR Initiatives	19
		Material Issue 4: Respect for Human Rights and Diversity Management	19
		Fair and Impartial Procurement Activities	57
		Promoting CSR across the Entire Supply Chain	58
		Dealing with the Conflict Minerals Issue	59
		Efforts Related to Human Rights	67
		Diversity Management	69~72
		Activities to Support Work-Life Balance	73
		Occupational Safety and Health	74~75
【Labour】 Principle3 : Principle4 : Principle5 : Principle6 :	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced and compulsory labour the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation.	Top Message	3
		Material Issue 3: Supply Chain CSR Initiatives	19
		Material Issue 4: Respect for Human Rights and Diversity Management	19
		Fair and Impartial Procurement Activities	57
		Promoting CSR across the Entire Supply Chain	58
		Dealing with the Conflict Minerals Issue	59
		Efforts Related to Human Rights	67
		Human Resource Development	68
		Diversity Management	69~72
		Activities to Support Work-Life Balance	73
Occupational Safety and Health	74~75		
【Environment】 Principle7 : Principle8 : Principle9 :	Businesses should support a precautionary approach to environmental challenges; undertake initiatives to promote greater environmental responsibility; and encourage the development and diffusion of environmentally friendly technologies.	Top Message	3
		Material Issue 2: Increasing Green Shared Value	18
		Environmental Initiatives (Environmental Policy / Environmental Sustainability Management / Product Development / Product Manufacture / Logistics / Recycling / Biodiversity Protection / Communication with Local Communities)	30~55
【Anti-Corruption】 Principle10 :	Businesses should work against corruption in all its forms, including extortion and bribery.	Top Message	3
		Compliance	25
		Preventing Corruption in All Forms and Dealing Properly with Donations	26
		Preventing Insider Trading	64

GRI Content Index

In preparing this report, Sharp refers to the 4th edition of the GRI Sustainability Reporting Guidelines (G4). The related material aspects required under the G4 guidelines are indicated by a star (★) next to the item numbers in this GRI Content Index.

1. Strategy and Analysis

Item	Indicator	Disclosed Item	PDF Page
G4-1	Statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability	Top Message	3
G4-2	Description of key impacts, risks, and opportunities	Top Message	3
		Risk Management	24

2. Organizational Profile

Item	Indicator	Disclosed Item	PDF Page
G4-3	Name of the organization	Editorial Policy	1
		Outline of the Sharp Group	87
G4-4	Primary brands, products, and services	Main products	88~89
G4-5	Location of the organization's headquarters	Outline of the Sharp Group	87
G4-6	Number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report	Outline of the Sharp Group Investor Relations	87
G4-7	Nature of ownership and legal form	Outline of the Sharp Group	87
		Investor Relations	
G4-8	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	Outline of the Sharp Group	87
		Financial Data	
		Investor Relations	
G4-9	Scale of the organization (total number of employees, total number of operations, net sales, total capitalization broken down in terms of debt and equity, quantity of products or services provided)	Outline of the Sharp Group	87
		Corporate Information	
		Financial Data	
G4-10	Total workforce by employment type, employment contract, region, and gender	Outline of the Sharp Group	87
		Sharp Corporation Personnel Composition, Ratio of Men and Women at Major Overseas Subsidiaries	71
G4-11	Percentage of total employees covered by collective bargaining agreements	—	
G4-12	Organization's supply chain	—	
G4-13	Any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	Financial Data	
Commitments to External Initiatives			
G4-14	Whether and how the precautionary approach or principle is addressed by the organization	Risk Management	24
G4-15	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	ISO 26000 and the United Nations Global Compact	14
		ISO 26000 Content Index	76
		United Nations Global Compact 10 Content Index	77
G4-16	Memberships of associations (such as industry associations) and national or international advocacy organizations	—	
Report Scope and Boundary			
G4-17	All entities included in the organization's consolidated financial statements or equivalent documents; whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report	Outline of the Sharp Group	87
		Affiliated Companies (Japan)	
		Affiliated Companies (Overseas)	
G4-18	Process for defining the report content and the Aspect Boundaries; how the organization has implemented the Reporting Principles for Defining Report Content	Identifying Material Issues in CSR	17

