

**SHARP**



Environmental and Social Report  
2008



## About the Cover

The ceiling of Suzuka City Hall in Mie Prefecture, Japan is made of thin-film, see-through solar modules that let in light like windows, creating an effect similar to that of sunlight streaming through the leaves and branches of trees. This creates a bright interior space that requires almost no artificial lighting, making the facility energy-saving and energy-creating at the same time. Sharp plans to expand its annual production capacity for thin-film solar cells from the current 15 MW to 1,000 MW in the near future.  
(Photograph reproduces appearance in clear weather)

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## Compiling This Report

### ■ Organization

This Environmental and Social Report consists of four sections. The Special Feature section introduces Sharp's efforts, as the frontrunner in energy-creating solar power and energy-saving LCD technologies, to achieve a low-carbon society through technological innovation. The Special Focus section looks at three particularly interesting examples from Sharp's continuing environmental and social contribution efforts.

The Sharp and the Environment section covers the policies, objectives, and achievements of Sharp's environmental efforts.

In Sharp and Society, Sharp reports on the goals it has set and the progress it is making in the social dimension of CSR activities for various stakeholders.

### ■ Links to the Sharp Website

This report focuses on the main points of the Sharp Group's environmental and social activities. Actual examples and detailed data can be found on Sharp's website (<http://sharp-world.com/corporate/eco/report2008/>). Items that are covered on the website are listed nearby the articles with  where they are mentioned in this report. Page 54 also lists the items covered on the website.

### ■ Period and Items Covered

**Period covered:** Fiscal 2007 (April 2007 to March 2008)  
However, some actual facts prior to this period, as well as subsequent policies, objectives, and plans will also be included.

**Coverage:** Environmental and social aspects of Sharp Corporation along with its domestic and overseas subsidiaries and affiliates.

**Organizations covered:** Sharp Corporation along with its domestic and overseas subsidiaries and affiliates. Note that the scope of environmental performance data contained in this report is as follows:

**Sites (companies) covered by environmental performance data:** Sharp Corporation and consolidated subsidiaries. Note that the category "production sites (companies)" includes non-consolidated subsidiaries and affiliated companies.

Production sites (companies)	39 (17 domestic, 22 overseas)
Non-production sites (companies)	34 (11 domestic, 23 overseas)

### ■ Referenced Guidelines

- Environmental Reporting Guidelines (2007 Version), Ministry of the Environment, Japan
- Sustainability Reporting Guidelines Version 3.0 (Japanese), Global Reporting Initiative (GRI)
- Environmental Accounting Guidelines 2005, Ministry of the Environment, Japan

### ■ Scheduled Publication Date for Next Report

September 2009 (published annually since 1999)

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GRI content index  
Sites (companies) covered by environmental performance data  
Calculation standards for environmental performance indices

# Sharp Contributes to Society Through Its Manufacturing and Technology-Oriented Business

“Make products that others want to imitate.” These words, spoken by Sharp founder Tokuji Hayakawa, embody Sharp’s management concept. As a manufacturer, Sharp contributes to society by being the first to make products that meet the needs of a new era. Successive generations of Sharp leaders have, in their own way, pursued this concept by making products that contribute to society and in the process created a corporation that is known and trusted by society.

In 1973, Sharp clarified the unchanging spirit of its founder in the company’s business philosophy and business creed. The business philosophy states that Sharp aims for mutual prosperity with stakeholders—the foundation of CSR today—by contributing to the culture, benefits, and welfare of people throughout the world. The business creed calls for “Sincerity and Creativity” and all employees must hold to it and follow it in order to realize the business philosophy.

This report details the many ways that Sharp is fulfilling its CSR. Each of these efforts is an index for gauging how well Sharp conducts business according to its core belief of “Sincerity and Creativity.”

The goal that Sharp aims at through its CSR efforts is nothing less than realizing the business philosophy through business activities. Having a “gene of creativity” since its foundation, Sharp will continue to propose one-of-a-kind products and new lifestyles, as a corporation that is trusted by all.

**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.

■ Achieve the tenets of the business philosophy by promoting “Sincerity and Creativity” in all business practices

Sharp’s Business Activities



**Realization of Business Philosophy**

- Perspective of social contribution through business activities  
“Contribute to the culture, benefits, and welfare of people throughout the world”
- Perspective concerning employees  
“It is the intention of our corporation to grow hand-in-hand with our employees”
- Perspective concerning stakeholders  
“Prosperity is directly linked to the prosperity of the entire Sharp family”

- The business creed is the central axis of all business activities.
- “Sincerity” means a working attitude mindful of what will offer genuinely useful solutions and happiness to everyone.
- “Creativity” means a working attitude not content with the way things are. An attitude which always seeks to add value, and to make efforts to innovate and improve.

# As the Frontrunner in Solar Energy and LCDs, Contributing to Achieving a Low-Carbon Society by Working Toward Further Technological Innovations



Chairman Machida (left) and President Katayama

A handwritten signature in black ink, appearing to read 'K. Machida' with a stylized flourish underneath.

Katsuhiko Machida  
Chairman & CEO, Sharp Corporation

A handwritten signature in black ink, appearing to read 'M. Katayama' with a stylized flourish underneath.

Mikio Katayama  
President & COO, Sharp Corporation

## Two New Visions Looking Ahead to the 100th Anniversary of Sharp's Founding

According to reports from the IPCC (Intergovernmental Panel on Climate Change) and the discussions at the G8 Heiligendamm Summit, a broad international consensus is emerging that dealing with global warming is a critical issue facing the world. Against this backdrop, the first commitment period of the Kyoto Protocol finally began this year.

This pressing situation demands a drastic transformation in social structure—from a mass-consumption society that since the Industrial Revolution has depended on fossil resources, to a sustainable low-carbon society focused on the use of renewable energies.

In 2012, the final year of the first commitment period, Sharp will celebrate the 100th anniversary of its founding. As the company prepares to mark this milestone at this critical turning point, Sharp has explored anew the role that it should play in the coming era and created two new corporate visions for the future.

One is "Realize a truly ubiquitous society\*<sup>1</sup> with the world's No. 1 LCDs." And, the other is "Contribute to the world through environment- and health-conscious business, focusing on energy-saving and energy-creating products."

\*<sup>1</sup> A "ubiquitous society" is a concept of how, through the rapid development of IT infrastructure, networks will always be accessible to users; thus, the whole society will be connected.

## As the Frontrunner in Solar Energy and LCDs, Contributing to Achieving a Low-Carbon Society

Guided by these two visions, Sharp is committed to meeting the needs of this era through unique, proprietary technologies of LCD and solar power generation, two areas in which Sharp has stood as an R&D leader for many years.

Energy-creating solar cells and energy-saving LCDs are extremely effective technologies for coping with the pressing problem of curbing global warming. As the frontrunner in both these fields, Sharp will work to the best of its ability to bring about a major evolution in these technologies, assembled over many long years of involvement, to achieve dramatic cost reductions for solar cells and even greater energy efficiencies in LCDs, and through these efforts to contribute to the achievement of a low-carbon society.

In developing these technologies, in addition to Sharp's own efforts, the intention is to advance R&D on a broad front through cooperation with industry, government, and academia, and to consolidate these results in the new manufacturing complex whose

construction is now underway in Sakai City, Osaka Prefecture, Japan.

This manufacturing complex will be home to two world-class production facilities—the world's first LCD panel plant to use 10th-generation glass substrates, and one of the world's largest thin-film solar cell plants, with an annual production capacity of 1 GW. Construction is proceeding on both facilities, with operations slated to begin by March 2010. Sharp is also inviting the participation of a number of industry-leading companies across the spectrum of industrial fields, with the aim of pooling collective wisdom and knowledge to create a revolutionary new manufacturing system.

The intent is to make the Sakai site a model manufacturing complex befitting the sustainable low-carbon society of the 21st century, where products featuring a high level of environmental performance will be mass-produced by a production system having extremely low impact on the environment.

### **Further Boosting the Level of Effort: Aiming to Become an Environmentally Advanced Company**

Since fiscal 2004, strengthening its commitment to the environment has been a basic management policy of the Sharp Group.

Sharp has declared a medium-term corporate objective of becoming an environmentally advanced company and defined its corporate vision\*2 as: Sharp's energy-creating and energy-saving products will more than balance out Sharp's greenhouse gas emissions. To reach these goals, Sharp has deployed a Super Green Strategy that aims to achieve the highest level of environmental consciousness in all corporate activities.

Successes resulting from this strategy include creating Super Green Technologies such as plant-based resin paint, achieving development goals for Super Green Products and Devices for the last three years in a row, converting 10 of Sharp Corporation's factories to Super Green Factories and making all factories in Japan and abroad Green Factories, and developing a nationwide elementary school environmental education program for Japan. These accomplishments have garnered high praise from outside the company.

In the future, Sharp will be working to strengthen its strategy and raise the level of its efforts aimed at becoming an environmentally advanced company.

Particularly in factories, as the production of solar cells and LCD TVs expands, Sharp will take up the challenge of slashing absolute emissions of greenhouse gases and waste at existing factories, as well as cutting current emissions per production unit, with the aim of making its corporate visions a reality as soon as possible.

\*2 See page 14.

### **Fulfilling Corporate Social Responsibility by Returning to the Roots of Its Founding**

Sharp has consistently promoted CSR activities related not only to the environment, but also in all business processes, in order to contribute to creating a sustainable society and gain an even higher level of trust from the community.

Sharp has for some time taken a proactive stance in its CSR activities, based on the concept of "Compliance First." In April 2008, a reorganization was instituted that merged the CSR Promotion Department with the Legal Affairs Division and placed this new CSR Promotion Group under the control of the Executive Managing Officer in charge of legal affairs and intellectual property. Through these actions, Sharp will work to further strengthen adherence to business ethics and compliance with all regulations and laws. In addition, Sharp will also push to systematically expand and improve the structure and system for enhancing customer satisfaction, particularly in ensuring product safety, nurturing a diverse range of human resources, and taking active steps to deploy CSR in the supply chain.

On the occasion of celebrating the 100th anniversary of its founding in 2012, Sharp will rededicate itself to its business philosophy and its business creed of "Sincerity and Creativity," the roots of its founding, and work company-wide to implement management practices that remain faithful to these concepts. Going forward, Sharp's desire is to contribute to society through its manufacturing and technological competency, and to fulfill the social responsibility expected of it.

We look forward to hearing your frank comments and opinions.

June 2008

# Outline of the Sharp Group

Sharp's business activities comprise "Consumer/Information Products" that are actual consumer electronics and information products, and "Electronic Components" that provide the key components of electronic products. By undertaking the development of both key devices based on proprietary technologies and their application products, Sharp aims to inspire and impress customers by bringing forth never-before-seen, one-of-a-kind products and devices, and by pioneering new markets.

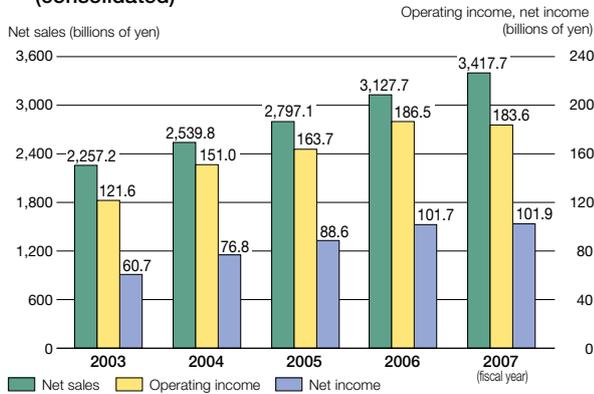
## Corporate Profile

Name Sharp Corporation  
 Head Office 22-22, Nagaike-cho, Abeno-ku, Osaka, Japan  
 Representatives Katsuhiko Machida, Chairman & CEO  
 Mikio Katayama, President & COO  
 Founded September 15, 1912  
 Operations\*1 Manufacture and sales of audio-visual, communication and information equipment, home appliances, LSIs, LCDs, other electronic components  
 Capital Stock\*1 204,675 million yen (rounded down to the nearest million)  
 Number of Employees\*2 53,708 (29,954 in Japan; 23,754 overseas)

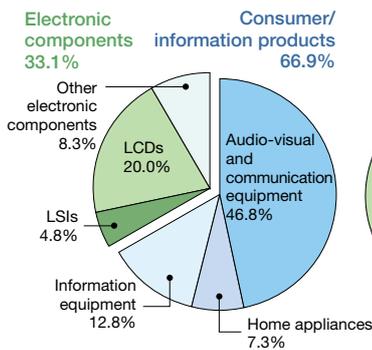
\*1 As of March 31, 2008

\*2 Sharp Corporation and its consolidated subsidiaries

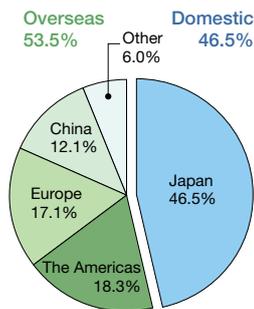
## Net sales, operating income, and net income (consolidated)



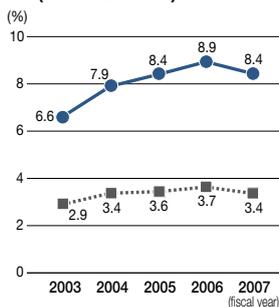
## Fiscal 2007 consolidated net sales by product group (component ratio)



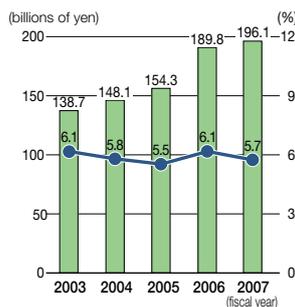
## Fiscal 2007 consolidated net sales by region (component ratio)



## Principal financial performance indicators (consolidated)



## R&D expenditures (consolidated)



Corporate information  
 Financial results

## Main Products (As of March 31, 2008)

### Audio-visual and communication equipment



LCD color TVs, color TVs, projectors, DVD recorders, DVD players, Blu-ray Disc recorders, Blu-ray Disc players, 1-Bit digital audio products, facsimiles, telephones, mobile phones, PHS (personal handy-phone system) terminals

### Home appliances



Refrigerators, superheated steam ovens, microwave ovens, air conditioners, washing machines, vacuum cleaners, air purifiers, dehumidifiers, humidifiers, electric heaters, small cooking appliances

### Information equipment



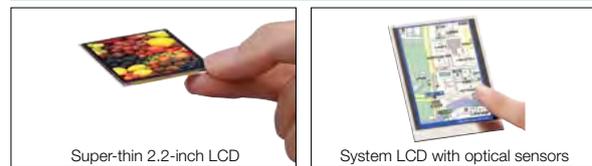
Personal computers, personal mobile tools, mobile communications handsets, electronic dictionaries, calculators, POS systems, handy data terminals, electronic cash registers, LCD color monitors, information displays, digital copier/printers, electrostatic copiers, supplies for copiers and printers, software, FA equipment, ultrasonic cleaners

### LSIs



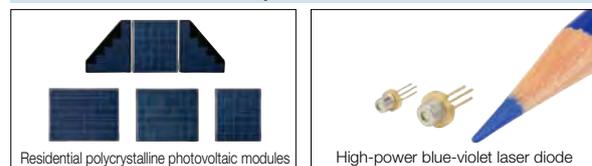
CCD/CMOS imagers, LSIs for LCDs, microcomputers, flash memory, combination memory, analog ICs

### LCDs



TFT LCD modules, Duty LCD modules, System LCD modules

### Other electronic components



Solar cells, components for satellite broadcasting, digital terrestrial tuners, RF modules, network components, laser diodes, LEDs, optical pickups, optical sensors, components for optical communication, regulators, switching power supplies

# Corporate Governance

Sharp seeks to further strengthen the system for business processes, as well as ensure sound and transparent management practices and firmly uphold the propriety of operational activities. Sharp has introduced the executive officer system to work toward faster, more efficient decision-making, looking ahead to expanding the scale of business in the future, and has also established and is promoting an internal control system. Thus, Sharp is enhancing and expanding the governance system for the Sharp Group as a whole.

Actions in Fiscal 2007		Objectives for Fiscal 2008
Objectives	Achievements	
<ul style="list-style-type: none"> <li>Steady operation of the internal control system</li> </ul>	<ul style="list-style-type: none"> <li>Improved the internal control system based on the Basic Policy for Internal Control</li> <li>Conducted internal control audits (tests/evaluations)</li> <li>Constructed an IT system to support operation of the internal control system</li> </ul>	<ul style="list-style-type: none"> <li>Operation and assessment of the internal control system</li> <li>Improve the Basic Policy for Internal Control in conjunction with introducing the executive officer system, etc.</li> <li>Put into practice on an ongoing basis various policies related to the internal control system</li> <li>Implement internal control assessment in conjunction with the start of the internal control reporting system based on Japan's Financial Instruments and Exchange Act</li> </ul>

## Concept of Corporate Governance: Expanding and Improving the System

In an effort to further strengthen manufacturing and technological competency, Sharp is committed to making speedy managerial decisions and to enhancing the quality of management.

Sharp's business activities are clearly bounded by the development, manufacture, and sales of products and devices. Each area is highly specialized, yet there is strong interrelation between them. When all directors who are each deeply versed in these business areas consult with one another, they can make speedy and unerring decisions. Sharp also believes that clarifying the managerial responsibilities of each director enhances reciprocal supervisory functions.

In June 2008, Sharp introduced an executive officer system to build an organization that can execute business processes responsively and effectively.

In addition, in July 2006, Sharp established the Advisory Board to obtain a wide range of opinions and proposals from knowledgeable outside experts from various fields to assist in management decisions.

Sharp intends to further strengthen its current Director/Corporate Auditor system, which allows management and R&D and manufacturing divisions to work closely on expanding business, to enhance corporate governance.

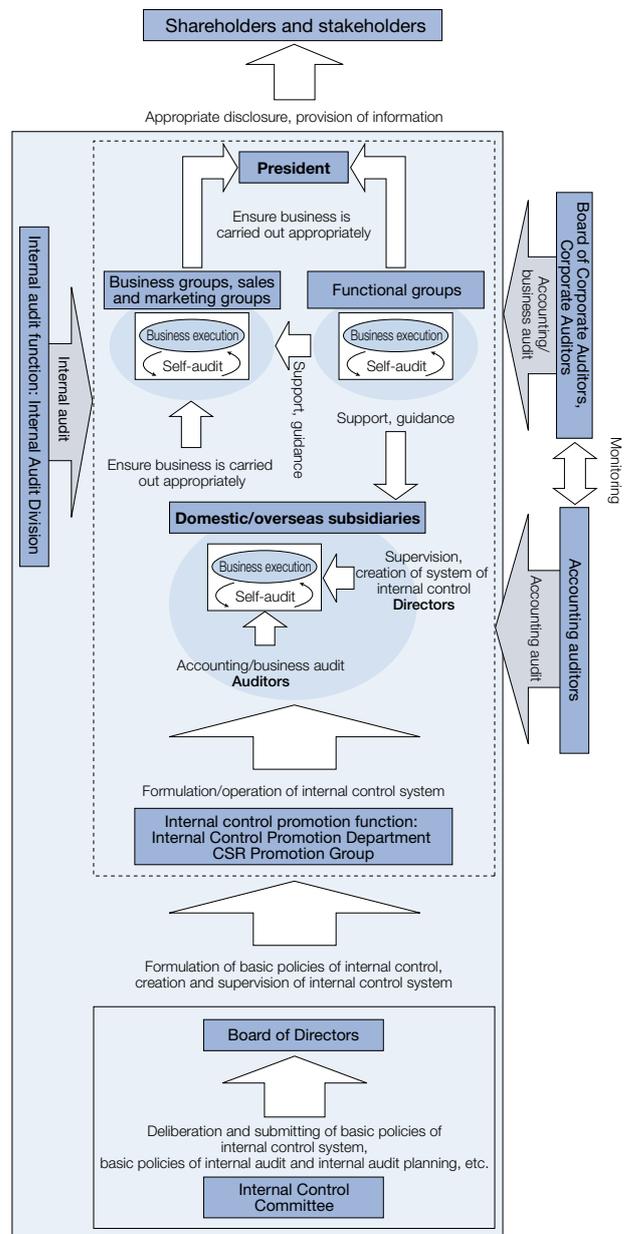
## Improving the Internal Control System

Based on Japan's Companies Act and the Financial Instruments and Exchange Act, which went into effect in May 2006, and September 2007, respectively, the Sharp Group is improving its internal control system to ensure effective governance of the entire group.

In May 2006, the Board of Directors passed a resolution to adopt a Basic Policy for Internal Control, as well as established the Internal Control Committee as an advisory panel to the Board of Directors. Through these actions, Sharp is advancing measures such as developing relevant documentation, conducting self audits and documenting compliance by subsidiaries in Japan and overseas and by Sharp business groups, implementing internal control audits by the Internal Audit Division, and introducing an IT system to provide operational support for internal control activities.

Also, the Financial Instruments and Exchange Act requires submission of internal control reports beginning in fiscal 2008. Accordingly, Sharp will implement internal control assessments and put appropriate information disclosure into practice this fiscal year.

## Internal control system



# Compliance and Risk Management

Business ethics and legal compliance are the minimum social responsibilities that any corporation must fulfill. Under a system that closely coordinates CSR with risk management, Sharp is strongly committed to adhering to business ethics and ensuring legal compliance.

Actions in Fiscal 2007		Objectives for Fiscal 2008
Objectives	Achievements	
<ul style="list-style-type: none"> <li>Improve compliance education and training tools</li> </ul>	<ul style="list-style-type: none"> <li>Created a compliance handbook (for sales/service and device business divisions)</li> </ul>	<ul style="list-style-type: none"> <li>Expand and improve compliance promotion policies and measures                             <ul style="list-style-type: none"> <li>Strengthen the system to promote compliance</li> <li>Create a compliance handbook (common version)</li> </ul> </li> <li>Expand and improve the BCM system                             <ul style="list-style-type: none"> <li>Further strengthen the BCM promotion system for business groups</li> <li>Ongoing review and continuous improvement of BCPs</li> <li>Prepare for the occurrence of a new influenza pandemic</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>Create a BCM (business continuity management) system</li> </ul>	<ul style="list-style-type: none"> <li>Implemented contingency training at domestic production sites and nearby sales bases (total of 16 bases)</li> <li>Developed BCPs (business continuity plans) for business groups</li> </ul>	

## Raising Awareness of the Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct

In May 2005, to make legal compliance and business ethics top priorities, Sharp revised its charter of conduct and divided it into two documents: the Sharp Group Charter of Corporate Behavior, the principles of Sharp's corporate behavior; and the Sharp Code of Conduct, the standards of conduct for all directors and employees. These two documents apply to group companies around the world as the common standards of the Sharp Group.

## Promoting CSR and BRM Activities

Sharp believes BRM (business risk management), like CSR, is indispensable in business management because it eliminates the risk of losses and legal violations, while at the same time helping the company quickly adapt to changing business environments. That is why the company pursues both CSR and BRM activities.

Sharp holds meetings of the CSR/BRM Committee to discuss and check progress, policies, and action plans for the entire company. These meetings are attended by an Executive Vice President (Chief Officer, General Administration) and all group general managers of both the business groups and the functional groups.

To strengthen this system, in April 2008 Sharp reorganized the CSR Promotion Department, which had been responsible for promoting CSR and BRM up to that point, and the Legal Affairs Division and established a new CSR Promotion Group under the control of the Executive Managing Officer in charge of legal affairs and intellectual property.

## Commitment to BCM (Business Continuity Management)

Amid concerns that a disaster causing extensive damage, such as a major earthquake, may strike, advancing a BCM program committed to continuously improving policies to ensure the safety of employees and their families, as well as upgrading action plans for maintaining business operations and expediting recovery, has become a critical aspect of CSR/BRM.

To cope with a large-scale earthquake that can be assumed will occur in Japan, Sharp instituted earthquake preparedness training, and developed and maintained BCPs (business continuity plans), primarily for production groups, in fiscal 2007.

In fiscal 2008, Sharp will further strengthen the system to promote BCM in all production groups, and will formulate action plans, including at overseas bases, on the assumption that a new influenza pandemic will occur, an event currently of increasing concern worldwide.

## Strict Business Ethics and Legal Compliance

In Japan, Sharp Corporation and its domestic subsidiaries have appointed a Chief of Legal Affairs at each business group and company to ensure that no laws, regulations, or social norms are violated in the course of conducting business.