GRI Content Index

G4-19 ★	All the material Aspects identified in the process for defining report content	5 Material Issues (Materiality) in CSR Material Issue 1: Ensuring the Safety and Reliability of Products and Enhancing Customer Satisfaction Material Issue 2: Increasing Green Shared Value Material Issue 3: Supply Chain CSR Initiatives Material Issue 4: Respect for Human Rights and Diversity Management Material Issue 5: Stakeholder Engagement (Contributing to Local Communities)	18~20
G4-20 ★	For each material Aspect, report the Aspect Boundary within the organization	5 Material Issues (Materiality) in CSR Material Issue 1: Ensuring the Safety and Reliability of Products and Enhancing Customer Satisfaction Material Issue 2: Increasing Green Shared Value Material Issue 3: Supply Chain CSR Initiatives Material Issue 4: Respect for Human Rights and Diversity Management Material Issue 5: Stakeholder Engagement (Contributing to Local Communities)	18~20
G4-21 ★	For each material Aspect, report the Aspect Boundary outside the organization	5 Material Issues (Materiality) in CSR Material Issue 1: Ensuring the Safety and Reliability of Products and Enhancing Customer Satisfaction Material Issue 2: Increasing Green Shared Value Material Issue 3: Supply Chain CSR Initiatives Material Issue 4: Respect for Human Rights and Diversity Management Material Issue 5: Stakeholder Engagement (Contributing to Local Communities)	18~20
G4-22	Effect of any restatements of information provided in previous reports, and the reasons for such restatements	—	
G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	—	
Stakeholder Engagement			
G4-24	List of stakeholder groups engaged by the organization	Business Philosophy and Business Creed	2
G4-25	Basis for identification and selection of stakeholders with whom to engage	Policy on CSR Activities	14~16
G4-26	Approach to stakeholder engagement	—	
G4-27	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns	—	

3. Report Parameters

Item	Indicator	Disclosed Item	PDF Page
Report Profile			
G4-28	Reporting period (such as fiscal or calendar year) for information provided	Editorial Policy	1
G4-29	Date of most recent previous report (if any)	September 2017	
G4-30	Reporting cycle (such as annual, biennial)	Editorial Policy	1
G4-31	Contact point for questions regarding the report or its contents	Editorial Policy	1
GRI Content Index			
G4-32	The 'in accordance' option the organization has chosen; the GRI Content Index for the chosen option	'In accordance' option: — (reference) GRI Content Index	
Assurance			
G4-33	Policy and current practice with regard to seeking external assurance for the report	—	

GRI Content Index

4. Governance, Commitments, and Engagement

Item	Indicator	Disclosed Item	PDF Page
Governance Structure and Composition			
G4-34	Governance structure of the organization; any committees responsible for decision-making on economic, environmental, and social impacts	Initiatives to Strengthen Social and Environmental Responsibility	15~16
		Corporate Governance	22
		Compliance	26
G4-35	Process for delegating authority for economic, environmental, and social topics from the highest governance body to senior executives and other employees	Corporate Governance	22
G4-36	Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics, and whether post holders report directly to the highest governance body	Initiatives to Strengthen Social and Environmental Responsibility	15~16
		Corporate Governance	22
		Internal Control	23
		Compliance	25
G4-37	Processes for consultation between stakeholders and the highest governance body on economic, environmental, and social topics. If consultation is delegated, describe to whom and any feedback processes to the highest governance body	Initiatives to Strengthen Social and Environmental Responsibility	15~16
		Corporate Governance	22
		Internal Control	23
G4-38	Composition of the highest governance body and its committees	Corporate Governance	22
G4-39	Whether the Chair of the highest governance body is also an executive officer	—	
G4-40	Nomination and selection processes for the highest governance body and its committees	—	
G4-41	Processes for the highest governance body to ensure conflicts of interest are avoided and managed	Corporate Governance	22
Highest Governance Body's Role in Setting Purpose, Values, and Strategy			
G4-42	Highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value, or mission statements, strategies, policies, and goals related to economic, environmental, and social impacts	Corporate Governance	22
Highest Governance Body's Competencies and Performance Evaluation			
G4-43	Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics	—	
G4-44	Processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental, and social topics	—	
Highest Governance Body's Role in Risk Management			
G4-45	Highest governance body's role in the identification and management of economic, environmental, and social impacts, risks, and opportunities; highest governance body's role in the implementation of due diligence processes	Initiatives to Strengthen Social and Environmental Responsibility	15~16
		Corporate Governance	22
		Risk Management	24
G4-46	Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental, and social topics	Corporate Governance	22
G4-47	Frequency of the highest governance body's review of economic, environmental, and social impacts, risks, and opportunities	—	
Highest Governance Body's Role in Sustainability Reporting			
G4-48	Highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered	Initiatives to Strengthen Social and Environmental Responsibility	14~15
Highest Governance Body's Role in Evaluating Economic, Environmental, and Social Performance			
G4-49	Process for communicating critical concerns to the highest governance body	Corporate Governance	22
G4-50	Nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them	—	