To raise legal awareness and ensure compliance with the law, Sharp and its subsidiaries periodically hold wide-ranging educational programs in Japan, including job-level-specific training for directors, senior executives, managers, mid-career employees and new employees, specialized training in specific fields, and e-learning available for all employees. Sharp is also working to upgrade and expand compliance manuals and improve the convenience of access on its intranet to information on the law and company regulations.

## Preventing Unlawful Grants and Expenditures

The Group Charter of Corporate Behavior and the Code of Conduct contain provisions that strictly prohibit any form of corrupt behavior such as money extortion or bribery, and require that donations be handled in a proper manner.

Sharp Corporation prevents illegal payoffs and improper expenditures through a system of compulsory reviews by the Donation Examination Committee in Japan to assess the propriety of monetary disbursements such as donations and contributions.

## Consultation Hotline for Compliance Issues

Sharp Corporation and its domestic affiliated companies have a hotline for reporting problems and providing counseling services related to compliance issues. The hotline is open to employees, temporary staff, and employees of business partners, in line with the spirit of Japan's Whistleblower Protection Act. In addition, in October 2007, Sharp in Japan set up a contact point outside the company at its legal advisor's office.

Sharp clearly stipulates that there will be no unfavorable treatment or penalties against individuals who report compliance violations or seek consultation.


[Sharp Group Charter of Corporate Behavior \(full text\)](#)  
[Sharp Code of Conduct \(full text\)](#)  
[Sharp Group's efforts to firmly establish CSR and BRM](#)  
[CSR activities in domestic sales](#)  
[Disaster risk management](#)

# Information Security and Intellectual Property

Keeping pace with the development of IT infrastructure, companies must now take more responsibility than ever for ensuring the security of information. Sharp is strengthening information management systems, improving the safety of information infrastructure, and providing employees with comprehensive training on information management and security. In addition, Sharp recognizes the importance of intellectual property and is managing this asset rigorously and appropriately.

Actions in Fiscal 2007		Objectives for Fiscal 2008
Objectives	Achievements	
<ul style="list-style-type: none"> <li>Extend self-checks and assessments for maintaining confidentiality and information security to overseas bases</li> </ul>	<ul style="list-style-type: none"> <li>Implemented self-checks and assessments for maintaining confidentiality and information security at main overseas bases</li> </ul>	<ul style="list-style-type: none"> <li>Extend the self-check and assessment system for maintaining confidentiality and information security to affiliated companies in Japan</li> </ul>
<ul style="list-style-type: none"> <li>Apply for and acquire Privacy Mark certification in Japan</li> </ul>	<ul style="list-style-type: none"> <li>Developed the infrastructure for acquiring Privacy Mark certification</li> <li>Implemented internal audits of departments that handle personal information</li> <li>Implemented group training related to protecting personal information at each business site</li> </ul>	

## System to Protect Personal Information and Corporate Secrets

To protect personal information of customers and other stakeholders as well as its own corporate secrets, Sharp established the Information Security Promotion Department and the Personal Information Protection Promotion Department in 2004, and is stepping up information security and personal information protection.

Managers from all domestic group companies participate in semi-annual meetings of the IT Infrastructure/Information Security Committee (name changed in fiscal 2007), to ensure the



Screen shot of the e-learning program

thoroughness of basic policies and to check the implementation status of various action plans. In addition, once a year, Sharp provides e-learning courses for all Sharp Group employees in Japan.

In fiscal 2005, Sharp Corporation introduced a self-check and assessment

system, to be conducted by every business group in Japan, to more effectively implement measures for information security and protecting confidential information. In fiscal 2007, Sharp took action to toughen self-checks and assessments related to IT asset management, control of personal computers used by outsourced personnel, and steps to be taken in case of information system failures.

In fiscal 2008, Sharp plans to raise the standards demanded of each organization for self-checks and assessments even higher, as well as extend them to all domestic affiliated companies.

To protect personal information, internal audits are conducted once a year based on Audit Rules for Handling Personal Information. Corrective measures are implemented in a timely manner for any deficiencies uncovered.

In fiscal 2007, Sharp strengthened its education and awareness efforts related to protecting personal information, including holding group training sessions at each business establishment, and disseminating education and awareness bulletins via Sharp's corporate intranet. The company also pressed ahead with infrastructure development to qualify for the Privacy Mark, a certification given to businesses that comply with the Japanese Industrial Standard (JIS) for personal information protection.

In fiscal 2008, Sharp will continue its policies designed to reinforce education and awareness, and advance the process to attain Privacy Mark certification.

 [Basic Policy on Information Security](#)  
[Basic Policy on Protecting Personal Information](#)  
[System for information security and protection of personal information in Japan](#)  
[Privacy Mark-certified affiliated companies](#)

## Reinforcing Information Security Systems at Overseas Bases

In 2006, Sharp further improved the level of security by launching regional information security committees in the world's four major areas: Europe, the Americas, Asia, and China. In addition, each base formulates and operates rules for information security based on Sharp Japan's Basic Policy on Information Security.

In fiscal 2007, Sharp introduced centralized management tools (for automatically collecting PC-stored information and the like) to develop and maintain permanent PC security measures at all Sharp Group bases worldwide, and took measures to protect critical data stored on servers. In addition, Sharp also implemented self-checks and assessments related to maintaining confidentiality and information security at principal overseas bases.

In fiscal 2008, Sharp will conduct security checks on all PCs and servers, including those used at the branches and local offices of overseas bases.

## Protecting Intellectual Property

Sharp's business and R&D strategies are interlinked with its intellectual property assets, which are used to the fullest possible advantage. At the same time, Sharp is firmly committed to protecting its own intellectual property rights, while respecting the intellectual property rights of others. Even though Sharp regards discussion as the basis for resolving cases of infringement, it is the company's policy to seek judgment from a third party such as the courts when its intellectual property rights are not respected.

By strengthening in-house rules, 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.

With regard to respect for the intellectual property rights of others, Sharp is responding by holding company-wide conferences for persons involved with patents and by training of engineers.



 [Incentives for employee inventions](#)

## Aiming for a Low-Carbon Society

Since its founding, Sharp has consistently focused its attention on swift responses to the needs of the time, and through an ongoing program of unprecedented R&D, brought to market a series of products never before seen in the world and products that become the mainstream of the next generation, while at the same time directing its energies toward their widespread adoption worldwide.

Today, coping with global environmental concerns, including global warming, is regarded as a critical issue facing all of humanity. In this light, it is Sharp's intention to contribute to the creation of a low-carbon society by working toward further technical innovations based on proprietary technologies accumulated over many long years as the frontrunner in energy-creating solar cells and energy-saving LCDs.

This section presents an overview of Sharp's environmental activities, starting with efforts at its plants.



**The office building of the Environment Agency, UK**

This eco-friendly building creates and saves energy. Sharp solar panels form eaves that provide protection from the sun, reducing the amount of energy needed for air conditioning.

## Further Evolution of the Super Green Factory



Kameyama Plant (Kameyama City, Mie Prefecture, Japan)

### All Plants Achieve Green Factory Status

“Make all 10 Sharp Corporation plants Super Green Factories (SGFs), and all plants, including subsidiaries and affiliated companies, in Japan and abroad, at least a Green Factory (GF) by the end of fiscal 2007.”

In its fiscal 2004 basic management policy, Sharp declared a medium-term corporate objective of becoming an environmentally advanced company, and established its corporate vision as: Sharp’s energy-creating and energy-saving products will more than balance out Sharp’s greenhouse gas emissions. Sharp launched its Super Green Strategy with an eye toward making these goals a reality.

The Super Green Strategy is an effort aimed at bringing the ultimate in environmental consciousness to all corporate activities, giving priority to five critical areas: management, technologies, products and devices, factories, and recycling. Sharp’s efforts at the factory level are symbolized by the Kameyama Plant (Mie Prefecture, Japan), which became operational in January 2004. From the initial planning stages, Sharp established an all-encompassing, environmentally conscious policy at the Kameyama Plant, a production facility befitting an environmentally advanced company, and introduced state-of-the-art equipment to protect the environment. Assessment and certification standards for SGFs, which demand reductions in environmental impacts to the extreme, were established in fiscal 2003, in tandem with the construction of the Kameyama Plant. Sharp added certification standards for GFs in fiscal 2004 based on these standards and, at the same time, set a medium-term objective (see opening paragraph above) that targeted fiscal 2007 as the year of attainment. By setting the Kameyama Plant, the first SGF, as the pinnacle, Sharp aimed to raise the level overall, through applying these standards for reducing environmental impact in factories and bringing the know-how to meet them to other Sharp production facilities around the world.

This medium-term objective, which initially had been considered difficult to achieve, was reached by the Mie Plant (production facility for LCD panels in Mie Prefecture, Japan) in fiscal 2004. Sharp Manufacturing France S.A. (SMF; a manufacturing subsidiary for office equipment) subsequently achieved SGF status in fiscal 2005, the first overseas plant to do so. Around this time, Sharp plants around the world worked to leapfrog each other in meeting these standards. Today, six overseas plants have attained SGF status—results that exceeded expectations—and Sharp reached its medium-term objective on schedule in fiscal 2007.

### Launching SGF II—the Evolution of Super Green Factories

In fiscal 2008, Sharp launched SGF II as a second-stage effort targeting the 10 plants of Sharp Corporation. Under SGF II, 100 new points were added to the assessment items that had to be met previously and that had a full score of 100. Now, the 200 points required to achieve a perfect score have been categorized into S, A, B, and C grades, which will enable plants to gradually move up to a higher ranking as an SGF (see page 33).

Two new areas of emphasis have been added to the assessment. The first is an assessment of “soft” aspects, such as the know-how to operate, manage, and maintain environmental equipment. Even if the latest equipment were to be introduced, the skills and expertise to master its operation are necessary to derive the maximum performance and benefits, and this aspect of the assessment accordingly concentrates on this area.

The other is absolute reductions in the level of greenhouse gas emissions and the amount of waste discharged. Up to now, the target of the assessment had been reducing emissions per production unit so that, even if production had increased, it was still possible to achieve a reduction in these values. SGF II adds absolute reductions in emissions to this. Even though Sharp offers products that feature high environmental performance, such as solar cells and LCD TVs, the company will not tolerate an absolute increase in the level of emissions that would be expected to accompany production increases, but conversely, will take up the challenge of the difficult problem of reducing this level through continuous improvements in production efficiency.

 Kameyama Plant  
Green Factories

### SGF II Demands Human Abilities—A Strong Sense of Purpose and Ingenuity in Thinking

Skill and expertise are required to master environmental equipment and to get the most out of it, but these are not something that can be learned in a single day. One must learn through a step-by-step process of trial and error, while having a strong sense of purpose and high environmental awareness. And lowering environmental impact while expanding production is not something that can be achieved through conventional thinking.

I really feel we have come to the stage where the level of awareness and ingenuity in thinking will be the factors that make the difference in a factory.



Norio Sawai  
General Manager  
Environmental & Industrial  
Safety Center  
Environmental Protection  
Group  
Sharp Corporation

# Building the Sakai Manufacturing Complex, a Production Model for a Low-Carbon Society



Artist's conception of Sakai Manufacturing Complex (Sakai City, Osaka Prefecture, Japan)

## The World's First 10th-Generation LCD Panel Plant and One of the World's Largest Thin-Film Solar Cell Plants on the Same Site

Sharp was among the first to become involved with energy-saving LCD TVs and energy-creating solar cells, products which will lead respectively to reductions in CO<sub>2</sub> by supplanting CRT TVs and thermal power generation. Demand for both is expanding tremendously in all parts of the world, and to respond to this burgeoning demand, Sharp is constructing a new manufacturing complex in Sakai City, Osaka Prefecture, Japan, as part of its efforts to contribute to achieving a low-carbon society.

This manufacturing complex will be home to new LCD panel and solar cell plants. Both facilities are scheduled to go into operation by March 2010.

The LCD panel plant will be the first in the world to use 10th-generation glass substrates for the efficient manufacture of LCD panels for large LCD TVs. In addition, the solar cell plant will mass-produce thin-film solar cells. Its slated production capacity of 1 GW (gigawatt) per year is one of the largest in the world.

With its commitment to solar cells, energy-efficient products, and environmentally friendly factories, Sharp, as the frontrunner, whose aim is sustainable manufacturing and technological competency, will make this manufacturing complex a model manufacturing complex befitting a low-carbon society. That is, Sharp will be introducing the latest environmental protection equipment based on entirely new concepts, and on a scale that far surpasses the Kameyama Plant.

In addition, Sharp is aiming to achieve vertical integration that transcends the boundaries between companies, in which the vertically integrated business model created at the Kameyama Plant—from LCD panels to assembled LCD TV sets—is extended further upstream in the supply chain. The result will be reduced environmental impacts during distribution, of course, but also greater efficiencies derived from unifying such operations as production planning. Sharp is also planning the joint management of supply and recovery of energy, process gases, and chemical solutions, waste disposal, and recycling systems, as well as the construction of highly efficient production systems that will minimize environmental impacts.

### Overview of the New Plants

Location: Sakaihamma District, Sakai Ward, Sakai City, Osaka, Japan  
Site area: 1.27 million m<sup>2</sup>

#### LCD Panel Plant

Main product: LCD panels for large LCD TVs in the 40-, 50- and 60-inch class  
Glass substrate size: 10th generation (2,850 mm x 3,050 mm)  
Input capacity: 72,000 substrates per month  
(initial capacity at start of operations: 36,000 substrates per month)  
Amount of investment: Approx. 380 billion yen (including land acquisition costs)  
Start of operations: By March 2010

#### Thin-Film Solar Cell Plant

Main product: Thin-film silicon solar cells  
Glass substrate size: 1,000 mm x 1,400 mm  
Plant size: 1 GW (gigawatt)  
(initial capacity at phase one of operations: 480 MW)  
Amount of investment: Approx. 72 billion yen  
Start of operations: By March 2010

## Bringing Together the Expertise to Build a Highly Efficient Production System That Minimizes Environmental Impacts

Sharp has set a goal for the Sakai Manufacturing Complex, to build a revolutionary production system featuring extremely high efficiency and extremely low environmental impact, by marshaling the expertise gained from the participation by a number of leading companies in various types of industry and business.

For the LCD panel plant, Sharp will develop adjacent infrastructure-related facilities and has invited several leading manufacturers of materials such as glass substrates and color filters. This proximity will work to improve productivity by enabling shared infrastructure, including gas and electricity. Sharp is also aiming to achieve new technological breakthroughs by integrating the knowledge and know-how developed through close cooperation with engineers from material manufacturers who have superb technical capabilities.

In addition, the installation of new manufacturing equipment developed jointly with Tokyo Electron Ltd., which uses large glass substrates, will dramatically improve manufacturing efficiency in the thin-film solar cell plant.

Plus, since April 2007, Sharp and the Graduate School of Engineering, Osaka University have set up a joint research course on next-generation environmentally conscious production technologies, to develop innovative manufacturing techniques for LCDs and solar cells. Through this program, Sharp plans to conduct R&D and introduce basic technologies that contribute to resource-saving, energy-efficient, and clean manufacturing.

# Confronting the Challenge of Reducing the Costs of Solar Power Generation and Expanding Production of Thin-Film Solar Cells

## Reducing Costs Through Technological Innovations to Expand the Use of Solar Energy

Sharp first launched R&D on solar cells in 1959, and has worked toward the widespread use and expansion of solar energy for almost half a century. Sharp's cumulative production of solar cells over this time reached 2 GW by the end of 2007, a world first, and accounts for about a quarter of the total worldwide solar cell production of about 8 GW.

Up to now, Sharp efforts have revolved around crystalline solar cells, but amidst a global shortage and skyrocketing prices of silicon feedstock, the company is strengthening development of thin-film solar cells.

Even though thin-film solar cells have lower energy conversion efficiency than crystalline types, they use only about 1% of the amount of silicon and their production processes can readily be shortened and made more efficient. These advantages are expected to reduce the cost of solar power generation.

For this reason, Sharp will promote both crystalline and thin-film solar cells but will focus on thin-film solar cell technology. Energy conversion efficiency, regarded as the weak point for thin-film cells, has reached 10% at the development level. Sharp will augment its annual production capacity, currently at 15 MW per year, to 160 MW in October 2008, and is building a 480-MW production system as phase one of operations at the new Sakai Plant. The company will also be building plants overseas to put a global 1-GW production system in place.

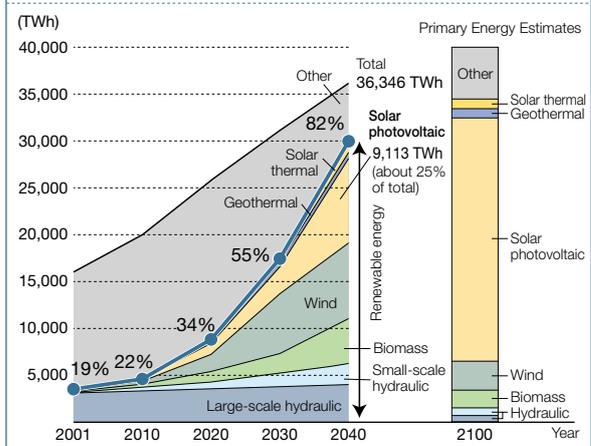
As shown in the graphs to the right, forecasts by the European Renewable Energy Council (EREC) predict a doubling of total worldwide power demand from current levels by 2040. Of that, approximately 25% will be covered by solar power generation, until it accounts for 60 to 70% by 2100. In addition, a solar power roadmap for the future from NEDO (New Energy and Industrial Technology Development Organization, an independent Japanese administrative agency) has set a first-stage target of reducing the cost of solar power generation to 23 yen per kWh, on a par with oil-fired thermal power, by 2010.

Both will require technological innovations to accomplish. Sharp is aiming to achieve a low-carbon society by taking up the challenge to reach these targets, based on its wealth of relevant technologies accumulated over the course of nearly half a century.



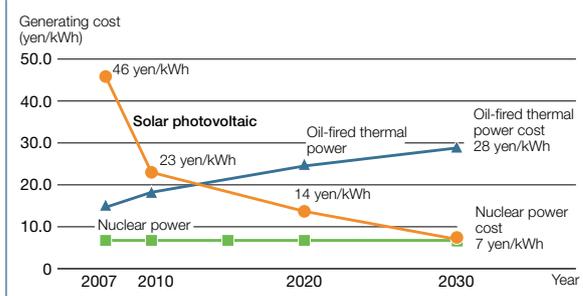
Thin-film, see-through solar modules used in skylights (City Hall, Suzuka City, Mie Prefecture, Japan)  
(Photo reproduces appearance in clear weather)

### Projected Global Electricity Demand



Source: Created by Sharp based on *Renewable Energy Scenario to 2040*, published by the European Renewable Energy Council, and reports of the German Advisory Council on Global Change (WBGU)

### Power Cost Targets for Solar Power Generation



Source: Created by Sharp based on *PV Roadmap 2030 (PV2030)*, published by NEDO

### Ensuring the Certain Success of Thin-Film Solar Cells

I joined Sharp to develop solar cells, but when I became involved in thin-film solar cells, no one around me thought that they would ever become a viable commercial product. Now, it fills me with emotion to think that they have grown into a full-scale business with the launch of the Thin-Film PV Division.



What I want to express to people inside and outside Sharp is the fact that we are serious. We are determined to set up a 1-GW production system worldwide. If we say we're going to do it, we will do it!

Yoshiyuki Nasuno  
Assistant Manager  
Technology  
Development Department  
Thin-Film PV Division  
Solar Systems Group  
Sharp Corporation

# The “LCD” That Comes After the LCD—Aiming for the Ultimate in Energy Efficiency and Minimal Resource Use

## The Ever-Evolving, Advanced Environmental Performance of the AQUOS LCD TV

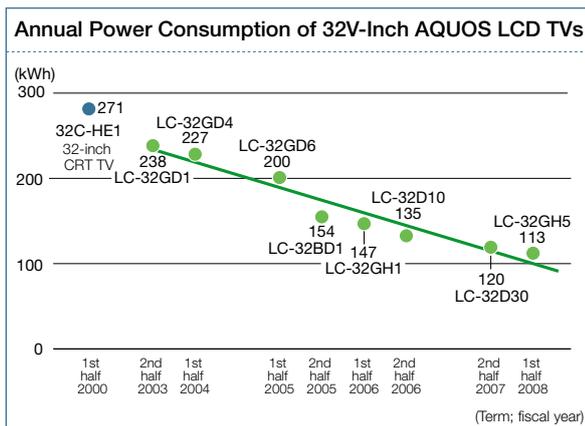
Sharp has been working to evolve liquid crystal displays (LCDs) and develop new applications for them ever since commercializing the world’s first practical application for an LCD as the display device in a compact electronic calculator in 1973. Features such as light weight, thin profile, and energy efficiency inherent to LCDs led to their widespread use, initially in mobile devices. Ultimately, the LCD TV emerged from this evolution, first from monochrome alphanumeric displays to graphics displays, and then to color-capable, full-motion video, high-resolution, and large-screen displays. In January 2001, the AQUOS made its debut as a television befitting the century of the environment.

The AQUOS exemplifies Sharp’s Super Green Product concept and symbolizes Sharp’s attitude toward environmentally conscious product design.

Compared to CRT TVs, it delivers the performance one would expect from an LCD TV, namely, energy efficiency, low resource utilization with a thin profile and light weight, and long life with a backlight lasting approximately 60,000 hours<sup>\*1</sup>, as well as making use of green materials wherever possible.

Looking ahead to a low-carbon society becoming a reality, and at a time when energy efficiency in consumer electronics is increasing in importance, Sharp has year after year consistently improved the energy-saving performance of the AQUOS (see below).

<sup>\*1</sup> A measure of the time until screen brightness declines by half under continuous viewing in a room at 25°C with screen brightness in Normal mode.



Prototype LCD TV (computer-generated graphic)

## Prototype LCD TV Featuring High Resolution, Super-Thin Profile, and Advanced Environmental Performance

In August 2007, Sharp brought together the essence of its LCD technologies accumulated over long years of experience in this field and announced a prototype LCD TV that far surpassed existing models in terms of image quality, thinness, and environmental performance. This prototype features a design with unprecedented, exceptional levels of performance, including a thickness of 20 to 29 mm, contrast ratio of 100,000:1<sup>\*2</sup>, color reproducibility of 150% of the NTSC color gamut<sup>\*3</sup>, power consumption of 140 kWh/year, and weight of 25 kg, all in a 50-inch class TV.

In addition to its superb image quality, the impact of a thickness of just 20 mm and power consumption of about one-half of existing LCD TVs was huge, and this development has significantly expanded the potential for energy efficiency and lower resource utilization in LCD TVs. If this prototype were to become available as a commercial product, replacing a conventional 32-inch CRT TV with this LCD TV in the 50-inch class would cut power consumption by roughly half.

Sharp will push ahead to reduce power consumption in all its products, particularly LCD TVs, through technological innovations, and contribute to the achievement of a low-carbon society.

<sup>\*2</sup> Indicates the brightness ratio between the darkest black and the whitest white on the screen (with the figure for black set at “1”). The higher this value, the more vivid and vibrant colors appear, and the clearer and more detailed the image quality on the screen.

<sup>\*3</sup> A numeric value indicating the percentage of area of the NTSC color spectrum that can be reproduced. The higher this value, the more vivid the primary colors (red, green, and blue) that can be reproduced.



## Superb Image Quality and a Super-Thin Profile with Far and Away the Lowest Power Consumption

In developing this new LCD TV, what we valued most was image quality. The public reaction to the super-thin profile was huge, but that is a feature we adopted more to make the beauty of the screen stand out. Along with superb image quality, we consistently sought to achieve power consumption that was far and away the lowest, even with a large screen.

I think this new LCD TV, which delivers outstanding energy efficiency, that is, power consumption about half that of a CRT TV, even with a screen twice as large, is a product that can contribute to the betterment of society.

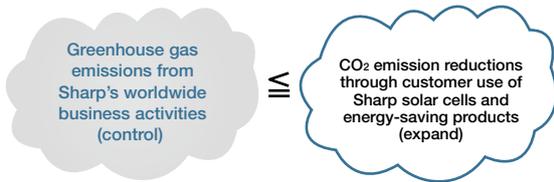


Tomohiko Yamamoto  
Manager  
A1255 Project Team  
Corporate Research &  
Development Group  
Sharp Corporation

# Aiming to Have Energy-Creating and Energy-Saving Products More Than Balance Out Greenhouse Gas Emissions

## Corporate Vision: Sharp's Energy-Creating and Energy-Saving Products Will More Than Balance Out Sharp's Greenhouse Gas Emissions

By reducing the amount of greenhouse gases emitted as a result of Sharp's worldwide business activities to the greatest extent possible, while at the same time significantly increasing the magnitude of reductions in greenhouse gas emissions through customer use of Sharp energy-creating solar cells and energy-saving products, the net reduction in greenhouse gases will more than balance out the level of emissions by fiscal 2010.



For fiscal 2007, Sharp's greenhouse gas emissions were approximately 1.76 million t-CO<sub>2</sub><sup>\*1</sup>. In contrast, the estimated amount of electrical power generated in fiscal 2007 by solar cells manufactured by Sharp during the 20-year period from fiscal 1987 to 2006 was approximately 1,870 GWh<sup>\*2</sup>. This is equivalent to a reduction in greenhouse gas emissions of approximately 0.77 million t-CO<sub>2</sub><sup>\*3</sup>. In addition, the amount of reductions in greenhouse gas emissions from the effect of customer use of energy-saving products was 0.60 million t-CO<sub>2</sub><sup>\*4</sup>.

- \*1 See page 34.
- \*2 Calculation based on a total of 1,780 MW of solar cells produced by Sharp in the 20 years from fiscal 1987 to 2006. (Please visit Sharp's website for detailed calculation methods.)
- \*3 Calculated using the figure of 0.410 kg/kWh for CO<sub>2</sub> emissions intensity (emissions per kWh of electricity consumed), announced by the Federation of Electric Power Companies of Japan (for fiscal 2006).
- \*4 Calculated based on reductions in power consumption in air conditioners, LCD TVs, and refrigerators shipped in Japan derived from the following formula and then using the conversion factor given in note 3 above (CO<sub>2</sub> emissions intensity for fiscal 2006): [Amount of reductions in power consumption] = [(average power consumption for representative models for fiscal 1997 (kWh)) - [power consumption for each model for fiscal 2007 (kWh)] x number of units sold for replacement purchase purposes for each model (units)]

### Achieving Sharp's Corporate Vision Through Energy Creation and Energy Saving

In August 2004, six months before the Kyoto Protocol went into effect, Sharp set a corporate vision: "Sharp's energy-creating and energy-saving products will more than balance out Sharp's greenhouse gas emissions," and set about to make this vision a reality, focusing on its Super Green Strategy (see page 24).

Specifically, with its SGF/GF initiatives, Sharp seeks to control to the greatest extent possible the amount of greenhouse gases emitted during the course of business operations, while at the same time, under the Super Green Product/Device initiative, push ahead to reduce greenhouse gases through customer use of Sharp's energy-creating solar cells and energy-saving products.

Balanced against the 1.76 million t-CO<sub>2</sub> of emissions from worldwide business activities is 1.37 million t-CO<sub>2</sub>, a combination of emission reductions from customer use of solar cells (0.77 million t-CO<sub>2</sub>) and energy-saving products (0.60 million t-CO<sub>2</sub>). The difference between the two is still 0.39 million t-CO<sub>2</sub>, but Sharp is further strengthening its efforts, with the intent of achieving its vision of Sharp's energy-creating and energy-saving products more than balancing out its greenhouse gas emissions before fiscal 2010.

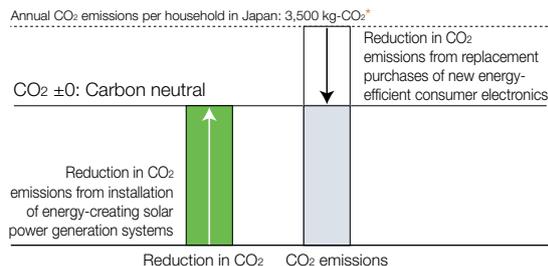
### Offering Carbon-Neutral Living Through Energy Creation and Energy Saving

Sharp is proposing carbon-neutral living through energy-creating solar cells and energy-saving consumer electronics. If all of the energy needs of a home could be covered by installing clean-energy residential solar power generation systems, a carbon-neutral way of living could be achieved that causes no warming of the Earth.

Sharp is contributing to bringing a low-carbon society into reality by further strengthening the energy-creating performance of its solar power generation systems and the energy-saving performance of its consumer electronics, so that carbon-neutral living will become a normal way of life.

 Corporate vision  
Carbon-neutral living

### Carbon-Neutral Living Through Energy Creation and Energy Saving



\* Calculated based on emissions of 174 million t-CO<sub>2</sub> originating from energy consumed by the residential sector in Japan in fiscal 2005, and a total number of 49.6 million households.

### Further Strengthening Energy Creation and Energy Saving Aimed at Achieving a Low-Carbon Society

As the frontrunner in energy-creating solar cells and energy-saving LCD TVs, Sharp is constantly working to innovate new technologies based on the skills and know-how accumulated over many years of experience in these fields.

Solar power generation will be extremely useful in making a low-carbon society a reality, and the completion of the Sakai Manufacturing Complex will mark a major milestone in Sharp's efforts to speed its widespread adoption and use.

Four years have passed since Sharp declared becoming an environmentally advanced company as a medium-term corporate objective, and its effects have begun to become apparent in every aspect of corporate activities. Sharp will be strengthening its efforts in the future to put this trend on a firm basis.



Hiroshi Morimoto  
Executive Officer  
Group General Manager  
Environmental Protection  
Group  
Sharp Corporation

# Further Expanding Plastic Recycling

Sharp has developed and put into practical use new technologies that help increase the potential of closed-loop material recycling,<sup>\*1</sup> which reuses plastic recovered from four kinds of home appliances (TVs, air conditioners, refrigerators, and washing machines). Based on these technologies, Sharp is greatly increasing the amount it recycles, with the goal of using 1,000 tons of recycled plastic in fiscal 2008.

\*1 Repeated reuse of recovered plastic in the parts of new consumer electronics products



① Recycled plastic pellets    ② Refrigerator with transport handles made from recycled plastic  
 ④ Recovered washing tub    ⑤ Recycled washing tub  
 ③ Washing machine with a bottom stand made from recycled plastic  
 ⑥ High-efficiency metal removal line (Kansai Recycling Systems)

## Developing Technology to Recycle Plastic

Although large amounts of plastic are used in consumer electronics, most of the plastic is disposed of as industrial waste after use. In 1999, with the aim of recycling that plastic, Sharp started developing the technology for closed-loop material recycling. In 2001, when the Japanese Law for Recycling of Specified Kinds of Home Appliances (Home Appliance Recycling Law) was enacted, Sharp and Kansai Recycling Systems Co., Ltd.<sup>\*2</sup> jointly put this recycling technology to practical use. Since then, through a series of technological advances and improvements to its facilities, Sharp has steadily increased its use of recycled plastic every year.

With the passage of more than six years since the technology was first put into practical use, washing machines equipped with tubs made from recycled plastic are now being sent to plants for recycling. Tests conducted on the washing tubs confirm that they possess the

properties needed for repeated recycling. These tubs are once again being recycled into parts of new home appliances.

## New Technology to Increase the Use of Recycled Plastic

The reuse of recovered plastic was previously limited to components made from a single resin material; plastic with metal parts and different types of resins still attached was disposed of as industrial waste. In August 2007, Sharp developed a technology to separate and recover high-purity polypropylene (PP) from plastic components previously subject to disposal, and recycle it into high-quality plastic. By employing this technology, Sharp can greatly expand its use of recycled plastic.

There are three significant aspects to the new technology. First, the high-efficiency metal removal line newly set up at Kansai Recycling Systems is based on a system in which

screws and other metal parts attached to recovered plastic components are accurately detected and removed, and the remaining plastic parts are placed into a crusher. Next, high-purity PP separation and recovery technology enables the recovery of PP in an almost 100% pure form from the crushed plastic through wind-power sorting and water-gravity separation. The third aspect involves plastic pigmentation technology developed by Ube Industries, Ltd. This proprietary technology for incorporating colored pigments into recovered PP to which additives have been mixed in after cleaning prevents impurities from being visible.

### Measures for Creating a Resource-Recycling Society

To increase the use of recycled plastic, it is necessary not only to expand the recovery of plastic but also to widen the applications of recycled plastic. Through the high-efficiency metal removal line and the high-purity PP separation and recovery technology, Sharp has greatly increased its recovery of recyclable plastic. Also, the plastic pigmentation technology has expanded the range of applications by

making it possible to reuse PP in the exterior components of new home appliances. In fiscal 2007, Sharp used PP developed through these technologies in refrigerator transport handles and in the bottom stands of washing machines. By further expanding the range of applications, Sharp plans to increase its use of recycled plastic to 1,000 tons in fiscal 2008.

Sharp has already applied this closed-loop plastic material recycling technology to the cabinets of LCD TVs<sup>3</sup> and to plant-based plastic<sup>4</sup>. Moreover, Sharp has developed and put into practical use plant-based resin paint made from corn<sup>5</sup>. Thus, by expanding the use of environment-friendly materials, which helps reduce the consumption of limited fossil resources, Sharp is contributing to the creation of a resource-recycling society.

\*2 A consumer electronics recycling company established with investment from Sharp Corporation, Mitsubishi Materials Corporation, and five other electronics companies.

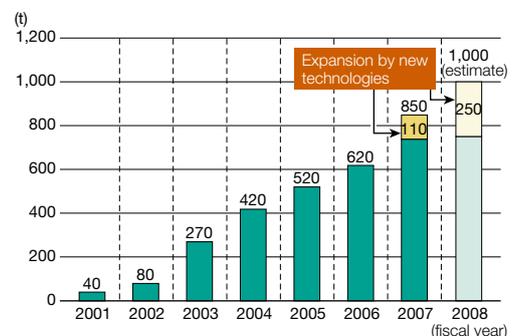
\*3 See page 30.

\*4 See page 30.

\*5 Developed jointly with Kansai Paint Co., Ltd. See page 29.



### Use of recycled plastic



Target and results of closed-loop plastic material recycling

### Evolving the Recycling Industry from a Venous Industry to a Materials Industry, to Create a Resource-Recycling Society

Our corporate vision is to be an advanced resource-recycling company valuable for humans and the Earth. To create a resource-recycling society, it is important to take on the challenge of conducting more advanced recycling: closed-loop material recycling is a prime example.

To further expand closed-loop material recycling, we will cooperate with Sharp in efforts to evolve the recycling industry from a "venous" disposal/renewal industry to an "arterial" materials industry.



Naoyuki Harada  
Manager  
Production Technology  
Department  
Kansai Recycling  
Systems Co., Ltd.

### Waste Plastic Is Domestically Produced Material

Plastic is made from oil. Our closed-loop material recycling technology, however, enables the production of plastic, while reducing the use of oil. In the sense that waste plastic can be substituted for oil in the production of plastic, it can be called "domestically produced material."

To further expand closed-loop material recycling for the effective use of waste plastic as domestically produced material, we will promote coordination among Kansai Recycling Systems, our product divisions, and subcontractors, and, with an eye toward establishing a resource-recycling society, we will work to create environmentally conscious products.



Yohei Kawaguchi  
Junior Manager  
Green Product Development  
Department  
Environmental Protection  
Group  
Sharp Corporation

# Environmental Forums and Sharp Charity Foundation Mark Sharp's Social Contribution Activities in China

In response to growing concerns over environmental problems, and proposals from municipal government officials in China, Sharp has been holding Environmental Forums to introduce global environmental issues and the company's environmental conservation efforts. Sharp has also been contributing to local communities through the Sharp Charity Foundation.



① Children in the area where the construction of a Sharp Hope Primary School is planned    ② Scholarship recipients at Southeast University (Nanjing)    ③ Tree-planting by employees  
 ④ Presentation ceremony for the public welfare organization Project Hope    ⑤ ⑥ Environmental forums

## Environmental Forums Introduce Sharp's Efforts to Become an Environmentally Advanced Company

Sharp has been holding environmental forums in cities across China: Shanghai (May 2007), Beijing (September 2007), Guangzhou (March 2008), and Tianjin (May 2008).

The forums came about after Chinese journalists on a study tour to the Kameyama Plant in Japan reported Sharp's environmental vision and conservation activities to municipal government officials back in China. Sharp saw this as an opportunity to launch a series of environmental forums in major cities, with the cooperation of municipal officials who take an interest in Sharp's environmental policies and measures.

At the forums, Sharp used explanatory panels and videos to introduce the measures the company takes in five areas—technologies, products and devices, factories, recycling, and management—all with the aim of becoming an environmentally advanced company.

During the exchange of opinions after the presentations, forum participants demonstrated a high level of concern about environmental issues in China, as they asked questions about the Japanese Home Appliance Recycling Law, Sharp's certification criteria for Super Green and Green Factories, and the environmental measures taken at Sharp's factories in China.

## Sharp Charity Foundation Grants Scholarships and Supports Public Institutions Through Donations

Sharp bases in China previously carried out social action programs on an individual basis, but in 2006, Sharp established the Sharp Charity Foundation in cooperation with the Shanghai Charity Foundation to unify those activities. Every year since then, Sharp's eight production and sales bases in China have donated to the fund for such activities as granting scholarships, as well as donating Sharp products to public institutions, and planting trees.

In fiscal 2007, Sharp engaged in a new form of social contribution activity by holding charity auctions. AQUOS LCD TVs used during the AQUOS Experience Tour, an event to experience the TVs' outstanding picture quality, were auctioned off. Thanks to the participation of people eager to make a contribution to society, proceeds totaling 500,000 yuan (approx. 7.5 million yen) went to Project Hope, a public welfare organization that works to construct schools in poverty-stricken areas of China. The proceeds from Sharp will be used to build a Sharp Hope Primary School in Chongqing and another in Anhui Province.

## Forest Grows as Symbol of Friendship Between China and Japan

In northwest China, desertification is advancing, and damage from yellow sand is affecting the city of Tianjin and surrounding areas. A desire to help protect China's natural environment spurred Sharp to start the Sharp China-Japan Friendship Forest in Wuqing District of Tianjin City as a joint effort between Sharp's eight subsidiaries in China, China Council for the Promotion of Environment and Forestry, and the Wuqing Forestry Bureau of Tianjin City. The tree-planting activities carried out under this reforestation project were funded by the Sharp Charity Foundation.

In fiscal 2007, about 7,400 poplar trees were planted in about seven hectares of a reforestation area in Tianjin. The project is intended to give rise to an approximately 27-hectare forest by 2010 that will serve as a windbreak against drifting sand. This friendship forest is expected to improve the living environment of local residents by increasing the level of greening and reducing damage from wind and dust storms, and it will be cultivated as a symbol of friendship between the people of China and Japan.

Sharp will continue carrying out social contribution activities through the Sharp Charity Foundation, with an eye to contributing to Chinese society and gaining the support of the local communities there.

## Words from Stakeholders

It is said that a company is required to fulfill its social responsibility. Sharp has established the Sharp Charity Foundation and, through this fund, is contributing to society and local communities. It is admirable that Sharp places as much importance on its social contribution activities as it does on its core business. I think that reflects far-reaching insight on the part of Sharp executives.

Jin Zhaomin  
Deputy Secretary-General  
Shanghai Charity Foundation



I feel honored and I greatly appreciate that we were chosen as one of the recipients of AQUOS LCD TVs. Our patients can now relax by watching TV. Inspired by Sharp's activities, we are also improving medical facilities at our hospital step by step. I hope Sharp will carry out this kind of social action program over the long term.

Zhang Fuxing  
Director of Hospital  
Shanghai Pudong New Area  
Jin Yang Community Medical Service Center



I feel greatly honored that our university became a recipient of Sharp scholarships. These activities by Sharp reflect Sharp's expectations for education in Shanghai and are also a huge contribution. I hope that the students who received the scholarships will study hard and return the favor to society in the future.

Zhang Mian  
Teacher  
College of Japanese Culture and Economy  
Shanghai International Studies University



Tree-planting activities conducted under the Sharp China-Japan Friendship Forest in Wuqing District of Tianjin City have played a big role in improving soil and the environment and in reducing damage from yellow sand affecting the Beijing and Tianjin areas. Particularly in the period leading up to the international sports festival in Beijing in 2008, the tree-planting activities have served as a model for environmental conservation activities conducted by Chinese and foreign companies.

Meng Fanzhi  
Secretary-General  
China Council for the Promotion of Environment and Forestry



The Sharp scholarship is the sunshine warming my heart. When I attended the scholarship presentation ceremony, I was overwhelmed with appreciation and emotion. According to an old saying, "One must return the favor of one drop of water by providing gushing spring water." Someday, I want to return this favor to society with the knowledge I will acquire.

Zhao Yifei  
Junior Student  
College of Japanese Culture and Economy  
Shanghai International Studies University



# Forests, Water, and Children—Expanding the Range of Environmental Social Contribution Activities

Sharp is developing environmental social contribution activities concerning forests, water, and children, with the Sharp Green Club (SGC), a volunteer organization jointly established by Sharp and its labor union, and the Environmental Education and Outreach Department of Sharp's Environmental Protection Group at the core of that movement. Through these activities, Sharp employees have become more aware of the importance of the environment and of volunteering. In the future, Sharp will promote coordination among individual activities with an eye to developing them on a global scale.



①



②



③

① Environmental education at the Shanghai Japanese School ② Fukuoka Sharp Takasu Forest ③ Water purification system at Moriya Pond

## Green Beginnings: Sharp Green Club and the Wakakusayama Green Campaign

Sharp's company-wide environmental social contribution activities in Japan date back to 1998, the start of the Green Mind Campaign spearheaded by Sharp's Environmental Protection Group. That campaign consisted of the Zero Waste and Zero Garbage campaigns, and Environmental Citizen Activities that involved regular cleanups of the areas around Sharp sites as well as employee participation in cleanups of neighboring communities.

Reflecting the growing awareness that promoting social contribution on a larger scale requires a core organization that can serve the entire company, Sharp and its labor union jointly established the Sharp Green Club (SGC) in June 2003 as a volunteer organization. On July 26, 2003, shortly after the club's inauguration, SGC held its first

Wakakusayama Cleanup Campaign in Nara Prefecture, Japan to commemorate the start of its full-scale environmental social action programs. More than 1,200 Sharp employees from the Kansai area, their family members and acquaintances, and subcontractor employees turned out to help with landscape preservation efforts at Wakakusayama and in the process became more aware of the importance of environmental conservation and volunteering.

To this day, SGC activities remain firmly rooted; in fiscal 2007, a total of 27,405 of the 31,600 Sharp Group employees in Japan took part in SGC activities there. SGC continues to raise awareness among Sharp employees by providing them with opportunities to voluntarily contribute to communities through environmental activities.

## Regenerating the Natural Environment Through Sharp Forests

Along with the Wakakusayama campaign, one of SGC's main activities is creating Sharp Forests in the areas around Japan where Sharp bases and sales and service offices are located. SGC started the first Sharp Forest in Hachihonmatsu Yoshikawa (Hiroshima Prefecture) in 2004. Under a basic concept of understanding the relationships between forests, human beings, and other living creatures, deepening those bonds, and fostering an environmentally friendly mindset, the Sharp Forest initiative aims to contribute to local communities through reforestation—planting and cultivating new trees on the sites of depleted forests—and to foster environmental awareness among Sharp employees through contact with the natural environment.

SGC expanded those activities to sales and service bases in fiscal 2007, creating Sharp Forests in Takamatsu (Kagawa Prefecture) and in Maebaru (Fukuoka Prefecture). Although the sales and service bases in Takamatsu and Maebaru are smaller than other Sharp bases, a large number of people participated in the projects; employees actively cooperated with local governments and residents and enlisted the help of Sharp-affiliated dealers.

In fiscal 2007, Sharp made preparations for the creation of Sharp Forests in Kameyama (Mie Prefecture) and in Naha (Okinawa Prefecture). The addition of those two locations will bring the number of Sharp Forests in Japan to 10. Although the scale may be small—on average, the forests cover an area of about two hectares—Sharp is committed to carefully cultivating those forests through the participation of employees, business partners, and people from the local communities.

 [Sharp Forests](#)

## Applying Environmental Technologies to Purify Reservoir Water

Closed bodies of water, such as reservoirs, are subject to eutrophication, a form of environmental deterioration brought on by organic components, nitrogen, and phosphorus. In November 2007, Sharp's Environmental Education and Outreach Department combined charcoal made through the superheated steam process developed by Professor Miyatake from Osaka Prefecture University's Graduate School of Life and Environmental Sciences, and a micro-nano-bubble system driven by a Sharp solar power generation system, to start up an experimental water purification system at the city-owned Moriya Pond in Sakai City (Osaka Prefecture), Japan.

The water purification campaign at Moriya Pond represents a collaboration among industry, government, academia, and private citizens, with ONE WORLD for Children, a nonprofit organization promoting local revitalization through environmental activities, acting as a liaison, and local citizens, including members of the Moriya Pond Society, playing a leading role.

## Preserving Historical Areas of Asuka

In October 2006, to preserve historical areas and make employees more aware of the importance of the environment, we began creating a wooded community park in Asuka Village (Nara Prefecture, Japan) by improving the condition of neglected rice terraces, forests, and bamboo groves, setting up birdhouses, and planting trees associated with the *Manyoshu* (*Anthology of Myriad Leaves*), a famous collection of early Japanese poetry. In appreciation of our activities, Asuka Village presented us with a certificate of gratitude recognizing us for our distinguished services to the village.

We will continue to enjoy working with local residents to create forests, all the while experiencing the surroundings described in the anthology.



Shingo Takai  
Department General Manager  
General Affairs Department  
Solar Systems Group  
Sharp Corporation

## SGC Wins Fiscal 2007 Nara Prefecture Environmental Merit Award

SGC received this award in recognition of its regular contributions to local communities through such initiatives as the Wakakusayama Green Campaign carried out by more than 1,200 Sharp employees and their family members every year, tree-planting and maintenance activities at Sharp Green Club Asuka Forest and at Tenri Kofun Sharp Forest, and cleanup activities conducted around Sharp sites.



## Striving for Local Revitalization, Starting with Moriya Pond

With the aim of creating a social environment that can give children hope for the future, we began our activities in 2004 as a nonprofit organization. Under the guidance of Professor Miyatake from the Graduate School of Osaka Prefecture University, we work once a month with Sharp employees, local citizens, and university students on activities to purify the water of Moriya Pond. Our primary goal is to start revitalizing the community, beginning with the pond, by having citizens rebuild the local environment with their own hands.



Kazumi Matsumoto  
Representative Director  
ONE WORLD for Children

## Putting Nature-Friendly Technologies to Work to Purify Water

Based on two environmental technologies—activation of pond microorganisms through micro-nano-bubbles using a solar power generation system and adsorption of pond organic matter using charcoal made with superheated steam—we are purifying pond water through an environmentally friendly method.

Though it takes some time to purify the water in a reservoir, we want to continue the purification of Moriya Pond as a collaboration among industry, government, academia, and private citizens, and we hope to succeed in the project as a new social business model for solar power generation systems.



Shuichi Akatsuka  
Assistant Department  
General Manager  
Environmental Education  
and Outreach Department  
Environmental Protection  
Group  
Sharp Corporation

### Working with Weathercasters to Take Environmental Education to Elementary Schools Around Japan



Under the auspices of its Environmental Education and Outreach Department, Sharp has been working with the Weathercaster Network (WCN), a nonprofit organization of weather forecasters in the Japanese media, since October 2006 to hold environmental education classes for fourth to sixth graders at elementary schools around Japan. In their presentations, Sharp and WCN explore one of two themes: global warming and recycling or global warming and new energy (solar power). To teach students about global warming, WCN representatives explain familiar changes in weather patterns and Sharp presenters called ECO Navigators use experiments to introduce recycling or new energy.

In fiscal 2007, more than 1,000 schools applied for the program. Through a drawing, Sharp and WCN selected 537 of those schools to visit, giving about 37,000 students a chance to take part in the program. To enable classes to be held around the country, Sharp has appointed employees from sales and service bases across Japan to serve as ECO Navigators and has increased their number from 280 to about 320 in fiscal 2007.

Sharp plans to present environmental education programs at more than 500 schools in fiscal 2008. In Hokkaido, Sharp contributed to the Hokkaido Toyako Summit Preparation Council's projects to support the July 2008 G8 Hokkaido Toyako Summit by covering summit-related environmental topics at elementary schools there.

In the future, Sharp will try to help students understand the fun of product making and the importance of the natural environment, by expanding its program to include such themes as eco-friendly manufacturing and familiar natural environments.