GRI Content Index

Remuneration and Incentives			
G4-51	Remuneration policies for the highest governance body and senior executives; how performance criteria in the remuneration policy relate to the highest governance body's and senior executives' environmental and social objectives	—	
G4-52	Process for determining remuneration	—	
G4-53	How stakeholders' views are sought and taken into account regarding remuneration	—	
G4-54	Ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country	—	
G4-55	Ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country	—	

5. Ethics and Integrity

Item	Indicator	Disclosed Item	PDF Page
G4-56	Organization's values, principles, standards, and norms of behavior such as codes of conduct and codes of ethics	Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct	13
		Sharp Group Charter of Corporate Behavior (full text)	
		Sharp Code of Conduct (full text)	
G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines	Compliance	25
		Consultation Hotline for Compliance Issues	25
G4-58	Internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms, or hotlines	Compliance	25
		Consultation Hotline for Compliance Issues	25

6. Management Approach and Performance Indicators

Item	Indicator	Disclosed Item	PDF Page
Economic			
Disclosure on Management Approach		Investor Relations	
		Risk Management	24
■ 経済的パフォーマンス			
G4-EC1	Direct economic value generated and distributed	Financial Data	
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	—	
G4-EC3	Coverage of the organization's defined benefit plan obligations	—	
G4-EC4	Financial assistance received from government	—	
■ Market Presence			
G4-EC5	Ratios of standard entry-level wage by gender compared to local minimum wage at significant locations of operation	—	
G4-EC6	Proportion of senior management hired from the local community at significant locations of operation	Ratio of Men and Women at Major Overseas Subsidiaries	71
■ Indirect Economic Impacts ★			
G4-EC7	Development and impact of infrastructure investments and services supported	Social Contribution Activities	65~66
G4-EC8	Significant indirect economic impacts, including the extent of impacts	—	
■ Procurement Practices			
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	—	

GRI Content Index

Environmental			
Disclosure on Management Approach		Material Issue 2: Increasing Green Shared Value	18
		Material Issue 3: Supply Chain CSR Initiatives	19
		Increasing Green Shared Value	30
		Putting Environmental Sustainability Management into Practice	31~32
		Sharp Group Charter of Corporate Behavior (full text)	
		Sharp Code of Conduct (full text)	
■ Materials ★			
G4-EN1	Materials used by weight or volume	Material Balance	33~35
G4-EN2	Percentage of materials used that are recycled input materials	Material Balance	33~35
		Expanding the Recycling of Used Products	52
		Environmental Technologies That Contribute to a Sustainable, Recycling-Based Society	53~54
■ Energy ★			
G4-EN3	Energy consumption within the organization	Material Balance	33~35
		Curbing Greenhouse Gas Emissions	43~44
G4-EN4	Energy consumption outside of the organization	Material Balance	33~35
		Curbing Greenhouse Gas Emissions	43~44
G4-EN5	Energy intensity	Curbing Greenhouse Gas Emissions	43~44
		Reducing Logistics-Related Environmental Impact	51
G4-EN6	Reduction of energy consumption	Increasing Green Shared Value	30
		Environmental Accounting	37~38
		Curbing Greenhouse Gas Emissions	43~44
G4-EN7	Reductions in energy requirements of products and services	Increasing Green Shared Value	30
		Environmental Accounting	37~38
		Developing Environmentally Conscious Products and Devices	39~42
■ Water ★			
G4-EN8	Total water withdrawal by source	Material Balance	33~35
		Effectively Using Water Resources	47~48
G4-EN9	Water sources significantly affected by withdrawal of water	—	
G4-EN10	Percentage and total volume of water recycled and reused	Effectively Using Water Resources	47~48
■ Biodiversity			
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	—	
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Protecting Biodiversity	55
G4-EN13	Habitats protected or restored	Protecting Biodiversity	55
G4-EN14	Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	—	
■ Emissions ★			
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	Material Balance	33~35
		Greenhouse Gas Emissions Based on the GHG Protocol Initiative	36
		Curbing Greenhouse Gas Emissions	43~44
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	Material Balance	33~35
		Greenhouse Gas Emissions Based on the GHG Protocol Initiative	36
		Curbing Greenhouse Gas Emissions	43~44
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	Greenhouse Gas Emissions Based on the GHG Protocol Initiative	36
G4-EN18	Greenhouse gas (GHG) emissions intensity	Curbing Greenhouse Gas Emissions	43~44
G4-EN19	Reduction of greenhouse gas (GHG) emissions	Environmental Accounting	37~38
		Curbing Greenhouse Gas Emissions	43~44
G4-EN20	Emissions of ozone-depleting substances (ODS)	Effective Management of Chemical Substances and Risk Management	49~50
G4-EN21	NOx, SOx, and other significant air emissions	Material Balance	33~35
		Effective Management of Chemical Substances and Risk Management	49~50