Internationally, Sharp's efforts to provide elementary school students in China with environmental education on the theme of recycling have begun by taking its program to a Japanese school in Shanghai. Moreover, Sharp is cooperating with local nonprofit organizations in the US states of New Jersey and California to deliver environmental education on solar power.

Sharp has been gradually widening the scope of its activities related to forests, water, and children. And, with an eye toward the future and based on a solid philosophy, Sharp will make these activities into lasting, meaningful ones. By also focusing attention on relationships, such as those between forests and water and between forests and children, Sharp will coordinate and fuse individual activities to develop new ones for the future.

### Improving the Global Environment Lets Us Realize Our Dreams

We received several significant awards for our environmental education classes last fiscal year. I think we were able to accomplish all that we did because of support from Sharp.

All human beings live with a dream. To realize those dreams, we must improve the global environment. With the help of Sharp again this fiscal year, we will work to prevent global warming, the biggest concern facing humanity.



Nobuyuki Hirai  
Representative  
Weathercaster Network

### Sharp Wins Three Awards for Elementary School Environmental Education

Sharp earned high praise for activities to raise awareness about new energy and the prevention of global warming.

Partnership Prize  
Partnership Awards  
(sponsored by  
Partnership  
Support Center)

Agency of Natural  
Resources and Energy  
Director General's Prize  
New Energy Award  
(sponsored by New  
Energy Foundation)

Agency of Natural Resources  
and Energy Director General's  
Prize  
Energy-Related Public Relations  
Commendation (sponsored by  
Japan Productivity Center for  
Socio-Economic Development)



### Fostering Experts from Hokkaido Who Can Help Solve Global Environmental Problems

I have been surprised by how much children know about environmental problems. They flash their brilliant smiles in classes—my experiences as a presenter have been wonderful!

Since the G8 summit was held in Hokkaido this year, the people here have become more aware of the importance of the environment. I hope that, by providing classes with enhanced content, I can help the local community foster children who can contribute to the solution of global environmental problems.



Hiroshi Sasaki  
Sapporo ECO Navigator  
Manager  
Administration Department  
Hokkaido Branch  
Sharp Electronics Marketing  
Corporation

### Desire to Protect the Earth Is a Universal Feeling

In addition to elementary schools in Japan, I have conducted classes at the Shanghai Japanese School and at an international school. Wherever I visited, children took part in my class with a serious, enthusiastic attitude.

I believe that the desire to protect the earth is universal. I will continue making presentations that can be inspirational to children, who must carry us into the future.



Satoe Saito  
Junior Manager  
Environmental Education and  
Outreach Department  
Environmental Protection Group  
Sharp Corporation



Elementary school environmental education  
Everybody's an ECO fan

# Sharp and the Environment

In Pursuit of Becoming an Environmentally Advanced Corporate Group

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Sakai Manufacturing Complex  
(artist's conception of completed facilities)

# Advanced Measures for Environmental Conservation as Management Policy

In accordance with environmental 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 conservation in all aspects of its business activities. Since fiscal 2004, when the medium-term corporate objective of becoming an environmentally advanced company was first set, Sharp has been promoting the Super Green Strategy to achieve its corporate vision and to establish sustainable manufacturing systems.

**Basic Environmental Philosophy**

**Creating an Environmentally Conscious Company with Sincerity and Creativity**

## Medium-Term Corporate Objective: An Environmentally Advanced Company

Since fiscal 2004, Sharp has set forth the medium-term corporate objective of becoming an environmentally advanced company as its basic management policy, and has set its corporate vision as "Sharp's energy-creating and energy-saving products will more than balance out Sharp's greenhouse gas emissions." To achieve these goals, Sharp is globally developing a Super Green Strategy that aims to maximize environmental awareness.

## Main Objectives and Fiscal 2007 Achievements

In fiscal 2007, Sharp's fourth year of pursuing the medium-term corporate objective of becoming an environmentally advanced company, Sharp began seeing results in a variety of areas.

With regard to environmental technologies, Sharp developed and put into practical use new technologies for closed-loop plastic material recycling, and also increased the use of recycled plastic and expanded its applications to the exterior components of home appliances. For its plant-based resin paint, which it is continually developing new applications for, Sharp was honored with the second Monodzukuri Nippon Grand Award, and awarded the Prize for Industrial Technology sponsored by the Japan Society of Colour Material.

Also, for the third year in a row, Sharp's products and devices exceeded sales percentage targets for all four kinds of Green Products and Green Devices.

Sharp has achieved the medium-term objective it set in fiscal 2004 of upgrading all 10 Sharp Corporation factories to Super Green Factories, as well as upgrading all other domestic and overseas Sharp Group factories, including those of subsidiaries and affiliates, to Green Factories or higher. Specifically, it has exceeded both domestic and overseas targets in terms of reducing greenhouse gases, and waste has decreased by double-digit percentages at overseas production sites for three years in a row. However, these reductions were all achieved per production unit, and Sharp will aim to reduce the absolute amount of emissions at existing factories in the future.

Other significant results include the start of the Green Office certification system, the reduction of discharge risks for chemical substances placed under high-priority control, and target-exceeding reductions of CO<sub>2</sub> emissions associated with distribution.

Sharp will further strengthen its policies related to becoming an environmentally advanced company, and will establish a system of sustainable manufacturing, with the top priority of contributing to the creation of a low-carbon society.

**The Sharp Group Charter of Corporate Behavior**

**Contribution to Conservation of the Global Environment**

The Sharp Group will fulfill our responsibility for environmental conservation by promoting the creation of proprietary technologies that contribute to protection of the global environment, and by carrying out our product development and 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

[Web](#) [Sharp Group Charter of Corporate Behavior \(full text\)](#)  
[Sharp Code of Conduct \(full text\)](#)

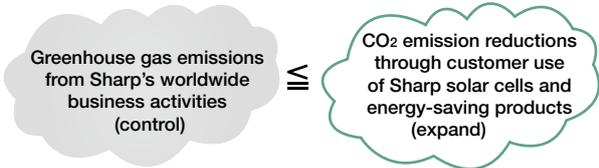
Stages	Themes	Major Objectives
Environmental Sustainability Management	Environmental management system	Implement Sharp Environmental Management System (S-EMS)
		Acquire ISO 14001 certification
		Build Integrated Management System (IMS) <sup>*1</sup>
		Conduct cross audits
Planning and Design	Establish 3R technologies	Promote closed-loop plastic material recycling
		Establish LCD TV recycling technology
	Develop Green Products	Increase Green Seal Products' share of net sales in Japan <sup>*2</sup>
		Increase Super Green Products' share of net sales in Japan
Develop Green Devices	Increase Green Devices' share of net sales <sup>*3</sup>	
	Increase Super Green Devices' share of net sales	
Manufacturing	Convert factories to Green Factories	Build Green Factories (GF) and Super Green Factories (SGF)
	Curb greenhouse gas emissions	Reduce CO <sub>2</sub> emissions (per production unit)
	Reduce and recycle waste	Reduce amount of waste discharged (per production unit)
	Reduce risk from harmful chemicals	Reduce discharge risk of chemicals under high-priority control
Logistics	Reduce distribution-related CO <sub>2</sub> emissions	Shift to environmentally friendly modes of transport
		Reduce CO <sub>2</sub> emissions
Recycling	Recycle used products	Enhance and improve recycling systems

\*1 The Integrated Management System is a system that simultaneously reduces environmental impact and improves quality.

\*2 The sales ratio of Green Seal Products includes sales of Super Green Products.

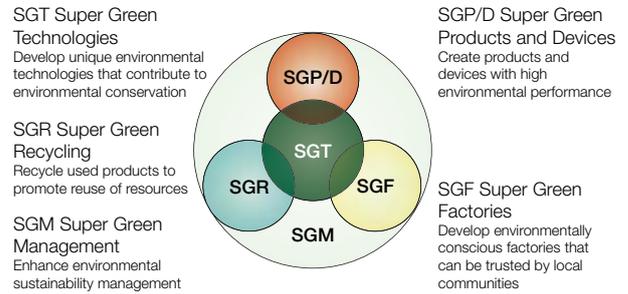
\*3 The sales ratio of Green Devices includes sales of Super Green Devices.

**Corporate Vision: Sharp's Energy-Creating and Energy-Saving Products Will More Than Balance Out Sharp's Greenhouse Gas Emissions**



By reducing the amount of greenhouse gases emitted as a result of Sharp's worldwide business activities to the greatest extent possible, while at the same time significantly increasing the magnitude of reductions in greenhouse gas emissions through customer use of Sharp energy-creating solar cells and energy-saving products, the net reduction in greenhouse gases will more than balance out the level of emissions by fiscal 2010. For details, see page 14.

**Super Green Strategy: Aiming to Become an Environmentally Advanced Company**



Self Evaluation ○ : Achieved more than targeted ○ : Achieved as targeted △ : Achieved more than 80% of initial target × : Achieved less than 80% of initial target

Fiscal 2007 Objectives	Fiscal 2007 Achievements	Self Evaluation	Fiscal 2008 Objectives	Fiscal 2010 Objectives	See page(s)	
Introduce S-EMS at 22 overseas production sites	Introduced S-EMS at 22 overseas production sites	○	—	—	25-26	
Complete certification at all overseas non-production consolidated subsidiaries	Completed certification at all overseas non-production consolidated subsidiaries	○	—	—		
Build IMS at 6 domestic production sites in total	Built IMS at 4 domestic production sites in total	×	Build IMS at 5 domestic and 5 overseas production sites in total	Build IMS at 5 domestic and 12 overseas production sites in total		
Conduct cross audits at 10 overseas production sites in total	Conducted at 12 overseas production sites in total	◎	Conduct at 15 overseas production sites in total	Conduct at 22 overseas production sites in total		
Introduce trial runs of Green Office certification system at domestic non-production sites	Total of 17 domestic non-production sites certified	◎	Certify 30 domestic non-production sites in total	Certify 56 domestic non-production sites in total	15-16	
Use 800 tons of recycled plastic in new products	Used approx. 850 tons	◎	Use 1,000 tons	Use 1,400 tons		
Conduct experimental study of LCD TV recycling technology	Identified problems in LCD TV recycling and formulated solutions	○	Complete proof-of-concept experiments for LCD TV recycling	Construct LCD TV recycling line (fiscal 2009 objective)		30
Green Seal Products account for 90% or more of net sales	Approx. 95%	◎	90% or more	90% or more		31-32
Super Green Products account for 50% or more of net sales	Approx. 60%	◎	55% or more	60% or more		
Green Devices account for 75% or more of net sales	Approx. 84%	◎	80% or more	90% or more		
Super Green Devices account for 15% or more of net sales	Approx. 21%	◎	20% or more	20% or more	33	
All 10 Sharp Corporation production sites SGF	All SGF	○	Put new SGF II policies in place	All business sites grade A or higher (fiscal 2012 objective)		
All 7 domestic production sites (subsidiaries/affiliates) GF or higher	All GF	○	2 SGF; all others GF	All business sites grade B or higher (fiscal 2012 objective)		
All 22 overseas production sites (subsidiaries/affiliates) GF or higher	All GF or higher (6 SGF and 16 GF)	○	9 SGF; all others GF	All business sites grade B or higher (fiscal 2012 objective)	34	
<b>Japan</b> (10 Sharp Corporation production sites): Product sites: Reduce by 2% from previous fiscal year (every fiscal year) Device sites: Reduce by 5% from previous fiscal year (every fiscal year)	<b>Reduced by approx. 15% from previous fiscal year</b> <b>Reduced by approx. 7% from previous fiscal year</b>	◎	Reduce by 2% from previous fiscal year (every fiscal year) Reduce by 5% from previous fiscal year (every fiscal year)	Japan: Reduce CO <sub>2</sub> emissions per adjusted production unit <sup>4</sup> by 35% compared to fiscal 1990 levels at all production sites (average for fiscal 2008 to 2012)		
<b>Overseas:</b> Reduce by 2% from previous fiscal year at all production sites (every fiscal year)	<b>Reduced by approx. 10% from previous fiscal year</b>	◎	Reduce by 2% from previous fiscal year (every fiscal year)		35	
<b>Japan:</b> Reduce amount of waste discharged per production unit by 3% from previous fiscal year (every fiscal year)	<b>Increased by approx. 14% from previous fiscal year</b>	×	Reduce by 3% from previous fiscal year (every fiscal year)			
<b>Overseas:</b> Reduce amount of waste, etc. discharged <sup>5</sup> per production unit by 2% from previous fiscal year (every fiscal year)	<b>Reduced by approx. 10% from previous fiscal year</b>	◎	Reduce by 2% from previous fiscal year (every fiscal year)		36	
Reduce discharge risk at Sharp Corporation production sites in Japan by 60% compared to fiscal 2003	<b>Reduced by 75% compared to fiscal 2003</b>	◎	Formulate new policy for management of chemical substances	Set in place new policy for management of chemical substances (fiscal 2012 objective)		
Shift to environmentally friendly modes of transport Domestic railway cargo transport (container transport): 15,600 containers	<b>20,619 containers</b>	◎	—	—	37	
Reduce CO <sub>2</sub> emissions per sales unit <sup>6</sup> by at least 1% from previous fiscal year by Sharp Group in Japan	<b>Reduced by 14% from previous fiscal year</b>	◎	Reduce by 1% from previous fiscal year (every fiscal year)			
Respond to increased number of items requiring recycling	<b>Developed recycling technology for flat-panel (LCD) TVs (completed technical studies at laboratory level)</b>	○	Build recycling system for flat-panel (LCD) TVs	Implement recycling system for flat-panel (LCD) TVs (fiscal 2009 objective)	38	

<sup>4</sup> Per adjusted production unit (t-CO<sub>2</sub>/100 million yen) = CO<sub>2</sub> emissions (t-CO<sub>2</sub>) ÷ (production output (100 million yen) ÷ domestic corporate price index (electrical and electronic equipment) determined by the Bank of Japan)

<sup>5</sup> Amount of waste, etc. discharged = Amount of waste discharged + amount of valuable resources

<sup>6</sup> CO<sub>2</sub> emissions per sales unit (t-CO<sub>2</sub>/100 million yen) = CO<sub>2</sub> emissions (t-CO<sub>2</sub>) ÷ net sales (100 million yen)

# Advancing Super Green Management

Sharp's system for advancing environmental sustainability management is centered on the Environmental Protection Group. Under this system, Sharp is continuously making efforts to strengthen environmental sustainability management and raise employees' environmental awareness by building an Integrated Management System that is incorporated into a strategic management system and by implementing environmental education programs.

Objectives for Fiscal 2007	Achievements for Fiscal 2007	Objectives for Fiscal 2008	Objectives for Fiscal 2010
Introduce S-EMS at 22 overseas production sites	Introduced S-EMS at 22 overseas production sites	—	—
Complete ISO 14001 certification at all overseas non-production consolidated subsidiaries	Completed ISO 14001 certification at all overseas non-production consolidated subsidiaries	—	—
Build Integrated Management System at 6 domestic production sites in total	Built Integrated Management System at 4 domestic production sites in total	Build Integrated Management System at 5 domestic and 5 overseas production sites in total	Build Integrated Management System at 5 domestic and 12 overseas production sites in total
Conduct cross audits at 10 overseas production sites in total	Conducted cross audits at 12 overseas production sites in total	Conduct cross audits at 15 overseas production sites in total	Conduct cross audits at 22 overseas production sites in total
Introduce trial runs of the Green Office certification system at domestic non-production sites	A total of 17 domestic non-production sites Green Office certified	Certify 30 Green Office domestic non-production sites in total	Certify 56 Green Office domestic non-production sites in total

## Environmental Sustainability Management Centered on the Environmental Protection Group

Under the aegis of the Environmental Protection Group, which plays a key role in Sharp's environmental sustainability management, Sharp holds biannual General Global Environmental Conferences. The conferences discuss and set environmental guidelines, strategies, and objectives for all Sharp Group companies. Sharp also hosts Company-Wide GP (Green Product) and GF (Green Factory) Conferences on a nearly bimonthly basis to discuss specific environmental measures concerning products and plants.

Also, at regional environmental conferences held in four world regions, participants gain a deeper understanding of environmental guidelines, strategies, and objectives, as well as discuss specific themes and case reports from each site.

With the Environmental Protection Group playing a central role, managers and departments in charge of environmental matters at all sites are working closely together to put Sharp's environmentally advanced policies into practice.

### Sharp Group's environmental sustainability management

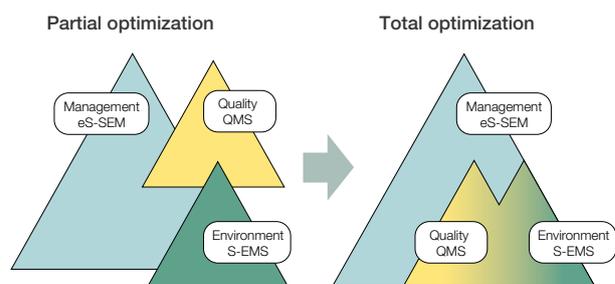


## Integrated Management System Incorporated into the eS-SEM Strategic Management System

Sharp has put in place a proprietary environmental management system (S-EMS<sup>\*1</sup>) aimed at reinforcing environmental legal compliance and improving environmental activities. For products and services, Sharp has introduced its Quality Management System (QMS) to carry out thorough quality control, further improve quality, and raise customer satisfaction levels.

In fiscal 2006, the previously separate S-EMS and QMS were merged into the Integrated Management System, which has been incorporated into Sharp's original strategic management system (eS-SEM<sup>\*2</sup>). The Integrated Management System has been adopted at the Hiroshima Plant and the Yao Plant. Through total optimization, the Integrated Management System has allowed problem solving to become easier and management to become more precise and efficient. In fiscal 2007, the Integrated Management System was also implemented at plants in Tochigi and Mihara, and in fiscal 2008 Sharp looks to continue spreading the system throughout domestic sites and begin overseas implementation.

### Structure of Integrated Management System



\*1 S-EMS (Sharp Environmental Management System): Sharp's original environmental management system based on ISO 14001 plus an additional 49 original criteria.  
 \*2 eS-SEM (e-Sharp Strategic Enterprise Management): Sharp's original strategic management system based on the balanced scorecard concept.

## Introducing Green Office Certification

Given the importance of applying environmental measures to the office, Sharp introduced the Green Office certification system at non-production sites in Japan in fiscal 2007 as a complement to the S-EMS.

This certification recognizes an office as a Green Office if it follows eight designated evaluation criteria, such as “Adherence to environmental laws” and “Prevention of global warming.” By establishing specific numerical goals and quantifying the degree to which those goals are met, Sharp is working to “visualize” the results of its environmental efforts in the office.

This system resulted in 17 out of 56 offices attaining certification in fiscal 2007. Sharp plans to expand the certification to include a wider variety of workplaces and pursue certification of overseas non-production sites as well.

## Green Office certification standards

Evaluation criteria	Evaluation points
Adherence to environmental laws	<ul style="list-style-type: none"> <li>Adherence to laws</li> <li>The conditions of compliance as evaluated by internal and external audits</li> </ul>
Reduction of environmental impact through work specific to each business division	<ul style="list-style-type: none"> <li>Selling of environmentally conscious products</li> <li>Improvement of employee skills</li> </ul>
Prevention of global warming	<ul style="list-style-type: none"> <li>Energy-saving efforts</li> <li>Introduction of eco-cars</li> </ul>
Waste management	<ul style="list-style-type: none"> <li>Promotion of zero discharge to landfill</li> <li>Introduction of electronic manifestos</li> </ul>
Green purchasing, etc.	<ul style="list-style-type: none"> <li>Reduction of paper usage</li> <li>Promotion of green purchasing</li> </ul>
Environmental maintenance in the workplace	<ul style="list-style-type: none"> <li>Operational management of facilities and equipment</li> <li>Management of waste storage facilities</li> </ul>
Implementation of environmental education	<ul style="list-style-type: none"> <li>Achievement ratio of education programs</li> <li>Acquisition of S-EMS auditors</li> </ul>
Environmental social action programs	<ul style="list-style-type: none"> <li>Implementation of community activities</li> <li>Support of environmental education programs at elementary schools</li> </ul>

## Conducting Cross Auditing Overseas

To augment internal audits being done on a per-site basis, in fiscal 2001 Sharp initiated cross audits in which multiple sites in Japan audit each other. Cross audits were introduced overseas in fiscal 2006.

Cross audits were introduced with the goal of raising the proficiency of internal auditors and improving audits. Sharp is seeing big results from the auditors exchanging their wide-ranging know-how through mutual study and development, and also expanding their knowledge and enriching their personal network.

In fiscal 2007, six audit sites in China, three in Malaysia, two in Indonesia, and one in the Philippines were added to the audits already taking place in Japan. Future plans involve setting up more cross audits at sites in Southeast Asia, Europe, and North America.



Cross audit at SREC in Malaysia

## Stepping Up Environmental Education and Training

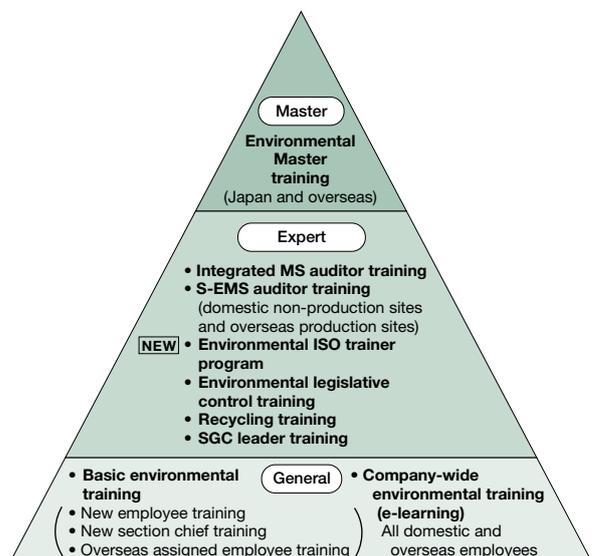
Sharp offers systematic environmental education and training, divided into Master, Expert, and General courses.

In fiscal 2007, Sharp held Environmental Master training for environmental officers at each plant. The training took place five times at four sites in Japan, and also at six sites in China and three sites in Malaysia. The training included lectures and group discussions about themes closely connected to business, such as environmental strategies, adherence to laws, environmental facilities, energy savings, waste disposal, and management of chemicals.

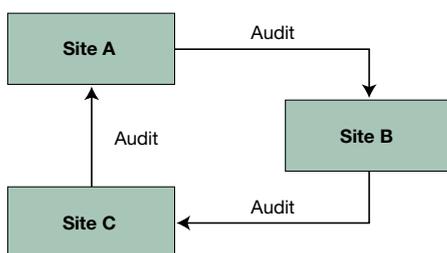
Also, a new environmental ISO trainer program was added to the Expert course for people who train S-EMS auditors.



## Environmental education and training system



## Cross audits of S-EMS operations between sites



## Advancing Super Green Management

## Environmental Accounting

Sharp introduced environmental accounting in fiscal 1999 to provide a quantitative assessment of the costs and benefit of its environmental conservation activities, and has applied the results to environmental sustainability management. Beginning in fiscal 2005, Sharp adopted a disclosure format that follows the Environmental Accounting Guidelines 2005 published by the Japanese Ministry of the Environment.

## Environmental conservation costs

Due to the reporting of environmental investment in research and development departments that started in fiscal 2007, investment in environmental conservation increased to approximately 3.6 billion yen, up 16% compared to the previous fiscal year. As production increased, environmental conservation expenditures rose to approximately 20.3 billion yen, up 32% over the previous fiscal year, due to the increase of waste disposal fees and the costs associated with controlling greenhouse gas emissions.

## Economic benefits

As a result of reporting the effects of reusing cartridges for copiers starting in fiscal 2007, actual benefit increased by 50% compared to the previous fiscal year, to 6.5 billion yen. In addition, Sharp provided environmental education for fourth through sixth grade students at 537 elementary schools in Japan, exceeding the initial target of 500 schools.

Classification of Environmental Conservation Activities ( ): Category based on Environmental Accounting Guidelines 2005, Ministry of the Environment		Environmental Conservation Costs (Unit: ¥ million)		Economic Benefit (Unit: ¥ million)		Environmental Conservation Effects			See page(s)		
		Investment	Expenses	Actual Benefit	Estimated Benefit	Physical Effects		Estimated Benefit			
Environmental Sustainability Management (management activities)	<ul style="list-style-type: none"> <li>Operation of environmental management system</li> <li>Promote environmental sustainability management</li> <li>Environmental education activities</li> </ul>	43 (10)	1,840 (1,509)	-	-	Promote environmental sustainability management			25 • 26		
						Number of employees with environmental education	Master General	125 504 450		- - -	
Planning and Design (R&D)	<ul style="list-style-type: none"> <li>R&amp;D on solar power generation systems</li> <li>Promote closed-loop recycling of plastic materials</li> <li>R&amp;D on basic environmental technologies</li> <li>R&amp;D on plant-based resin paint</li> </ul>	452 (-)	2,385 (2,005)	-	43,638 (35,129)	Supply environmentally conscious products (Unit: ¥ million)			12 { 16  29 { 32		
						Green Seal products' share of net sales		95.1%		-	
						Super Green products' share of net sales		59.5%		-	
						Total amount of power generated by solar power generation systems		1,870 GWh		39,270	
						CO <sub>2</sub> emissions reduced by solar power generation systems		0.77 million t-CO <sub>2</sub>		1,848	
						Electric power saved from energy-saving products		115 GWh		2,407	
Manufacturing	Reduce greenhouse gas emissions (global environmental conservation)	<ul style="list-style-type: none"> <li>Introduce PFC abatement systems</li> <li>Install solar power generation systems</li> <li>Introduce energy-saving equipment</li> </ul>	1,679 (1,027)	2,263 (1,568)	2,386 (2,018)	1,372 (1,121)	Greenhouse gas emissions reduced by controlling electricity and fuel consumption (Unit: ¥ million)			10 • 11	
							CO <sub>2</sub> emissions reduced		99 thousand t-CO <sub>2</sub>		237
							PFC emissions reduced		473 thousand GWPt		1,135
	Minimize and recycle waste (recycle resources)	<ul style="list-style-type: none"> <li>Reduce waste discharge and recycle waste into valuable resources</li> <li>Recycle water</li> </ul>	19 (135)	8,334 (5,044)	2,368 (2,288)	-	Waste recycled or sent for appropriate disposal				
							Waste recycled		201 thousand tons	-	
							Recycled and reused water		19,032 km <sup>3</sup>	-	
Prevent pollution (prevent pollution)	<ul style="list-style-type: none"> <li>Install scrubbers</li> <li>Introduce exhaust gas treatment systems</li> </ul>	1,358 (1,908)	5,369 (5,150)	-	-	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			33 { 36		
						Collection, recycling, and proper disposal of used products					
						Used PCs recycled		23 tons		-	
Recycling/Logistics (upstream/downstream)	<ul style="list-style-type: none"> <li>Promote collection, recycling, and proper disposal of used products</li> </ul>	8 (0)	15 (12)	1,757 (24)	-	-	Used copiers recycled			37 • 38	
							Used home appliances (4 categories) recycled				
							Environmental burden during distribution reduced (Unit: ¥ million)				
							Railway cargo transport (container transport)		20,619 containers		-
							Number of low-pollution vehicles introduced		132		-
							Environmental social contributions				
Social Responsibility	<ul style="list-style-type: none"> <li>Expand social contribution activities</li> </ul>	-	44 (49)	-	-	Number of employees who attended SGC activities			51 • 52		
						Number of schools where environmental education was provided					
Total		3,559 (3,080)	20,250 (15,337)	6,511 (4,330)	45,010 (36,257)	Note: Figures in parentheses below entries represent actual values from the previous fiscal year.					

## Explanation of terminology

## Environmental conservation costs

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

## Economic benefit

Contributions to society and to the company, which result from environmental conservation activities, expressed in monetary units.

Actual benefit: Economic effects that can be assessed directly in monetary terms, such as cost savings from energy-saving efforts and use of recycled water, as well as profits from the sale of valuable resources.

Estimated benefit: Sharp Corporation uses the following terms to convert the economic effects of reduced greenhouse gas emissions and electricity savings from the use of solar power generation and energy-saving products into equivalent monetary amounts.

- Reduced greenhouse gas emissions converted into equivalent monetary amounts: 2,400 yen/t-CO<sub>2</sub>.
- Electricity savings converted into equivalent monetary amounts: Unit cost of electricity: 21 yen/kWh.

## Sites covered

A total of 16 sites (and companies) in Japan fall within the scope of environmental accounting: Sharp Corporation sites at Tochigi, Yao, Hiroshima, Nara, Katsuragi, Fukuyama, Mie, Tenri, Mihara, Kameyama and Toyama, Sharp's head office, the Tanabe office, Sharp Manufacturing Systems Corporation, Sharp Niigata Electronics Corporation, and Sharp Yonago Corporation.

## Period covered

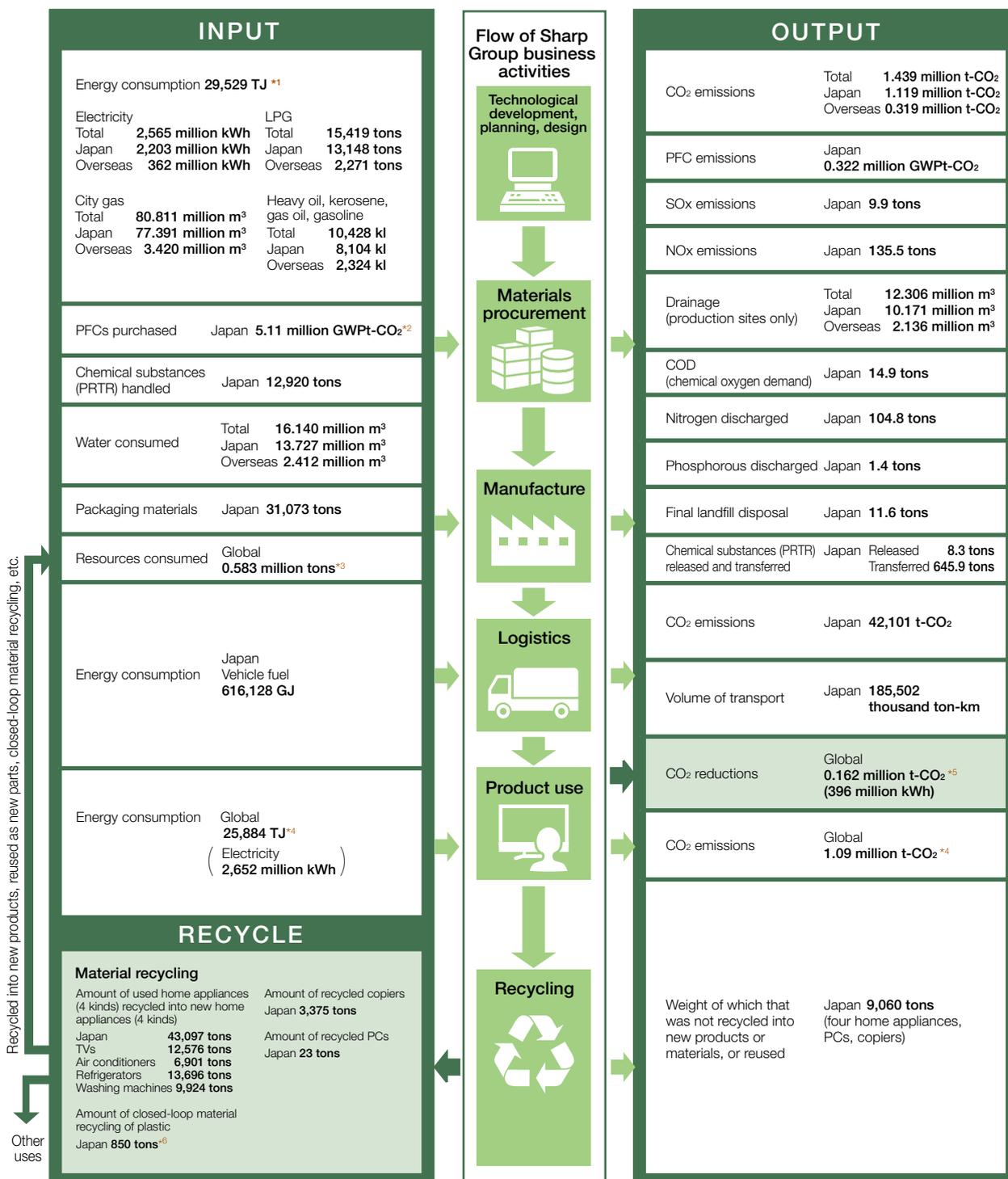
April 1, 2007 to March 31, 2008

## Referenced guidelines

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

## How Business Activities Relate to the Environment

Sharp uses numerical values to accurately assess the relationship between its business activities and the environment, and uses them to promote environmental sustainability management. By making use of these current values at all stages of business activities to create proposals for policy measures and to analyze and evaluate the results, Sharp is aiming to effectively reduce the impact it has on the environment.



\*1 TJ (terajoule) = 10<sup>12</sup> Joules

\*2 GWP (global warming potential) is a measure of how much a given amount of greenhouse gas will contribute to global warming, expressed relative to an equivalent mass of CO<sub>2</sub>.

\*3 Total weight of products in the 13 major categories shipped in fiscal 2007 (estimate), plus waste, etc. discharged from production sites.

\*4 Estimate of annual energy used and amount of CO<sub>2</sub> emitted by products in the 12 major categories shipped in fiscal 2007. Calculation based on each product's energy consumption rate.

\*5 Amount of power generated (kWh) annually by Sharp solar cells shipped in fiscal 2007, plus CO<sub>2</sub> emissions reduction (t-CO<sub>2</sub>).

\*6 For details, see page 16.

# Developing Super Green Technologies

To realize the corporate vision of Sharp's energy-creating and energy-saving products more than balancing out its greenhouse gas emissions, the development of superior environmental technologies is an essential factor in the performance of products and devices, together with the reduction of environmental impact during production. That is why Sharp is developing critically important environmental technologies as "one-of-a-kind" environmental technologies, in line with its strategy for company-wide technology development.

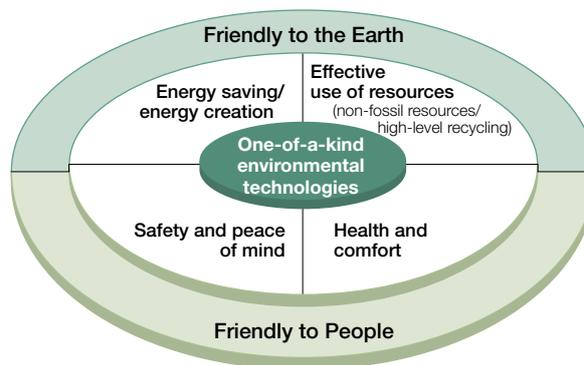
Objectives for Fiscal 2007	Achievements for Fiscal 2007	Objectives for Fiscal 2008	Objectives for Fiscal 2010
Promote closed-loop plastic material recycling; use 800 tons of recycled plastic in new products	Approx. 850 tons of recycled plastic used in new products	Use 1,000 tons of recycled plastic in new products	Use 1,400 tons of recycled plastic in new products
Conduct experimental study of LCD TV recycling technology	Identified problems in LCD TV recycling and formulated solutions	Complete proof-of-concept experiments for LCD TV recycling	Construct an LCD TV recycling line (fiscal 2009 objective)

## Developing One-of-a-Kind Environmental Technologies

Sharp aims to raise the environmental performance of its products and devices, lower the environmental impact of its plants, and use resources with greater efficiency by advancing the following four areas of environmental technology: energy saving and energy creation, effective use of resources, safety and peace of mind, and health and comfort.

Under the theme of "Friendly to People, Friendly to the Earth," Sharp recognizes the most important technologies in these areas as one-of-a-kind environmental technologies, and develops them based on a company-wide technology development strategy. The unique technologies evolving from these developments are what Sharp calls Super Green Technologies.

## One-of-a-kind technological development fields that give birth to Super Green Technologies



Environmental technologies

## Development and Application of Plant-Based Resin Paint

Sharp and Kansai Paint Co., Ltd. jointly developed a plant-based resin paint made from corn and began using it in March 2006. Since the CO<sub>2</sub> that was absorbed during the process of growing the corn cancels out the CO<sub>2</sub> emitted when the plant-based resin paint is incinerated, this material helps curb global warming and reduces the environmental impact.

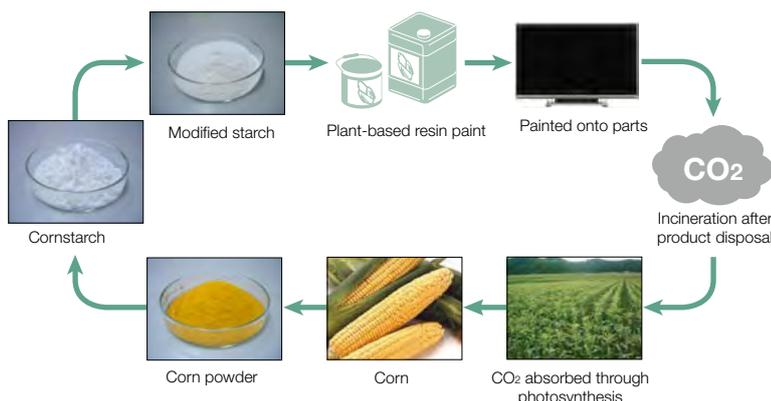
In fiscal 2006, Sharp and Kansai Paint succeeded in the development and application of a new type of plant-based resin paint that dries in only half the time and has a simplified painting process. Sharp further improved the durability of the paint in fiscal 2007 and is using it on stands of AQUOS LCD TVs\*1.

Sharp will expand the usage of this paint and further improve its performance (adhesive properties and hardness) and appearance (sheen and color variations) for use on home appliances.

\*1 LC-52GX3W/46GX3W/42GX3W/37GX3W, LC-52GX4W/46GX4W/42GX4W/37GX4W, LC-52EX5/46EX5/42EX5/37EX5



## Carbon cycle for plant-based resin paint



## Sharp Wins Two Prizes for Plant-Based Resin Paint

Recognized for Excellence at the 2nd Monodzukuri Nippon Grand Award (from the Japanese Ministry of Economy, Trade and Industry)

Sharp was recognized for its technology enabling the transition from the use of fossil-based resources to the use of renewable plant-based resources in its products.



Prize for Industrial Technology from the Japan Society of Colour Material

Sharp was recognized for outstanding contributions to the development of the color-material-related industry by the Japan Society of Colour Material, Japan's only academic society for color materials (pigments, paints, printing inks, etc.).



## Technology for Using Plant-Based Plastic

Sharp is striving to reduce, as much as possible, its use of fossil-resource-based plastic, which is made from petroleum. One of the actions Sharp is taking is to shift to plant-based plastic.

In fiscal 2006, Sharp developed a technology to blend plant-based plastic (made from corn) with general plastic (polypropylene, polystyrene, etc). And by adding durability to the plant-based plastic, it can withstand the closed-loop material recycling process.

This technology was used for desktop mobile phone holders that went on sale in Japan in June 2007. Sharp aims to use this technology in LCD TVs and home appliances at the earliest possible date.

### Products that use plant-based plastic

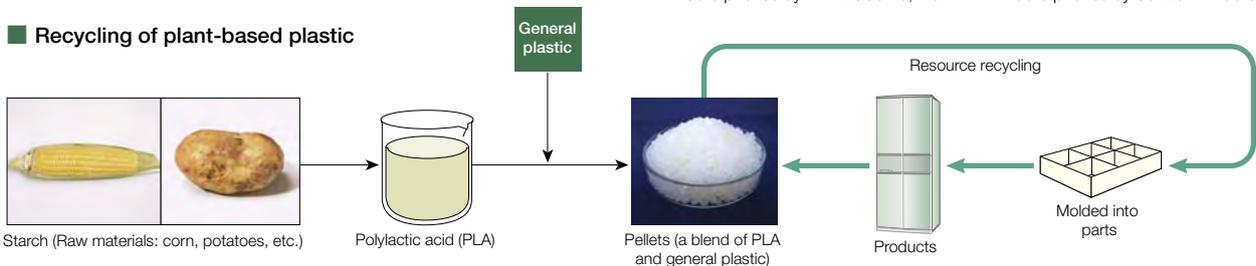


Desktop holder for SH705i/SH705ill mobile phones by NTT DoCoMo, Inc.



Desktop holder for SoftBank 921SH mobile phones by SoftBank Mobile Corp.

### Recycling of plant-based plastic



## Closed-Loop Plastic Material Recycling for LCD TV Cabinets

The AQUOS LCD TV is a product that symbolizes Sharp's philosophy on environmentally conscious design. In addition to offering energy efficiency and resource savings, AQUOS LCD TVs use environmentally conscious materials wherever possible.

Sharp developed a material for LCD TV cabinets that excels in both durability and recyclability and started using it in AQUOS LCD TVs<sup>\*2</sup> in fiscal 2006. These cabinets, which can be recycled through the closed-loop material recycling process and reused in new products, represent a new means of contributing to the decreased usage of fossil-based resources.

Sharp continued to develop this technology in fiscal 2007 by improving the material's moldability and used it in more AQUOS models<sup>\*3</sup>.

Sharp plans to use this material on a wider scope of products as it continues to improve the material's properties.

## LCD TV Recycling Technology

Sharp worked until fiscal 2006 on the formulation of guidelines for LCD panel recycling and the development of a technology for recovering and recycling the rare metal indium<sup>\*4</sup>. In fiscal 2007, Sharp disassembled LCD TVs of all sizes to identify any problems in the disassembly process.

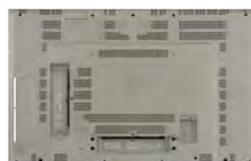
Incorporating the knowledge it has gained through these disassemblies, Sharp will design a safe, efficient disassembly line. Sharp plans to initiate full-fledged recycling of LCD TVs in the near future and is steadily advancing the development of relevant technologies.

<sup>\*4</sup> A wet-process recovery technology employing acid (developed jointly with Aqua Tech Co. Ltd.)

<sup>\*2</sup> LC-52RX1W/46RX1W/42RX1W  
<sup>\*3</sup> LC-52GX3W/46GX3W/42GX3W,  
 LC-52GX4W/46GX4W/42GX4W,  
 LC-52GX35/46GX35/52GX45/46GX45,  
 LC-52EX5/46EX5/42EX5



LC-52GX3W



LCD TV cabinet that can be recycled in the closed-loop material recycling process



An experimental LCD TV disassembly



An experimental LCD TV disassembly

# Creating Super Green Products and Devices

Sharp establishes increasingly higher objectives as it revises its guidelines every year in making ever more strict assessment standards, all with the goal of continuously improving the environmental performance of products and devices. As a result, in fiscal 2007 Sharp achieved its goals to increase the percentage of net sales accounted for by Green Seal Products, Super Green Products, Green Devices, and Super Green Devices.

Objectives for Fiscal 2007	Achievements for Fiscal 2007	Objectives for Fiscal 2008	Objectives for Fiscal 2010
Green Seal Products account for 90% or more of net sales in Japan	Approx. 95%	90% or more	90% or more
Super Green Products account for 50% or more of net sales in Japan	Approx. 60%	55% or more	60% or more
Green Devices account for 75% or more of net sales	Approx. 84%	80% or more	90% or more
Super Green Devices account for 15% or more of net sales	Approx. 21%	20% or more	20% or more

## Make All Products Green Products

Sharp calls its environmentally conscious products Green Products. In 1998, it formulated the Green Product Guidelines, which define development and design guidelines in line with seven concepts<sup>\*1</sup>. The guidelines are used at all design and production sites in Japan and overseas.

As the first step in developing Green Products, during the planning stage, Sharp sets specific objectives according to the Green Product Standard Sheet, which is designed to assess all aspects of environmental consciousness. Secondly, in the trial manufacture and mass production stages, Sharp determines how well the actual product has met its objectives.

All new products in fiscal 2007 met the assessment criteria necessary to be designated as Green Products.

\*1 The seven Green Product concepts are 1) energy saving, 2) resource saving, 3) safety, 4) recyclability, 5) use of recycled materials, 6) long-life usability, and 7) ease of disassembly

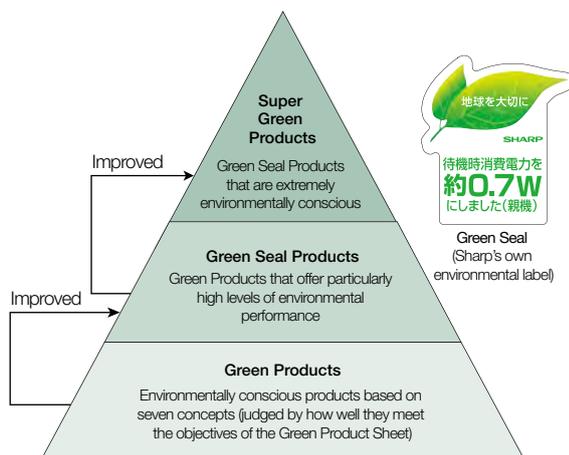
 Green Products

## Certification of Green Seal Products and Super Green Products in Japan

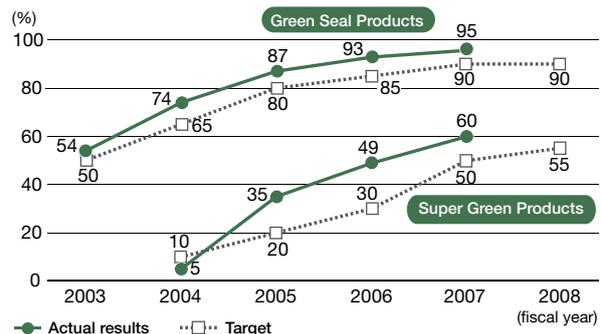
Since 1998, Sharp has been certifying products for Japan that offer a particularly high level of environmental performance as Green Seal Products. In 2004, it began certifying Green Seal Products with the highest possible levels of environmental performance as Super Green Products.

In fiscal 2007, Sharp surpassed its goals for both Green Seal Products and Super Green Products as a percentage of total sales. In the coming years, Sharp plans to raise these percentages even higher.

### Sharp's concept of environmentally conscious products



### Ratio of Green Seal Products and Super Green Products to net sales in Japan



Data for Super Green Products in fiscal 2004 is for the 2nd half of the year only.

### Case Reports Super Green Products

#### LCD TV (LC-46XJ1)

164% achievement rate of 2008 energy-saving standard

- Five-star rating after multilevel assessments based on Japan's energy-saving labeling system (215 kWh/year)
- Industry's thinnest<sup>\*2</sup> profile at only 34.4 mm (at the thinnest part)
- Cabinet is made of halogen-free resin



\*2 As of January 24, 2008 for digital full-HD LCD TVs sold in Japan.

#### Refrigerator/Freezer with HC Refrigerant (SJ-HD50P)

102% achievement rate of 2010 energy-saving standard

- Five-star rating after multilevel assessments based on Japan's energy-saving labeling system (560 kWh/year)
- With the use of HC refrigerant, the impact on global warming is approx. one four-hundredth that of the previously used CFC substitute (R134a)
- Parts are made of plastic recycled through closed-loop material recycling technology



#### Digital Full-Color MFP (MX-7001N)

- Newly developed Mycrostoner reduces toner consumption by approx. 30%<sup>\*3</sup>
- Fax standby power consumption is less than 1W<sup>\*4</sup>
- Complies with Japan's Law on Promoting Green Purchasing



\*3 As compared to Sharp's previous model (AR-C262FP) when in color mode.

\*4 Fax-reception mode when power is off (fax function is optional).



## Certification of Green Devices and Super Green Devices

Sharp calls its environmentally conscious devices Green Devices. To define guidelines for development and design based on seven concepts<sup>\*5</sup>, Sharp established the Green Device Guidelines, which it began applying in 2004. In 2005, it began certifying Green Devices with the highest possible levels of environmental performance as Super Green Devices.

As the first step in developing Green Devices, Sharp sets specific objectives during the planning stage according to the Green Device Standard Sheet, which is designed to assess all aspects of environmental performance. Secondly, in the trial manufacture and mass production stages, Sharp determines how well the actual device has met its objectives.

In fiscal 2007, both Green Devices and Super Green Devices exceeded their sales ratio targets. In the coming years, Sharp plans to raise these figures even higher.