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■ Effluents and Waste			
G4-EN22	Total water discharge by quality and destination	Material Balance	33~35
		Effective Management of Chemical Substances and Risk Management	49~50
G4-EN23	Total weight of waste by type and disposal method	Minimizing and Recycling Waste	45~46
G4-EN24	Total number and volume of significant spills	—	
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	—	
G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	—	
■ Products and Services ★			
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	Increasing Green Shared Value	30
		Environmental Accounting	37~38
		Developing Environmentally Conscious Products and Devices	39~42
		Examples of Super Green Products for Fiscal 2016	39
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	Material Balance	33~35
		Environmental Accounting	37~38
		Expanding the Recycling of Used Products	52
		Environmental Technologies That Contribute to a Sustainable, Recycling-Based Society	53~54
■ Compliance			
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	—	
■ Transport			
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	Material Balance	33~35
		Environmental Accounting	37~38
		Reducing Logistics-Related Environmental Impact	51
■ Overall			
G4-EN31	Total environmental protection expenditures and investments by type	Environmental Accounting	37~38
■ Supplier Environmental Assessment ★			
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	Promoting CSR across the Entire Supply Chain	58
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	Promoting CSR across the Entire Supply Chain	58
■ Environmental Grievance Mechanisms			
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	—	
Social (Labor Practices and Decent Work)			
Disclosure on Management Approach		Initiatives to Strengthen Social and Environmental Responsibility	15~16
		Material Issue 3: Supply Chain CSR Initiatives	18
		Material Issue 4: Respect for Human Rights and Diversity Management	18
		Compliance	25
		Consultation Hotline for Compliance Issues	25
		Human Resource Development	68
		Developing Diversity Management	69~72
		Promoting Occupational Safety and Health	74~75
		Sharp Group Charter of Corporate Behavior (full text)	
		Sharp Code of Conduct (full text)	

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■ Employment			
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender, and region	Developing Diversity Management	69~72
		Outline of the Sharp Group	87
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	—	
G4-LA3	Return to work and retention rates after parental leave, by gender	Work-Life Balance Support Programs (Main Programs and Participation at Sharp Corporation)	73
■ Labor/Management Relations			
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	—	
■ Occupational Health and Safety			
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	—	
G4-LA6	傷Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Promoting Occupational Safety and Health	74~75
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	—	
G4-LA8	Health and safety topics covered in formal agreements with trade unions	Promoting Occupational Safety and Health	74~75
■ Training and Education			
G4-LA9	Average hours of training per year per employee by gender, and by employee category	—	
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Human Resource Development	68
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	—	
■ Diversity and Equal Opportunity ★			
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Developing Diversity Management	69~72
■ Equal Remuneration for Women and Men			
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	—	
■ Supplier Assessment for Labor Practices ★			
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	Promoting CSR across the Entire Supply Chain	58
G4-LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	Promoting CSR across the Entire Supply Chain	58
■ Labor Practices Grievance Mechanisms ★			
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	—	
Social (Human Rights)			
Disclosure on Management Approach		Initiatives to Strengthen Social and Environmental Responsibility	15~16
		Material Issue 3: Supply Chain CSR Initiatives	18
		Material Issue 4: Respect for Human Rights and Diversity Management	18
		Compliance	25
		Consultation Hotline for Compliance Issues	25
		Efforts Related to Human Rights	67
		Sharp Group Charter of Corporate Behavior (full text)	
		Sharp Code of Conduct (full text)	
■ Investment			
G4-HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	—	
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	Efforts Related to Human Rights	67
■ Non-Discrimination ★			
G4-HR3	Total number of incidents of discrimination and corrective actions taken	—	