\*5 The seven Green Device concepts are 1) energy saving, 2) recyclability, 3) resource saving, 4) green materials, 5) long life, 6) packaging, and 7) information disclosure

**Case Report** **Super Green Device**

**Tuner module for receiving One-Seg digital terrestrial broadcasts (VA3A5JZ912)**

- The smallest, thinnest package size in the industry<sup>\*6</sup>: 7.3 x 7.3 x 1.25 mm (45% smaller volume than previous model<sup>\*7</sup>)
- One of the lowest power consumption rates in the industry<sup>\*8</sup>: 85 mW<sup>\*8</sup>



\*6 As of June 12, 2007 (Sharp survey).  
\*7 Sharp's VA35JZ9910.  
\*8 Average power consumption rate when in low consumption current mode.

[Web](#) Green Devices

## Reducing VOCs in Products

Sharp is working to make its products safer by reducing their VOC<sup>\*9</sup> emissions. With the establishment of a large-scale VOC testing laboratory in fiscal 2007, it is now possible for all Sharp products for the Japanese market to undergo VOC evaluations.

Sharp is promoting the cross-sectional development of low-VOC products by holding low-VOC product development training for approximately 50 engineers from each business group.

Sharp plans to continually push forward with developing low-VOC products.

\*9 VOC (volatile organic compounds) are said to cause multiple chemical syndrome and/or sick building syndrome.



Low-VOC product development training

## Development of Worldwide Comprehensive Product Environmental Evaluation System

In April 2006, Sharp began using the Comprehensive Product Environmental Evaluation System in order to promote even stricter adherence to environmental regulations and greater environmental awareness in designing products. This system consolidates company-wide product environmental data and is being used in all domestic product and device groups. In 2007, all overseas design and development bases also began using the system.

This system contains all of Sharp's accumulated successes in developing and assessing environmentally conscious products and devices, as well as its know-how of life cycle assessment (LCA). It enables Sharp to make the product development process more efficient, place design knowledge and development data under centralized management, and standardize the LCA method.

In fiscal 2008, Sharp plans to upgrade the system to meet the EuP Directive<sup>\*10</sup>.

\*10 The EuP Directive is a framework for setting requirements concerning the environmentally conscious design of energy-using products.

[Web](#) LCA data for major products

## Green Procurement

In 2000, Sharp established the Green Procurement Guidelines and began joint efforts with suppliers to ensure that parts and materials are environmentally conscious.

Beginning in 2003, Sharp investigated chemical substance content, as stipulated by the Japan Green Procurement Survey Standardization Initiative (JGPSSI), and took measures toward eliminating RoHS-designated substances<sup>\*11</sup>. Sharp was in complete compliance with the RoHS Directive for all products for the European market and for all new products (except those for certain regions) by the end of fiscal 2005.

In fiscal 2007, in line with the Green Procurement Guidelines and the Survey Manual for Chemical Substances in Parts and Materials, both of which were revised in 2005, Sharp conducted an online survey of domestic and overseas suppliers. In addition, Sharp began construction of a system to meet the REACH<sup>\*12</sup> regulation and completed the registration protocol.

Sharp will complete its system for meeting the REACH regulation in fiscal 2008 as it plans to raise the level of its management of chemicals contained in its products.

\*11 An EU directive on the "Restriction on the use of certain Hazardous Substances," RoHS prohibits 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.

\*12 REACH is a new regulation on the Registration, Evaluation, and Authorization of Chemicals produced in and imported into the EU.

[Web](#) Green Procurement Guidelines

# Building Super Green Factories

Applying its own unique criteria and standards, Sharp certifies a factory with a high level of environmental consciousness as a Green Factory (GF), and a factory with an extremely high level of environmental consciousness as a Super Green Factory (SGF). Sharp achieved its medium-term plan to convert all domestic and overseas Sharp Group production sites into Green Factories or higher by the end of fiscal 2007.

Objectives for Fiscal 2007	Achievements for Fiscal 2007	Objectives for Fiscal 2008	Objectives for Fiscal 2012
All 10 Sharp Corporation production sites SGF	All SGF	Put new SGF II policies in place	All business sites grade A or higher
All 7 domestic production sites (subsidiaries/affiliates) GF or higher	All GF	2 SGF; all others GF	All business sites grade B or higher
All 22 overseas production sites (subsidiaries/affiliates) GF or higher	All GF or higher (6 SGF and 16 GF)	9 SGF; all others GF	All business sites grade B or higher

## Upgrading All Plants to Green Factories

At Sharp, a factory must achieve a high degree of environmental performance to earn the designation of Green Factory. The basic policies and operational know-how for achieving Green Factory status have been formulated in line with 10 concepts<sup>\*1</sup> in the Green Factory Guidelines. These guidelines were introduced at all domestic production sites from fiscal 1999 onward and at all overseas production sites from fiscal 2001 onward.

Starting in fiscal 2003, Sharp established assessment criteria for Green Factories and Super Green Factories and launched efforts to award in-house certification.

\*1 The 10 GF concepts are 1) greenhouse gases, 2) energy, 3) waste, 4) resources, 5) chemical substances, 6) atmosphere/water/soil, 7) harmony with nature, 8) harmony with the community, 9) environmental awareness, and 10) information disclosure



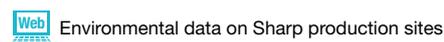
## All Sharp Corporation Plants Achieve Super Green Factory Status

Sharp uses unique, quantified environmental performance criteria to assess and approve a plant for certification. A plant must score 70 or more points out of a possible 100 in the assessment process to earn Green Factory certification, and score 90 or more points to achieve Super Green Factory certification.

For new plants, environmental assessments are begun in the early planning stages to ensure that these facilities will attain high levels of environmental performance, with the ultimate aim of achieving Super Green Factory status. Existing plants will realize high environmental performance by gradually upgrading their environmental capabilities.

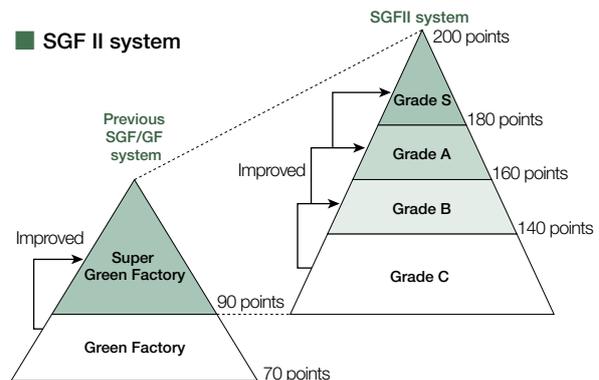
In fiscal 2007, the fourth year since introducing the assessment certification system, an additional five domestic plants<sup>\*2</sup> and three overseas plants<sup>\*3</sup> achieved Super Green Factory status, enabling Sharp to achieve its medium-term objective of making all 10 Sharp Corporation plants Super Green Factories and all domestic and overseas Sharp Group plants Green Factories or higher.

\*2 Tochigi Plant (Yaita City, Tochigi Prefecture), Mihara Plant (Mihara City, Hiroshima Prefecture), Fukuyama Plant (Fukuyama City, Hiroshima Prefecture), Katsuragi Plant (Katsuragi City, Nara Prefecture), and Tenri Plant (Tenri City, Nara Prefecture)  
 \*3 Sharp-Roxy Electronics Corporation (M) Sdn. Bhd. (SREC) (Malaysia), Nanjing Sharp Electronics Co., Ltd. (NSEC) (China), and Sharp Manufacturing (Thailand) Co., Ltd. (SMTL) (Thailand)



## A New Initiative for Super Green Factories

Beginning in fiscal 2008, Sharp will launch an effort to develop Super Green Factories that have an even higher level of environmental performance. SGF II is a new initiative that adds an assessment of "soft" aspects, such as the know-how to operate and maintain environmental equipment, and focuses on achieving absolute reductions in the level of greenhouse gases emitted and the amount of waste discharged.



## SGF II quantified environmental performance criteria and assessment weighting (total score: 200)

	Environmental performance criteria		Assessment weighting	Sub total	Total
SGF I (partially revised performance criteria from previous SGF system)	Reductions in greenhouse gas emissions per production unit	<ul style="list-style-type: none"> <li>Reductions in PFC gases, etc.</li> <li>Promotion of variable supply control systems</li> <li>Recovery and recycling of waste heat</li> <li>Introduction of a cogeneration system</li> <li>Introduction of high-efficiency equipment</li> <li>Introduction of new energy sources</li> <li>Continued reductions in emissions per production unit</li> <li>Implementation of managerial decision-making standards</li> </ul>	30 points	100 points	200 points
	Reductions in the release of chemical substances	<ul style="list-style-type: none"> <li>PRTR atmospheric emissions</li> <li>PRTR water emissions</li> <li>Sulfoxides produced by combustion</li> <li>Elimination of all noxious odors</li> </ul>	26 points		
	Appropriate disposal of industrial waste	<ul style="list-style-type: none"> <li>Zero discharge to landfill</li> <li>Confirmation of appropriate disposal</li> <li>Recycling waste as valuable resources</li> </ul>	14 points		
	Reductions in the consumption of industrial water	<ul style="list-style-type: none"> <li>Use of rain and condensate water</li> <li>Recovery of production rinse water</li> </ul>	9 points		
	Monitoring and safety	<ul style="list-style-type: none"> <li>Disaster and fire prevention measures for hazardous materials</li> <li>Special safety measures</li> <li>Adoption of central monitoring measures</li> </ul>	21 points		
Additional performance criteria for SGF II	Reduction of environmental impacts and contribution to management	Absolute reduction in greenhouse gas emissions	Percentage reduction in total emissions	40 points	100 points
		Absolute reduction in waste discharged	Percentage reduction in total waste discharged	30 points	
	Safety measures	Environmental equipment	Equipment replacement Maintenance management	10 points	
		Equipment other than environmental equipment	Equipment replacement Maintenance management	10 points	
	Information disclosure	Assign points for each item disclosed	10 points		

# Curbing Greenhouse Gas Emissions

Sharp is taking active measures to curb greenhouse gas emissions resulting from its business activities. Sharp is reducing CO<sub>2</sub> emissions through the introduction of cogeneration systems and energy-efficient equipment, the installation of solar power generation systems, and the meticulous implementation of energy-saving activities at plants and offices. At the same time, Sharp is also reducing emissions of greenhouse gases such as PFCs<sup>1</sup> by installing abatement systems and adopting replacement gases with lower global warming potential.

Objectives for Fiscal 2007	Achievements for Fiscal 2007	Objectives for Every Fiscal Year	Medium-Term Objectives
CO <sub>2</sub> emissions per production unit <sup>2</sup> • Domestic product sites: Reduce by 2% from previous fiscal year • Domestic device sites: Reduce by 5% from previous fiscal year • All overseas production sites: Reduce by 2% from previous fiscal year	• Reduced by approx. 15% from previous fiscal year • Reduced by approx. 7% from previous fiscal year • Reduced by approx. 10% from previous fiscal year	• Reduce by 2% from previous fiscal year • Reduce by 5% from previous fiscal year • Reduce by 2% from previous fiscal year	CO <sub>2</sub> emissions per adjusted production unit <sup>3</sup> • All domestic production sites: Reduce by 35% compared to fiscal 1990 levels (average for fiscal 2008 to 2012)

Domestic sites include only the business sites of Sharp Corporation. Overseas sites include Sharp subsidiaries and affiliated companies.

To provide a rational way to evaluate the effect of controlling greenhouse gas emissions, Sharp utilizes an index referred to as "per production unit."

<sup>1</sup> A general term for perfluorocarbon gases such as CF<sub>4</sub> (carbon tetrafluoride), C<sub>2</sub>F<sub>6</sub> (carbon hexafluoride), and the like, which are greenhouse gases.

<sup>2</sup> Per production unit (t-CO<sub>2</sub>/100 million yen) = CO<sub>2</sub> emissions (t-CO<sub>2</sub>) ÷ production output (100 million yen)

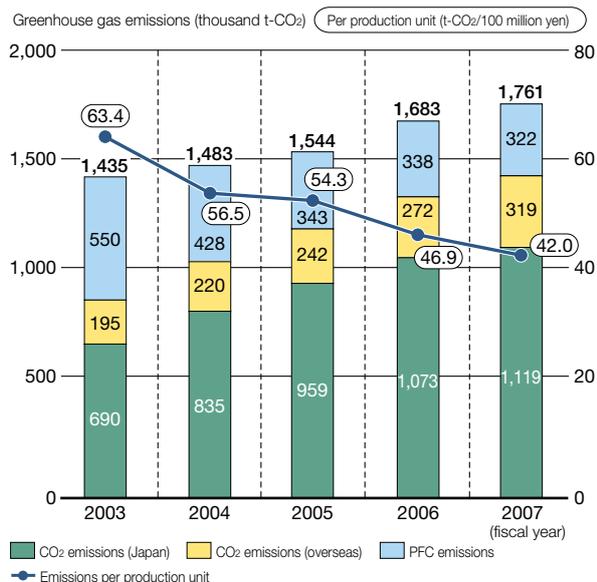
<sup>3</sup> Per adjusted production unit (t-CO<sub>2</sub>/100 million yen) = CO<sub>2</sub> emissions (t-CO<sub>2</sub>) ÷ (production output (100 million yen) ÷ domestic corporate price index (electrical and electronic equipment) determined by the Bank of Japan)

## Sharp Group Activities to Control Greenhouse Gas Emissions

In fiscal 2007, the Sharp Group reduced its greenhouse gas emissions per production unit by approximately 10% compared to the previous fiscal year. In addition, even in the face of expanding production output, the Group kept growth in total emissions to approximately 5% over the previous fiscal year by implementing a variety of energy-saving measures and by reducing PFC emissions through the installation of additional abatement systems.

Although production is expected to expand in the future, Sharp will continue to work to curb greenhouse gas emissions by implementing further energy-saving measures. For PFCs, this will be achieved by providing abatement systems on all emission sources at new factories, particularly the Sakai Plant, and making a concerted effort to reduce emissions through proper operation and management.

### Amount of Sharp Group's greenhouse gas emissions and emissions per production unit



Emissions per production unit are calculated from production-related emissions. Emissions from the Toyama Plant were included beginning in April 2006.

Prior to fiscal 2005, values for global warming potential were taken from the IPCC's Second Assessment Report (SAR). For fiscal 2006 and later, the values used were taken from the IPCC's Third Assessment Report (TAR). Sharp's PFC emissions for fiscal 2006 would have been 351 (thousand t-CO<sub>2</sub>) when calculated using the value for global warming potential from the SAR.

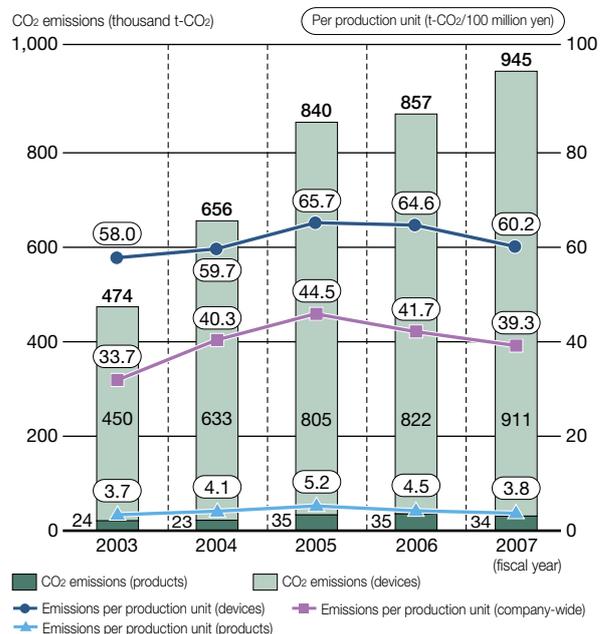
[Web](#) Reductions in greenhouse gases  
Data on greenhouse gases

## Controlling CO<sub>2</sub> Emissions at Domestic Production Sites

Sharp's company-wide efforts to implement further energy-saving measures and improve production efficiency in fiscal 2007 have yielded results at domestic production sites, with CO<sub>2</sub> emissions per production unit reduced by approximately 6% from the previous fiscal year.

Sharp will continue working aggressively to reduce CO<sub>2</sub> emissions through the installation of energy-efficient equipment, switching to alternate fuels, and expanded use of solar power generation systems.

### Amount of CO<sub>2</sub> emissions and emissions per production unit by business category for Sharp Corporation production sites in Japan



Starting in fiscal 2005, these figures represent total CO<sub>2</sub> emissions from all divisions of production sites, excluding basic research. Emissions from the Toyama Plant were included beginning in April 2006.

### CO<sub>2</sub> emissions per adjusted production unit for Sharp Corporation production sites in Japan

Fiscal year	1990	2006	2007
Emissions per adjusted production unit (t-CO <sub>2</sub> /100 million yen)	32.2	19.8	17.9
Fiscal 1990 comparison	100	61	56

### Self-generated electricity output<sup>4</sup> at Sharp Corporation production sites in Japan

Fiscal year	2005	2006	2007
Self-generated electricity output (millions of kWh)	158	246	287

<sup>4</sup> Electricity generated by on-site cogeneration systems, solar power generation systems, and fuel cell systems.

# Minimizing and Recycling Waste

Sharp has been working to bring down its total amount of waste discharged<sup>\*1</sup> and to recycle as much of its waste as possible. As a result, domestic production sites (including subsidiaries and affiliated companies) have achieved zero discharge to landfill<sup>\*2</sup> for seven consecutive years. Sharp will keep up its efforts to continue zero discharge to landfill and reduce waste discharge. In addition, Sharp is focusing on recycling wastewater and restricting the amount of water utilized.

Objectives for Fiscal 2007	Achievements for Fiscal 2007	Objectives for Every Fiscal Year
Amount of waste discharged per production unit at domestic plants (including subsidiaries and affiliated companies): • Reduce by 3% from previous fiscal year	Increased by approx. 14% from previous fiscal year	Reduce by approx. 3% from previous fiscal year
Amount of waste, etc. discharged <sup>*3</sup> per production unit at overseas production sites (including subsidiaries and affiliated companies): • Reduce by 2% from previous fiscal year	Reduced by approx. 10% from previous fiscal year	Reduce by approx. 2% from previous fiscal year

\*1 Amount of waste discharged = Amount of industrial waste discharged + amount of general waste discharged from business activities  
 \*2 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. discharged (amount of waste discharged + amount of valuable resources) x 100  
 In fiscal 2005, to make the definition of zero discharge to landfill more rigorous, Sharp changed the denominator from "total amount of waste generated" to the lower "amount of waste, etc. discharged (amount of waste discharged + amount of valuable resources)".  
 \*3 Amount of waste, etc. discharged = Amount of waste discharged + amount of valuable resources

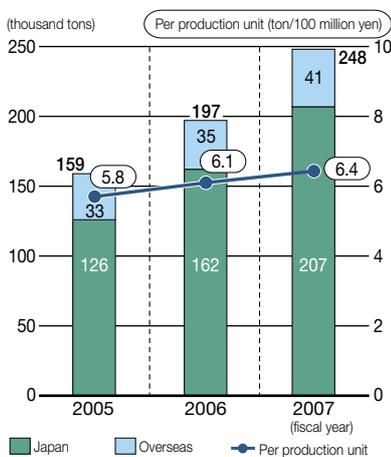
## Domestic Production Sites Achieve Zero Discharge to Landfill for Seven Years in a Row, Overseas Sites See Major Improvement in Reduction of Amount of Waste, etc. Discharged per Production Unit

Thanks to all-out efforts to recycle waste at domestic production sites (including subsidiaries and affiliated companies), the final landfill disposal rate was less than 0.01% in fiscal 2007, giving Sharp zero discharge to landfill for the seventh consecutive year. Sharp also further intensified efforts to upgrade more of its overseas production sites to Green Factories, achieving an approximately 10% reduction, compared to the previous fiscal year, in amount of discharge per production unit, including waste and valuable resources recovered from waste. This was the third consecutive year of double-digit drops in the

percentage, marking continuation of major reductions. However, in fiscal 2007, the total amount of discharge, including waste and valuable resources recovered from waste, by the Sharp Group increased by approximately 26% over the previous fiscal year owing to increases in production volume.

Following the plan of reducing the amount of waste discharge beginning in fiscal 2008 after levels peaked in fiscal 2007, Sharp is promoting the limitation and reduction of waste and aiming for an overall reduction in waste discharge.

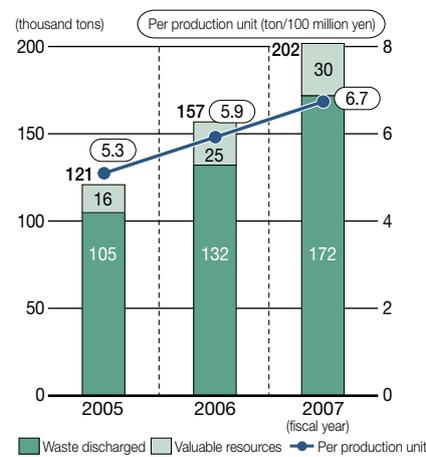
■ Amount of waste, etc. discharged (per production unit) by the Sharp Group



Figures include non-production sites. Figures include the Toyama Plant from April 2006.

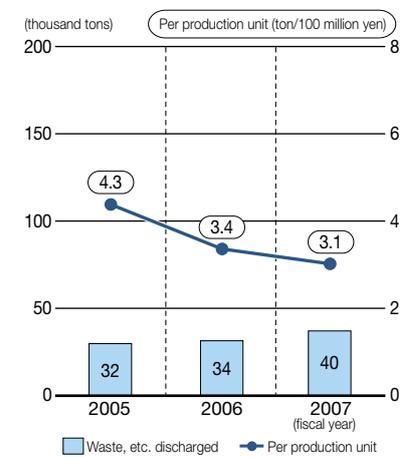
Web Waste reduction Data on waste

■ Amount of waste discharged (per production unit) and valuable resources at domestic production sites



Figures include subsidiaries and affiliated companies. Figures include the Toyama Plant from April 2006.

■ Amount of waste, etc. discharged (per production unit) from overseas production sites

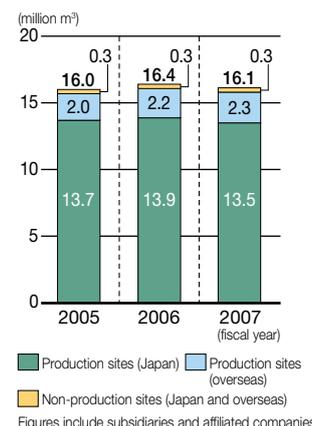


## Recycling Water

As a result of thorough recovery and recycling of water, particularly at the Kameyama and Mie plants, the amount of water that was reused increased by approximately 12% over the previous fiscal year. Therefore, even though production increased, the overall amount of water used throughout the Sharp Group remained the same as for the previous fiscal year. Looking ahead, Sharp will continue to focus on making effective use of water.

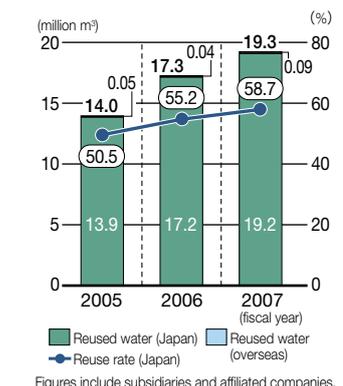
Web Effective water usage Data on water usage

■ Amount of water used by the Sharp Group



Figures include subsidiaries and affiliated companies.

■ Amount of water recycled at domestic and overseas production sites, and recycling rate at domestic production sites



Figures include subsidiaries and affiliated companies.

# Effectively Managing Chemical Substances, Conducting Risk Management

Sharp ensures the unified control and management of consumption and discharge of all chemical substances through its chemical substance management system. Sharp also promotes the preferential reduction of chemical substances placed under high-priority control and of those having greater impact on human health by conducting risk assessment. Sharp also discloses information on environmental risks and promotes good communication with local communities.

Objectives for Fiscal 2007	Achievements for Fiscal 2007	Objectives for Fiscal 2008	Objectives for Fiscal 2012
Sharp Corporation production sites in Japan • Reduce discharge risk <sup>*1</sup> by 60% compared to fiscal 2003	Reduced by 75% compared to fiscal 2003	Formulate a new policy for management of chemical substances • Switch from downstream to upstream management and to line-specific management	Set in place the new policy for management of chemical substances

<sup>\*1</sup> Discharge risk: Total of all numerical values assigned to each chemical substance released into the atmosphere. Values are calculated as per: Discharged amount (concentration at site boundary) x Risk to human health coefficient

## Effective Management of Chemical Substances

Sharp conducts rigorous preliminary audits based on the C-PA system<sup>\*2</sup> and the process assessment system<sup>\*3</sup> to determine the environmental, safety, and health effects of new chemical substances and handling equipment. In addition, Sharp implements regular education and training and conducts across-the-board safety audits to prevent accidents and reduce environmental impact.

Sharp centrally manages the quantities of chemical substances handled and discharged at domestic production sites by utilizing S-CMS<sup>\*4</sup> and other systems concerning chemical substance usage.

Sharp is promoting discharge reduction and proper management of chemicals such as VOCs<sup>\*5</sup> and high-priority management substances (460 substance groups consisting of the 354 substance groups covered by the PRTR<sup>\*6</sup> Law plus 106 additional substance groups, including hazardous air pollutants).

- <sup>\*2</sup> C-PA system: A system to conduct assessments on the harmful effects of chemical substances in use.
- <sup>\*3</sup> Process assessment system: A system to conduct preliminary assessments on the safety of equipment handling chemical substances.
- <sup>\*4</sup> S-CMS: Sharp Chemical Management System
- <sup>\*5</sup> VOC: Volatile organic compounds
- <sup>\*6</sup> PRTR: Pollutant Release and Transfer Register. A system to collect and publicize data, such as the amount of harmful chemicals discharged and transferred.

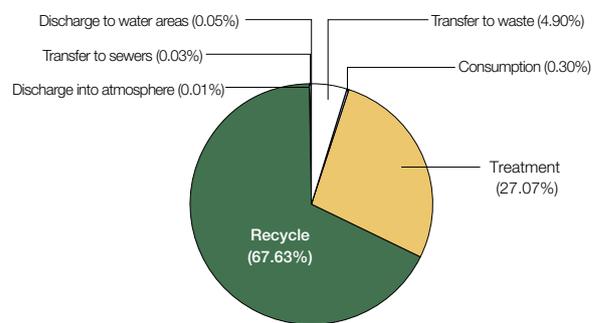
## Reducing Chemical Substance Emissions and Discharge Risks

Of the chemical substances covered by the PRTR Law, the number of chemicals handled in quantities greater than 500 kg in fiscal 2007 at all domestic production sites amounted to 17 substances or 12,920 tons (up 44% over the previous fiscal year). Although the use of PRTR chemicals increased as a result of business expansion, emissions fell by 67% from the previous fiscal year to 8.3 tons due to the use of alternative substances and the installation of abatement systems to reduce designated chemicals.

In fiscal 2004, Sharp introduced an approach to risk assessment that evaluates every type of chemical discharged and began taking measures for the preferential reduction of chemical substances having a greater impact on human health. In fiscal 2007, discharge risks were reduced around 75% from fiscal 2003.

In addition, Sharp is steadily advancing the reduction of VOC discharge by following the objectives of the industry's voluntary action plan based on the Amendment of the Air Pollution Control Law in Japan.

## Destinations of PRTR-listed chemical substances in Japan



## Chemical substances discharged in large amounts into the atmosphere and water areas in Japan

Main chemical substances	Fiscal 2007 discharge (kg)	Proportion (%)	Compared to previous fiscal year (%)	Fiscal 2006 discharge (kg)
Hydrogen fluoride & its water-soluble salts	6,835	82.1	74.5	9,175
2-Aminoethanol	1,153	13.9	66.2	1,743
Xylene	134	1.6	19.3	694
Others	202	2.4	25.5	791
Total	8,324	100.0	67.1	12,403

## Risk Communication and Information Disclosure

Sharp regularly and actively discloses environmental risk information associated with business activities by means of periodic Sharp Festivals and the publication of site reports at each site. Sharp has also placed specially educated Risk Communicators at all Sharp Corporation sites to promote mutual understanding and communication between the company, its neighboring residents, and the local government.

A survey conducted in 1998 on soil and groundwater identified chlorine solvent pollution within Sharp Corporation's Nara, Yao, Tenri, and Katsuragi sites. With the exception of Nara, all sites have reduced contamination levels below those of the environmental standard via biotechnology. Sharp is continuing purification at the Nara site in order to reduce its contamination levels below those of the environmental standard, and regularly notifies government authorities and residents of the cleanup progress.

# Environmentally Conscious Logistics

In cooperation with shipping contractors, Sharp is creating a system to accurately assess environmental impacts in distribution. In Japan, the Sharp Group as a whole is promoting initiatives to optimize transport methods and load efficiency. Sharp is also working to further reduce environmental impacts in distribution by setting a goal of slashing annual CO<sub>2</sub> emissions per sales unit<sup>\*1</sup> by at least 1%, a mandate for certain shippers specified under Japan's revised Law Concerning the Rational Use of Energy.

Objectives for Fiscal 2007	Achievements for Fiscal 2007	Objectives for Every Fiscal Year
Shift to environmentally friendly modes of transport Domestic railway cargo transport (container transport) <sup>*2</sup> : 15,600 containers	20,619 containers	—
Reduce CO <sub>2</sub> emissions per sales unit by at least 1% from previous fiscal year by the Sharp Group in Japan	Reduced by 14% from previous fiscal year	Reduce by 1% from previous fiscal year

<sup>\*1</sup> CO<sub>2</sub> emissions per sales unit (t-CO<sub>2</sub>/100 million yen) = CO<sub>2</sub> emissions (t-CO<sub>2</sub>) ÷ net sales (100 million yen)  
<sup>\*2</sup> Calculated based on 5-ton containers.

## Energy Conservation Law Committee Assesses Environmental Impacts in All Areas of Distribution in Japan

In fiscal 2005, Sharp established the Committee for Compliance with the Energy Conservation Law as a Shipper. The committee assesses the environmental impacts of distribution and logistics in the areas of product sales, procurement and production, waste disposal, and parts<sup>\*3</sup>, and works to strengthen energy-saving measures in distribution across the Sharp Group.

Although only Sharp Corporation and its consolidated subsidiary, Sharp Electronics Marketing Corporation, are designated as specified shippers (shippers with large transport volume) under Japan's revised Law Concerning the Rational Use of Energy, Sharp has declared an objective of achieving an annual reduction in CO<sub>2</sub> emissions per sales unit of 1% or greater, a mandate for specified shippers under the law, for all members of the Sharp Group in Japan, including consolidated subsidiaries not so designated, and will promote energy-saving measures to reach this objective.

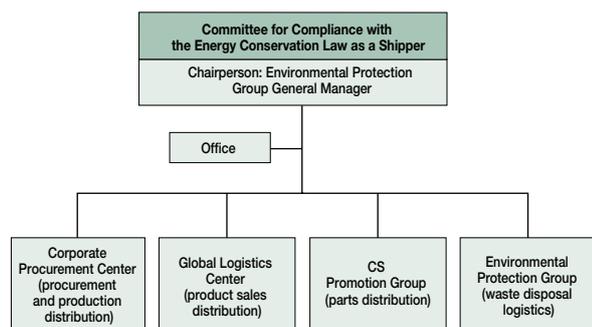
In fiscal 2007, the amount of cargo transported by Sharp Group companies in Japan (total weight by cargo category [t] x transport distance [km]) was approximately 185.5 million ton-kilometers (down 4% from the previous fiscal year). CO<sub>2</sub> emissions were 42,101 t-CO<sub>2</sub> (down 6% from the previous fiscal year), and CO<sub>2</sub> emissions per sales unit were 1.23 t-CO<sub>2</sub>/100 million yen (down 14% from the previous fiscal year).

Sharp will continue expanding its energy-saving efforts, such as shifting to environmentally friendly modes of transport and improving transport and load efficiencies.

<sup>\*3</sup> Distribution of parts used for after-sales service, such as repair and maintenance of products.

 Data on distribution

### System to promote energy savings in distribution



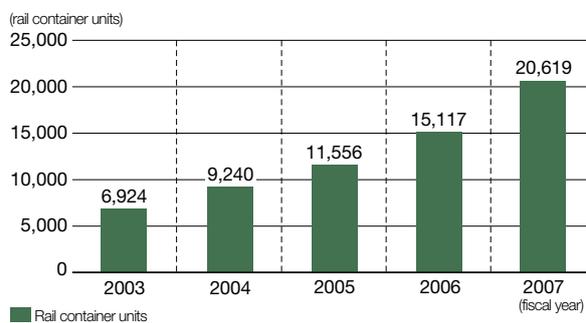
## Shifting to Environmentally Friendly Modes of Transport in Japan

In Japan, Sharp is shifting from conventional trucking to more environmentally friendly transportation modes, such as rail and ships. In fiscal 2007, Sharp shipped 20,619 containers by railway freight transport (up 36% over the previous fiscal year).

For actively expanding the use of rail transport, Sharp's West Japan Logistics Center won the Excellent Shipper in Shifting Transportation Mode award (four years in a row) and a 2007 Commendation for Outstanding Railway Shippers.

In the future, Sharp will work to expand the shift in transport modes and switch from air cargo to high-speed ocean vessels.

### Sharp Group's railway container shipments in Japan



## Environmentally Conscious Distribution Worldwide

In the US, Sharp Electronics Corporation (SEC), Sharp's sales subsidiary, participates in the SmartWay Transport Program<sup>\*4</sup>. Of the total volume of products distributed by SEC, the weight of freight that complied with this program increased from 33% in 2005 to 98% in 2007. SEC is also working to promote wider participation in this program through logistics-related lectures. In 2007, at the second annual awards ceremony sponsored by the Environmental Protection Agency, the SmartWay Transportation Partnership honored SEC with an excellence award for these activities, the first company to win this award two years in a row.



Accepting the award of excellence for the second year in a row

<sup>\*4</sup> SmartWay Transport Program: A joint effort by the US Environmental Protection Agency and industry to promote environmentally conscious shipping and distribution.

# Developing Super Green Recycling

Sharp is working to expand recycling of products that have reached the end of their service life based on three concepts: 1) improve the recycling rate and aim for zero landfill disposal, 2) improve the efficiency of the recycling system to reduce recycling costs, and 3) incorporate recycling technologies into the development and design of products.

Objectives for Fiscal 2007	Achievements for Fiscal 2007	Objectives for Fiscal 2008	Objectives for Fiscal 2009
Respond to the increased number of items requiring recycling	Developed recycling technology for flat-panel (LCD) TVs (completed technical studies at the laboratory level)	Build a recycling system for flat-panel (LCD) TVs	Implement recycling system for flat-panel (LCD) TVs

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

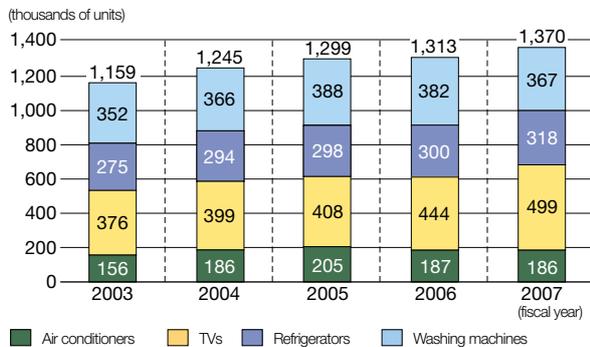
Sharp is constructing a highly efficient recycling system by collaborating with five other consumer electronics companies<sup>\*1</sup> to operate 190 designated sites for picking up old appliances as well as 18 recycling plants in Japan.

In fiscal 2007, four types of home appliances designated under the Japanese Home Appliance Recycling Law—about 1.38 million units in total (up 5% over the previous fiscal year)—were recovered and about 1.37 million units were recycled. The processing rates in the recycling plants satisfied the legal standard for all four kinds of appliances.

In the future, Sharp will work to continuously improve its system in response to changes, such as an increase in the volume of target products collected, and will work to further improve the recycling rate.

<sup>\*1</sup> Five collaborating companies: Fujitsu General Ltd., Hitachi Appliances, Inc., Mitsubishi Electric Corporation, Sanyo Electric Co., Ltd., Sony Corporation (in alphabetical order)

### Sharp Corporation's recycled units for the four home appliances



## Recycling PCs in Japan

In compliance with the Japanese Law for Promotion of Effective Utilization of Resources, Sharp is recycling business- and home-use PCs.

For home-use PCs, the PC industry is working with Japan Post Service Co., Ltd. in a collection system in operation at more than 20,000 post offices around Japan.

In fiscal 2007, recovered and recycled PCs amounted to approximately 5,300 business- and home-use desktop and notebook PCs (up 23% over the previous fiscal year) and about 2,000 monitors (up 3% over the previous fiscal year).

Information on PC recycling

## Kansai Recycling Systems Reaches the 5-Million Mark in Total Recycled Units

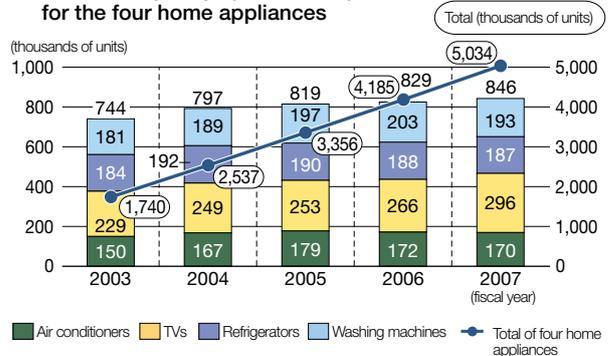
In March 2008, Kansai Recycling Systems Co., Ltd., a consumer electronics recycling company created with investment by Sharp Corporation, Mitsubishi Materials Corporation, and five other companies<sup>\*1</sup>, reached the 5-million mark in total recycled units.

The main facility of the company (in Hirakata City, Osaka Prefecture, Japan) began full operation in April 2001, to recycle the four types of used home appliances. A second plant began operations in December 2006 (Iga City, Mie Prefecture, Japan), exclusively to recycle TVs, and features an integrated, start-to-finish recycling line—from disassembling the TV sets to refining glass cullet<sup>\*2</sup>. Together, these two plants represent a comprehensive system to advance recycling of consumer electronics.

By strengthening the collaboration between the recycling plants and Sharp's design and production divisions, Sharp will push ahead to develop new recycling technologies and easy-to-recycle environmentally conscious products.

<sup>\*2</sup> Cullet is granulated glass from crushed CRTs (TV picture tubes). In the recycling process, contaminants are carefully removed from the glass to convert it into a nearly pure raw material suitable for use in a variety of applications.

### Kansai Recycling Systems' recycled units for the four home appliances



## Reusing and Recycling Copiers in Japan

Collected used copiers with minor deterioration are remanufactured: after being inspected, they are disassembled into unit parts, and the parts cleaned and thoroughly tested before being returned to the production line. New parts are also added to guarantee performance and quality equal to new products.

In fiscal 2007, approximately 41,000 copiers (up 24% over the previous fiscal year) were recovered, and remanufactured or recycled. Models not targeted for reuse are dismantled and sorted by type of component material to facilitate recycling.

Approximately 781,000 toner cartridges (up 12% over the previous fiscal year) were recovered, and about 270,000 remanufactured toner cartridges (up 8% over the previous fiscal year) were shipped.

Data on recycling of used products

# Promoting Environmental Communication

To enhance environmental communication with its wide range of stakeholders, Sharp discloses environmental information through exhibitions and various media, including Environmental and Social Reports, websites, and newspaper ads. Each Sharp site also endeavors to promote dialogue on environmental topics with local communities by sponsoring various events and holding factory tours.

## Environmental and Social Report, Website on Social and Environmental Activities

Every year since 1999, Sharp has issued an annual report on its environmental activities. Starting with the 2005 edition, the report was expanded to include the social aspects of Sharp's business activities. Accordingly, the title was changed to the Environmental and Social Report.

The 2007 edition of the Environmental and Social Report won an award of excellence for environmental reports at the 11th Environmental Communication Awards in Japan backed by Nikkei Inc. and cosponsored by the Ministry of the Environment and the Global Environmental Forum (GEF).

In addition to using articles from the Environmental and Social Report, Sharp's website presents more specialized content with examples of specific activities and detailed data on environmental impact.



Sharp Environmental and Social Report 2007 (Japanese, English, and Chinese editions)



Sharp Environmental Brochure (Japanese, English, and German editions)



Website for Sharp's social and environmental activities:  
<<http://sharp-world.com/corporate/eco/>>

## Exhibitions

Sharp introduces its environmental activities to the public through participation in domestic and international trade fairs and exhibitions.

In Japan, Sharp participated in the Ecolife Fair 2007, where it demonstrated how solar power generation can help curb global warming. Sharp also took part in the Eco Products 2007 exhibition, and this year, under the slogan "Carbon-Neutral Living Through Energy Creation and Energy Saving," introduced its environment-related activities and technologies, as well as environmentally friendly products.

At IFA 2007, held in Berlin, Germany, Sharp exhibited its super-thin LCD TV, which features dramatically lower energy consumption than existing models.



Eco Products 2007



IFA 2007

## Advertising and Commercials

To share its environmental message and goals with a wider audience, Sharp creates TV and newspaper ads. Using the slogan "Let's Go Ecology Class with Sharp," the ads for Japan highlight Sharp's environmentally supportive activities.

In fiscal 2007, Sharp produced a TV commercial showing the UK Environment Agency, which uses a Sharp solar power generation system. This commercial emphasized the importance of not only thinking about environmental conservation, but also putting it into practice, and won an award for excellence in the environmental TV commercial category of the 11th Environmental Communication Awards in Japan.



TV commercial



Newspaper ad

## Environmental Forums

To more widely disseminate information on its initiatives on behalf of the environment, Sharp has been holding environmental forums for journalists and the general public. In fiscal 2007, Sharp held seven such forums in Japan and in cities in China, including Beijing and Shanghai.

The Shanghai Environmental Forum was attended by government officials, and presented Sharp's environmental efforts in China. Additional sessions were held to exchange opinions and introduce environmental policies in China. This platform was fruitful in deepening the understanding of both parties on these issues.

Sharp is planning to hold these forums in a variety of locations around the world during fiscal 2008 as well.



Environmental Forum held in Shanghai in May 2007

## Exchanges with Stakeholders

To enhance communication with its wide range of stakeholders, Sharp holds factory tours and other events.

The Advanced Development and Planning Center (Nara Prefecture, Japan) invited local government officials to visit its site. The lively discussions with the visitors gave Sharp some interesting new ideas for future environmental and CSR efforts.



Informal gathering with local government officials

# Sharp and Society

## In Pursuit of Becoming a Corporate Group Trusted by Society

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# Objectives and Achievements in the Social Dimension of CSR

Sharp has established the Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct as standards of conduct serving to fulfill Sharp's business philosophy and business creed, which are the origins of the Sharp Group's CSR. Based on the Group Charter of Corporate Behavior and the Code of Conduct, Sharp sets major social themes and targets within the framework of CSR, and develops various initiatives, while promoting ongoing efforts for improvement.

## Promoting CSR Efforts in the Social Dimension

To promote CSR efforts in the social dimension, Sharp develops initiatives ranging from the company-wide level to the department level.

On the management level, Sharp established the CSR/BRM<sup>\*1</sup> Committee to hold discussions on basic policy directions and measures related to CSR and risk management, which are then deployed company wide.

Each functional group and head office department implements the measures discussed and determined by the CSR/BRM Committee across the entire company, and each business group sets and promotes action items specific to that group.

On the level of departments and employees, CSR is put into practice through measures broken down into specific duties. CSR is also implemented through participation in R-CATS<sup>\*2</sup> small-group activities and the Sharp Green Club (environmental social contribution activities).

\*1 BRM: Business risk management

\*2 R-CATS: Revolution Creative Action Teams

### CSR Through R-CATS Small-Group Activities

R-CATS are small-group activities carried out not only by production and quality departments, but also by all work specialties and departments—from product planning and technology departments, to sales/marketing, procurement and administrative departments. Employees at all work sites in Japan and overseas set themes related to CSR to tackle common problems encountered during routine work activities, and then work together as a team to find solutions and put them into practice.

In fiscal 2007, more than 40,000 employees across the entire Sharp Group participated in R-CATS activities and became involved in CSR activities from the perspective of their individual workplaces.

## Overall CSR Efforts in the Social Dimension for Fiscal 2007

Examples of Sharp's distinctive efforts in the social dimension of CSR are introduced in the Special Focus section (pages 17 and 18: social contribution activities in China, pages 19 to 21: expanding environmental social contribution activities [Sharp Forests, purification of reservoir water, and elementary school environmental education]).

In fiscal 2007, in addition to these efforts, Sharp achieved results in promoting initiatives such as putting in place and operating systems to improve quality (see page 44 Topics "Sharp Ranked No. 1 Overall in Quality Management").

In the future, Sharp will work proactively to incorporate these CSR initiatives into operational processes so that they function as a management system enabling regular progress assessments of such measures, as well as the identification of emerging problems and the implementation of further improvements in this area.

Field	Important Themes
Management	Improve, operate, and assess internal control system
	Practice compliance in business
	Strengthen business risk management
	Strengthen measures for maintaining confidentiality and information security
	Strengthen personal information protection system
For Customers	Secure quality and safety
	Create products that are easier to use
	Improve customer satisfaction
For Business Partners	Promote CSR across entire supply chain
For Shareholders and Investors	Improve communication with shareholders and investors
For Employees	Strengthen human resource development
	Develop company-wide affirmative action for women
	Promote occupational safety and health
For Local Communities	Expand and diversify social contribution activities

Self Evaluation ◎: Results exceeded objectives ○: Results nearly met objectives △: Certain results were accomplished