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■ Freedom of Association and Collective Bargaining			
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	Fair and Impartial Procurement Activities	57
		Promoting CSR across the Entire Supply Chain	58
		Dealing with the Conflict Minerals Issue	59
		Efforts Related to Human Rights	67
		Sharp Group Charter of Corporate Behavior (full text)	
		Sharp Code of Conduct (full text)	
		Sharp Supply-Chain CSR Deployment Guidebook	
■ Child Labor			
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	ISO 26000 and the United Nations Global Compact	13
		Fair and Impartial Procurement Activities	57
		Promoting CSR across the Entire Supply Chain	58
		Dealing with the Conflict Minerals Issue	59
		Efforts Related to Human Rights	67
		ISO 26000 Content Index	76
		United Nations Global Compact 10 Content Index	77
		Sharp Group Charter of Corporate Behavior (full text)	
		Sharp Code of Conduct (full text)	
Sharp Supply-Chain CSR Deployment Guidebook			
■ Forced or Compulsory Labor			
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	ISO 26000 and the United Nations Global Compact	14
		Fair and Impartial Procurement Activities	57
		Promoting CSR across the Entire Supply Chain	58
		Dealing with the Conflict Minerals Issue	59
		Efforts Related to Human Rights	67
		ISO 26000 Content Index	76
		United Nations Global Compact 10 Content Index	77
		Sharp Group Charter of Corporate Behavior (full text)	
		Sharp Code of Conduct (full text)	
Sharp Supply-Chain CSR Deployment Guidebook			
■ Security Practices			
G4-HR7	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	—	
■ Indigenous Rights			
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	—	
■ Assessment			
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	—	
Supplier Human Rights Assessment ★			
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	Promoting CSR across the Entire Supply Chain	58
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	Promoting CSR across the Entire Supply Chain	58
■ Human Rights Grievance Mechanisms ★			
G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	—	
Social (Society)			
Disclosure on Management Approach		Compliance	25
		Social Contribution Activities	65~66
		Sharp Group Charter of Corporate Behavior (full text)	
		Sharp Code of Conduct (full text)	
■ Local Communities ★			
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Social Contribution Activities	65~66
G4-SO2	Operations with significant actual and potential negative impacts on local communities	—	

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■ Anti-Corruption			
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Preventing Corruption in All Forms and Dealing Properly with Donations	26
G4-SO4	Communication and training on anti-corruption policies and procedures	Preventing Corruption in All Forms and Dealing Properly with Donations	26
G4-SO5	Confirmed incidents of corruption and actions taken	—	
■ Public Policy			
G4-SO6	Total value of political contributions by country and recipient/beneficiary	—	
■ Anti-Competitive Behavior			
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	—	
■ Compliance			
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	—	
■ Supplier Assessment for Impacts on Society ★			
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	Promoting CSR across the Entire Supply Chain	58
G4-SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	Promoting CSR across the Entire Supply Chain	58
■ Grievance Mechanisms for Impacts on Society			
G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	—	
Social (Product Responsibility)			
Disclosure on Management Approach		Material Issue 1: Ensuring the Safety and Reliability of Products and Enhancing Customer Satisfaction	17
		Compliance	25
		Dealing with the Conflict Minerals Issue	59
		Ensuring Quality and Safety	60
		Sharp Group Charter of Corporate Behavior (full text) Sharp Code of Conduct (full text)	
■ Customer Health and Safety ★			
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	Ensuring Quality and Safety	60
		Making Easier-to-Use Products	63
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	—	
■ Product and Service Labeling ★			
G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	Ensuring Quality and Safety	60
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	—	
G4-PR5	Results of surveys measuring customer satisfaction	Making Easier-to-Use Products	61
■ Marketing Communications			
G4-PR6	Sale of banned or disputed products	—	
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	—	
■ Customer Privacy			
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	—	
■ Compliance ★			
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	—	

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
- ◇ Representative : J.W. Tai, President & Chief Executive Officer
- ◇ Founding : September 15, 1912
- ◇ Capital Stock : 5 billion yen (as of March 31, 2017)
- ◇ Employees : Consolidated: 42,861
 - Japan: 18,439 (Sharp Corporation 13,452/ other Consolidated 4,987)
 - Overseas: 24,422 (Consolidated) (as of June 30, 2017)
- ◇ Operations : Mainly manufacturing and sales of telecommunications equipment, electric and electronic application equipment, and electronic components.

Main Data

(Millions of yen)

	Fiscal 2012	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016
Net Sales	2,478,586	2,927,186	2,786,256	2,461,589	2,050,639
Domestic sales	1,007,264	1,150,091	968,449	750,499	654,012
Overseas sales	1,471,322	1,777,095	1,817,807	1,711,090	1,396,627
Operating Profit	-146,266	108,560	-48,065	-161,967	62,454
Profit before Income Taxes	-466,187	45,970	-188,834	-231,122	-587
Profit Attributable to Owners of Parent	-545,347	11,559	-222,347	-255,972	-24,877
Net Assets	134,837	207,173	44,515	-31,211	307,801
Total Assets	2,087,763	2,181,680	1,961,909	1,570,672	1,773,682
Capital Investment	82,458	49,434	62,653	45,240	77,733
R&D Expenditures	137,936	132,124	141,042	130,120	106,107

Related information : > [Financial Data](#)

Main Products

Smart Homes

IoT Communications



RoBoHoN Mobile Robotic Phone / Smartphone



Electronic dictionary



Wearable device

Mobile phones, Tablet devices, Electronic dictionaries, calculators, facsimiles, telephones, Network control units, others

Health and Environment Systems



Washing machine



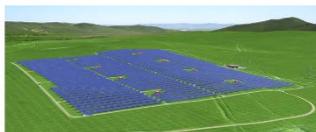
Superheated Steam Oven



Plasmacluster humidifying air purifier

Refrigerators, superheated steam ovens, microwave ovens, small cooking appliances, air conditioners, washing machines, vacuum cleaners, air purifiers, electric fans, dehumidifiers, humidifiers, electric heaters, Plasmacluster Ion generators, beauty appliances, others

Energy Solutions



Industrial Solar Power System



Residential Solar Power System



Cloud Storage Battery System

Solar cells, Storage Batteries, others

Smart Business Solutions

Business Solutions



Automated Unmanned Ground Vehicle



Digital MFP



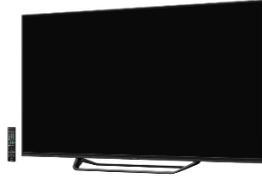
Information display

POS systems, electronic cash registers, Business projector, Information displays, Digital MFPs (multifunction printers), Options and consumables, Software, FA equipment, Ultrasonic cleaners, others

Main Products

Advance Display Systems

TV Systems



8K LCD TV



Blu-ray Disc recorder

LCD color TVs, Blu-ray Disc recorders, others

Display Devices



8K LCD monitor



Free-form Display

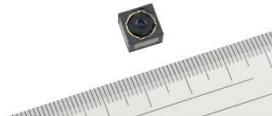
IGZO LCD modules, Continuous Grain Silicon LCD modules, Amorphous silicon LCD modules, others

IoT Electronics Devices

Camera Modules



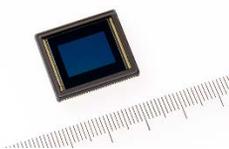
3D Camera module for mobile devices



CMOS Camera module

Camera modules, Camera module manufacturing equipment, others

Electronic Components & Devices



CMOS imager



Network camera



Semiconductor laser diode

Sensor module, Proximity sensor, Dust sensor, CCD/CMOS imager, Semiconductor laser diode, Camera unit for in-vehicle use, others

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