Actions for Fiscal 2007		Self Evaluation	Objectives for Fiscal 2008	See page(s)
Objectives	Achievements		Objectives for Fiscal 2008	
Steady operation of internal control system	<ul style="list-style-type: none"> <li>Improved internal control system based on Basic Policy for Internal Control</li> <li>Conducted internal control audits (tests/evaluations)</li> <li>Constructed IT system to support operation of internal control system</li> </ul>	○	<ul style="list-style-type: none"> <li>Operation and assessment of internal control system                             <ul style="list-style-type: none"> <li>Improve Basic Policy for Internal Control in conjunction with introducing executive officer system, etc.</li> <li>Put into practice on an ongoing basis various policies related to internal control system</li> <li>Implement internal control assessment in conjunction with start of internal control reporting system based on Japan's Financial Instruments and Exchange Act</li> </ul> </li> </ul>	6
Improve compliance education and training tools	<ul style="list-style-type: none"> <li>Created compliance handbook (for sales/service and device business divisions)</li> </ul>	△	<ul style="list-style-type: none"> <li>Expand and improve compliance promotion policies and measures                             <ul style="list-style-type: none"> <li>Strengthen system to promote compliance</li> <li>Create compliance handbook (common version)</li> </ul> </li> </ul>	7
Create BCM (business continuity management) system	<ul style="list-style-type: none"> <li>Implemented contingency training at domestic production sites and nearby sales bases (total of 16 bases)</li> <li>Developed BCPs (business continuity plans) for business groups</li> </ul>	○	<ul style="list-style-type: none"> <li>Expand and improve BCM system                             <ul style="list-style-type: none"> <li>Further strengthen BCM promotion system for business groups</li> <li>Ongoing review and continuous improvement of BCPs</li> <li>Prepare for occurrence of new influenza pandemic</li> </ul> </li> </ul>	7 website
Extend self-checks and assessments for maintaining confidentiality and information security to overseas bases	<ul style="list-style-type: none"> <li>Implemented self-checks and assessments for maintaining confidentiality and information security at main overseas bases</li> </ul>	○	<ul style="list-style-type: none"> <li>Extend self-check and assessment system for maintaining confidentiality and information security to affiliated companies in Japan</li> </ul>	8 website
Apply for and acquire Privacy Mark certification in Japan	<ul style="list-style-type: none"> <li>Developed infrastructure for acquiring Privacy Mark certification</li> <li>Implemented internal audits of departments that handle personal information</li> <li>Implemented group training related to protecting personal information at each business site</li> </ul>	△	<ul style="list-style-type: none"> <li>Promote procedures to attain Privacy Mark certification                             <ul style="list-style-type: none"> <li>Continuously implement internal audits related to protecting personal information for departments that handle personal information</li> <li>Continuously implement education and awareness policies related to protecting personal information for employees and others</li> </ul> </li> </ul>	8 website
Further improve quality in early stages of product making (planning and design)	<ul style="list-style-type: none"> <li>Achieved better product quality and reliability and shorter evaluation cycle by expanding application of design parameters for development and design process</li> <li>Strengthened analysis system by assigning more failure analysis technicians (currently 53 more than previous year)</li> <li>Issued revised version of Company-Wide Technical Safety Standards (14th edition) and promoted product making in line with strengthened standards</li> </ul>	○	<ul style="list-style-type: none"> <li>Reinforce design quality and product safety through use of statistical methods and tools                             <ul style="list-style-type: none"> <li>Expand number of design parameter applications for development and planning process</li> <li>Update and strengthen Company-Wide Technical Safety Standards</li> <li>Promote inter-company sharing of technical analysis capabilities</li> </ul> </li> </ul>	43 website
Introduce more universal design products	<ul style="list-style-type: none"> <li>109 models of 19 products recognized as universal design home appliances by Association for Electric Home Appliances in Japan</li> <li>Implemented product improvements based on usability test results and analysis of customer feedback</li> </ul>	○	<ul style="list-style-type: none"> <li>Improve products by taking on customer's point of view and introduce more universal design products                             <ul style="list-style-type: none"> <li>Activate Voice of the Customer (VOC) program to incorporate customer feedback into product making</li> </ul> </li> </ul>	43
Improve phone call reception rate to achieve higher ranking in customer satisfaction surveys of inquiry response skills	<ul style="list-style-type: none"> <li>Phone call reception rate increased by 10.7 points over previous year as result of improvement efforts, including predicting number of inquiries and raising level of customer assistance agents' response skills</li> </ul>	○	<ul style="list-style-type: none"> <li>Pursue "no customer waiting" responsiveness and faster, more reliable service                             <ul style="list-style-type: none"> <li>Reorganize reception system during peak times to improve consistency of phone call reception rate</li> <li>Implement ongoing training in response techniques for customer assistance agents</li> <li>Strengthen efforts to improve percentage of repairs that can be completed in one visit</li> </ul> </li> </ul>	44
Improve supply chain CSR measures	<ul style="list-style-type: none"> <li>Constructed online response system for CSR Procurement Survey and conducted surveys targeting major suppliers in Japan</li> </ul>	○	<ul style="list-style-type: none"> <li>Expand implementation of supply chain CSR measures overseas                             <ul style="list-style-type: none"> <li>Expand CSR Procurement Survey to local suppliers serving Sharp's overseas bases</li> </ul> </li> </ul>	45 website
Improve information disclosure to shareholders and investors	<ul style="list-style-type: none"> <li>Renewed contents of investor relations website</li> </ul>	○	<ul style="list-style-type: none"> <li>Improve information disclosure to shareholders and investors and respond to diversified needs of investors                             <ul style="list-style-type: none"> <li>Expand number of regions overseas hosting IR meetings</li> <li>Hold explanation sessions for individual investors</li> </ul> </li> </ul>	47 website
Promote continual development of diversified human resources and capabilities to deal with changes in business environment	<ul style="list-style-type: none"> <li>Developed global human resource development system, the Global Mid-Level Professional Human Resource Development Program (GMP Program)</li> <li>Promoted career development rotations for engineers</li> </ul>	○	<ul style="list-style-type: none"> <li>Promote cultivation of managerial personnel to support development of global business                             <ul style="list-style-type: none"> <li>Promote GMP Program</li> </ul> </li> </ul>	48
Promote continuation of Corporate Affirmative Action for Women Strategy Program and consider additions to it	<ul style="list-style-type: none"> <li>22.3% of female employees held junior manager (semi-managerial) positions (up 5% from 2005 when Corporate Affirmative Action for Women Strategy Program was initiated); 48 women were at management level (27 more than in 2005)</li> <li>Initiated consideration of diversity management (strategy for utilizing employee diversity)</li> <li>Implemented partial salary and new benefits for childcare leave (started April 2008)</li> </ul>	△	<ul style="list-style-type: none"> <li>Promote diversity management                             <ul style="list-style-type: none"> <li>Introduce and develop program to utilize diversity of female, physically or mentally challenged, and elderly employees, and non-Japanese employees in Japan</li> </ul> </li> </ul>	49 website
Strengthen industrial accident risk reduction activities	<ul style="list-style-type: none"> <li>Conducted safety and health inspections at 10 major domestic plants</li> <li>Promoted major bimonthly theme-based targets (six themes in total)</li> <li>Provided safety and health education for newly assigned temporary staff and employees of subcontractors at each site</li> </ul>	○	<ul style="list-style-type: none"> <li>Strengthen industrial accident risk reduction activities                             <ul style="list-style-type: none"> <li>Conduct regular safety and health inspections at 11 major domestic plants</li> <li>Continue with preparations for introduction of occupational safety and health management system</li> </ul> </li> </ul>	50
Improve safety and health awareness of newly assigned temporary staff and employees of subcontractors stationed inside Sharp sites in Japan	<ul style="list-style-type: none"> <li>Strengthened efforts to promote mental health care</li> </ul>	○	<ul style="list-style-type: none"> <li>Continue strengthening efforts to promote mental health care                             <ul style="list-style-type: none"> <li>Expand support system for employees taking or returning from medical leave due to mental health reasons</li> <li>Continue to carry out stress checks for all employees</li> </ul> </li> </ul>	50 website
Strengthen measures against lifestyle diseases	<ul style="list-style-type: none"> <li>Distributed handbook to all employees</li> <li>Set up counseling system through outside medical service institute</li> <li>Carried out mental health training for all employees</li> <li>Carried out stress checks for all employees</li> </ul>	○	<ul style="list-style-type: none"> <li>Continue strengthening measures against lifestyle diseases                             <ul style="list-style-type: none"> <li>Attain 100% participation in periodic physical checkups (including special health exams)</li> <li>Strengthen guidance for employees with metabolic syndrome (improving exercise, diet, and smoking habits)</li> </ul> </li> </ul>	50 website
Japan: <ul style="list-style-type: none"> <li>Create Sharp Forests at 10 or more locations</li> <li>Provide environmental education at 500 elementary schools for the year</li> <li>Expand local social contribution activities at sales and service bases</li> </ul> Overseas: <ul style="list-style-type: none"> <li>Expand activities centered on Sharp Charity Foundation in China</li> <li>Develop network for social contribution activities at overseas bases</li> </ul>	<ul style="list-style-type: none"> <li>Created Sharp Forests at 10 locations</li> <li>Provided environmental education at 537 elementary schools</li> <li>Total of 12,836 people participated in 572 local social contribution activities at 85 bases</li> <li>In China, provided scholarships (about 180 people at 11 universities), donated Sharp products (about 150 air purifiers to approx. 60 public hospitals), planted trees to control drifting sand and dust in Tianjin, and carried out beautification campaigns in areas near Sharp bases</li> <li>Developed network to gather information on environmentally related social contribution activities from overseas bases</li> </ul>	◎	<ul style="list-style-type: none"> <li>Japan:                             <ul style="list-style-type: none"> <li>Continue Sharp Forest activities</li> <li>Provide environmental education for at least 500 elementary schools for the year</li> <li>Continue local social contribution activities at all Sharp sales and service bases</li> </ul> </li> <li>Overseas:                             <ul style="list-style-type: none"> <li>Continue activities centered on Sharp Charity Foundation in China</li> <li>Expand environmental education in overseas regions</li> </ul> </li> </ul>	17·18-19 20·21·51-52 website

# For Customers Delivering Peace of Mind and Satisfaction to Every Customer

In order to create user-friendly products, Sharp is applying customer feedback from the Customer Assistance Center toward product improvements. Sharp pursues customer satisfaction by supplying products and services that customers can always rely on.

Actions in Fiscal 2007		Objectives for Fiscal 2008
Objectives	Achievements	
<ul style="list-style-type: none"> <li>Further improve quality in the early stages of product making (planning and design)</li> </ul>	<ul style="list-style-type: none"> <li>Achieved better product quality and reliability and a shorter evaluation cycle by expanding application of design parameters for the development and design process</li> <li>Strengthened the analysis system by assigning more failure analysis technicians (currently 53 more than the previous year)</li> <li>Issued a revised version of Company-Wide Technical Safety Standards (14th edition) and promoted product making in line with the strengthened standards</li> </ul>	<ul style="list-style-type: none"> <li>Reinforce design quality and product safety through the use of statistical methods and tools                             <ul style="list-style-type: none"> <li>Expand the number of design parameter applications for the development and planning process</li> <li>Update and strengthen Company-Wide Technical Safety Standards</li> <li>Promote inter-company sharing of technical analysis capabilities</li> </ul> </li> <li>Improve products by taking on the customer's point of view and introduce more universal design products                             <ul style="list-style-type: none"> <li>Activate the Voice of the Customer (VOC) program to incorporate customer feedback into product making</li> </ul> </li> <li>Pursue "no customer waiting" responsiveness and faster, more reliable service                             <ul style="list-style-type: none"> <li>Reorganize the reception system during peak times to improve the consistency of the phone call reception rate</li> <li>Implement ongoing training in response techniques for customer assistance agents</li> <li>Strengthen efforts to improve the percentage of repairs that can be completed in one visit</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>Introduce more universal design products</li> </ul>	<ul style="list-style-type: none"> <li>109 models of 19 products recognized as universal design home appliances by the Association for Electric Home Appliances in Japan</li> <li>Implemented product improvements based on usability test results and analysis of customer feedback</li> </ul>	
<ul style="list-style-type: none"> <li>Improve the phone call reception rate to achieve a higher ranking in customer satisfaction surveys of inquiry response skills</li> </ul>	<ul style="list-style-type: none"> <li>The phone call reception rate increased by 10.7 points over the previous year as a result of improvement efforts, including predicting the number of inquiries and raising the level of customer assistance agents' response skills</li> </ul>	

## Basic Stance and Vision on Customer Satisfaction and Quality

### Quality Philosophy

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

**品質第一 私たちの心です**  
Quality First in Heart and Mind

Displayed at every Sharp site as a company-wide slogan for quality

 Quality guarantee system  
ISO 9001-certified sites (companies)

## Efforts to Ensure Product Safety

At Sharp, product safety is based on adherence to the safety standards, laws, and regulations of every country. Sharp's own uniquely strict Company-Wide Technical Safety Standards are revised annually, especially concerning issues such as incombustible material usage and abnormal motion detection.

Moreover, the Sharp Group has established a voluntary action plan on product safety. It specifies: 1) the Sharp Voluntary Product Safety Action Policy, 2) the product safety promotion system, 3) efforts for ensuring the safety of products, and 4) response to accidents with products. In addition, in fiscal 2007 the Product Safety Promotion Center was established to further improve safety efforts.

Along with responding in a timely manner to changes in the social situation and revisions to laws pertaining to product safety, Sharp will continue to increase its efforts at offering products that customers can use with peace of mind.

## Creating Products That Are Easier to Use

In order to develop products that customers can feel comfortable using, Sharp conducts monitor and usability tests and actively reflects customers' voices in its product planning.

In fiscal 2007, Sharp ran these tests for LCD TVs and DVD/Blu-ray Disc recorders. For products that are currently on the market, the rate of customer calls to the Customer Assistance Center was quantified (by calculating the cumulative number of calls per cumulative unit sales). By comparing the rate of calls with that of previous models, Sharp can pinpoint which models require improvement and can conduct more precise analysis.

Through such ongoing efforts, Sharp has created products following universal design standards, and as of June 2008, 109 models of 19 products have been recognized as universal design home appliances by the Association for Electric Home Appliances in Japan.

To continue this trend in the future, Sharp is incorporating the customer's point of view as it looks ahead to creating products that are better than ever.

### Improved product from fiscal 2007

As simple as a VCR, but even easier to use  
**Easy recording and playback of HD programs**

The easy-to-use, simple remote control

LC-42DS3-W

BD-AV10-W

One-touch recording

One-touch timer recording

One-touch playback

Automatically ends recording when the program is over

Select a program from the EPG and press one button to timer-record that program

Starts playback from where it ended last time



### Universal design product from fiscal 2007

#### Look, touch, and understand Digital MFP MX-7001N

The MX-7001N itself (the control panel, internal parts, etc.) and its instruction manual are designed so they can be recognized by people with varying kinds of color vision. The MX-7001N has been certified for Color Universal Design (CUD) from the Color Universal Design Organization (CUDO), a nonprofit organization in Japan.



Large, easy-to-see, touch-screen LCD control panel



Easy-to-push operating buttons

## No. 1 in Customer Satisfaction; After-Sales Service Activities

Guided by the goal of becoming No. 1 in customer satisfaction, Sharp is advancing customer service innovation activities in an effort to provide faster, more effective after-sales service that customers can always rely on.

In fiscal 2007, Sharp established a service parts pre-order system. When a request for repairs is received by 6:00 p.m., the necessary parts are shipped immediately and will arrive at the appropriate service center anywhere in Japan the next morning before 9:00 a.m. Later that day, the parts are used in repairing products. This system has increased the number of repairs that can be completed in only one visit and is making customers happier. Using the know-how that is being accumulated through this system, Sharp aims to increase the rate of "hits" (instances when exactly the right part is ordered) in the future.

In addition, a full-time system for next-day complete repair service for large AQUOS LCD TVs has been set up at 39 service centers across Japan. After the repairs are completed, Sharp makes follow-up calls to customers that are yielding positive feedback.

Sharp plans to continue raising the standard of customer satisfaction in a variety of ways.

## Hospitality Is the Motto of the Customer Assistance Center

From the first consultation with a potential customer to a request for repairs after purchase, Sharp's Customer Assistance Center responds to customer needs with hospitality in mind. While always taking the customer's point of view, Sharp's greatest mission is to provide products customers feel good using.

In order to achieve this goal, Sharp is training the people who have direct contact with customers: the customer assistance agents. Sharp's agents are receiving training in the fundamentals of response skills, as well as technical product knowledge, in order to improve the quality of service they provide. With this training, agents are better able to foster a customer satisfaction-oriented mindset and improve their skills of accurately assessing customer needs and providing the best possible solutions to problems.

Sharp is working to create easy-to-use, high-quality products that reduce the inconvenience of customers having to call the Customer Assistance Center. Feedback from customers is transmitted accurately to those in charge of product development within the appropriate divisions, and regular meetings are held to exchange ideas and opinions with the aim of making product improvements.

Sharp will continue to satisfy customers and fulfill expectations by always keeping the customer's point of view in mind.



Customer Assistance Center

## Active Disclosure of Quality Information

In the event that a Sharp product is found to be responsible for injury to customers or for damage to property, Sharp will disclose relevant information immediately in newspapers and via its website. Sharp also has contact points to directly receive inquiries from customers and is striving to keep quality problems to an absolute minimum.

During fiscal 2007, Sharp notified customers as below, providing free-of-charge inspection and repair services. Sharp also continually updates important product safety information on its website.

### • LCD TVs for the Oceania market (May 2007)

In response to the risk of electric shock from some 42-inch LCD TVs sold in Australia and New Zealand, Sharp announced free-of-charge inspections and repair service.

### • Residential solar power generation system (December 2007)

In response to the risk of color alteration and/or burnout for the connecting section of some indoor power conditioners, Sharp announced free-of-charge inspections and repair service.

## TOPICS

### Sharp Ranked No. 1 Overall in Quality Management

Sharp took first place in the third Quality Management Ranking Survey (sponsored by the Union of Japanese Scientists and Engineers and cosponsored by Nikkei Inc.). The survey evaluates and quantifies efforts such as putting in place and operating systems to improve quality. Evaluated areas include management conditions of departments responsible for quality, human resource development, and customer inquiry response measures.

Sharp ranked especially high in the proliferation and promotion of quality improvements. The company was highly rated for recognizing quality innovations in its regular awards system and for creating the Quality Engineer System\*, an intra-company certification system for quality control ability.

Sharp's activities were introduced at a lecture on the survey at a later date.

\* Quality Engineer System: This program was initiated in October 2005 to educate and support quality technicians. At the end of April 2008, 9,426 employees had been certified at the beginner or intermediate level.



Quality Management Ranking Survey lecture

### Training Call Center Leaders from Shanghai

Sharp is reinforcing the operation of its call centers in the Americas, Europe, China, and the rest of Asia in response to growing worldwide AQUOS sales.

In fiscal 2007, three call center leaders from Sharp Electronics Sales (China) Co., Ltd. (SESC) came to the Customer Assistance Center in Japan and learned how to improve their responsiveness and apply customer feedback towards product making. On the final day, the trainees said the training had changed their outlook and they confidently proclaimed that they would return home and improve the Shanghai call center.



(From left) SESC call center leaders Mr. Ding, Ms. Hu, and Ms. Wei

For Business Partners

# Mutual Prosperity with Suppliers and Dealers

Sharp conducts its procurement activities on the basis of fair evaluation, ensuring that all companies are provided with equal opportunities. Sharp is building relationships of cooperation and trust with business partners through dialogue that deepens mutual understanding. It is also Sharp's belief that CSR activities should apply to the entire supply chain, including its business partners.

Actions in Fiscal 2007		Objectives for Fiscal 2008
Objectives	Achievements	
<ul style="list-style-type: none"> <li>Improve supply chain CSR measures</li> </ul>	<ul style="list-style-type: none"> <li>Constructed an online response system for the CSR Procurement Survey and conducted surveys targeting major suppliers in Japan</li> </ul>	<ul style="list-style-type: none"> <li>Expand implementation of supply chain CSR measures overseas</li> <li>Expand CSR Procurement Survey to local suppliers serving Sharp's overseas bases</li> </ul>

## Equal Opportunity and Fair Evaluation for All Domestic and Overseas Suppliers

With production activities around the world, Sharp procures parts, materials, and equipment based on the concept of providing equal opportunities to all domestic and overseas suppliers. It also fairly evaluates whether the procurement meets Sharp's requirements for quality, standards, and performance.

Sharp has stipulated Basic Purchasing Principles that clearly define the fundamentals of impartial and fair purchasing and that promote the development of cooperation and trust with business partners. Sharp thus pursues a prosperous coexistence with its business partners.

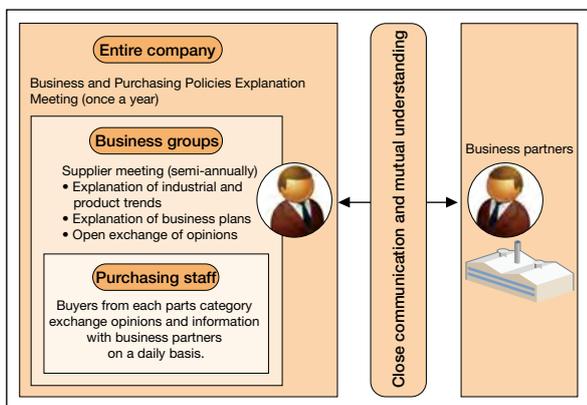
 Sharp Basic Purchasing Principles

## Making CSR a Common Goal Across the Entire Supply Chain

In fulfilling its social responsibility in business activities as a manufacturer, Sharp must go beyond its group companies and include the network of business partners encompassing the entire supply chain.

Consequently, in 2004 and 2005, Sharp revised its Basic Purchasing Principles, which it had originally established in 1990, to include important requirements for suppliers, such as environmental conservation, compliance with laws and regulations, ensuring the security of confidential information, and promoting CSR activities.

Sharp will continue to fulfill CSR across the entire supply chain by constantly checking to see that its basic principles and requirements meet the needs of society, including respect for the law and social norms, and environmental conservation.



## Approaching CSR Together with Suppliers

Sharp is promoting a variety of measures based on the concept of approaching CSR in concert with suppliers.

In fiscal 2004, Sharp first began to hold briefing sessions and seminars related to CSR on themes such as labor, health and safety management, and environmental conservation, targeting senior management of major suppliers as well as persons in charge at subcontractor companies engaged in production and other work at Sharp sites in Japan.

In addition, to enable suppliers to check their own CSR efforts at the international level, Sharp added its own content to the Supply-Chain CSR Deployment Guidebook issued by JEITA (Japan Electronics and Information Technology Industries Association) and created the Sharp Supply-Chain CSR Deployment Guidebook.



Sharp Supply-Chain CSR Deployment Guidebook (Japanese, English, and Chinese editions)

- Contents of Sharp Supply-Chain CSR Deployment Guidebook
  - I. Human Rights and Labor
  - II. Occupational Health and Safety
  - III. Environment
  - IV. Fair Trading
  - V. Product Quality and Safety
  - VI. Information Security
  - VII. Contribution to Society

Since May 2007, this guidebook has been distributed to about 1,400 of Sharp's major suppliers in Japan, with a request that they use it to step up their efforts on items related to CSR.

To promote the CSR Procurement Survey, which provides Sharp with the results of self-checks based on this guidebook, Sharp has also constructed an online response system to enable suppliers to use the Internet to enter their answers. Sharp has held briefing sessions targeting suppliers, particularly subcontractors, to request their understanding of and cooperation in Sharp's CSR initiatives, and launched the CSR Procurement Survey in January 2008.

Depending on the status of a supplier's CSR efforts gleaned through their answers to the survey, Sharp will also request that the supplier take the necessary steps to improve their efforts.

In fiscal 2008, Sharp plans to extend the CSR Procurement Survey to suppliers in locations serving Sharp's overseas bases.

 Sharp Supply-Chain CSR Deployment Guidebook

## Response to the Subcontract Act

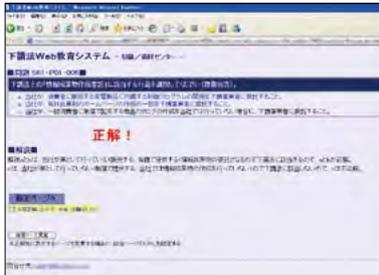
To comply with the Act Against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors (the Subcontract Act), which protects the interests of subcontractors in Japan, Sharp is strengthening its measures for compliance checks and in-house education.

Regarding compliance checks, since 2002, Sharp's Corporate Procurement Center has conducted regular audits of all domestic business groups once a year.

In fiscal 2007, as a new initiative, Sharp began cross audits in which purchasing staff for each business group conduct an internal audit of other business groups. As a result, awareness of compliance with the Subcontract Act by all purchasing staff rose even higher, and at the same time, this initiative worked to promote the exchange of information on the status of compliance efforts among all business groups.

Regarding in-house education, Sharp also set up in March 2008 a Subcontract Act training system on its intranet to raise awareness and improve knowledge among staff belonging to purchasing and subcontractor supervision departments. This system, with a "one question a day" format, allows study sessions that take only a short time, and it is receiving favorable reviews.

Sharp will continue its efforts in fiscal 2008 by expanding the range of departments subject to compliance checks and in-house education to include, for example, engineering departments.



### Online Subcontract Act training system

The user selects an answer to a question. If the answer is correct, an explanation is displayed. If the answer is incorrect, the same question is posed again in the days that follow until the answer selected is the correct answer.

## Assisting Dealers in Their Efforts Toward the Environment

As dealers work to promote the sale of energy-efficient products and spread the knowledge of energy conservation to ordinary households, Sharp has been providing those dealers assistance via routine sales activities such as presenting ideas for in-store displays and planning exhibitions of environmentally conscious products, to help facilitate understanding of the benefits of energy-efficient products among consumers.

In fiscal 2007, under a commendation system entitled Dealer of Excellence in Promoting Energy-Efficient Products sponsored by the Energy Conservation Center, Japan, 55 dealers in regions where Sharp personnel provided assistance received certification as Dealer of Excellence.

In addition, from among those dealers, five also won various other awards, including the Environment Minister's Prize, the Agency for Natural Resources and Energy Director-General's Prize, and the Energy Conservation Center Chairman's Prize.

### Words from the Winner of the Environment Minister's Prize

The salesperson from Sharp introduced us to examples of other dealers who had been certified as Dealers of Excellence, and so we felt we needed to promote our sales activities from the standpoint of environmental conservation. Our efforts to do just that led to us winning this prize.

We were surprised at the solemnity of the award ceremony, which was held at Tokyo Big Sight. We were also featured prominently in our local newspaper and we received a great response from our customers. We really have a sense of the significance of this award.

Receiving this award has given us encouragement, and we want to put even more energy into advising customers and showing them how to use consumer electronics in a way that effectively saves energy and resources.

Owners of Fukuoka Shoten, a Sharp dealer in Iwate Prefecture (winner of the Environment Minister's Prize)



### Web Words from an award-winning dealer

## OVERSEAS TOPICS

### Global Suppliers Conference in Malaysia

The Malaysia Global Suppliers Conference was held in Kuala Lumpur in October 2007, with the participation of some 230 people from 161 suppliers. At this conference, Sharp executives in charge of procurement explained Sharp's policies as well as plans to expand local procurement. Then each base in Malaysia introduced business plans for the last half of 2007. Lastly, Sharp requested the cooperation of participants in ensuring a stable supply of parts and materials.

In addition, the executives in charge of CSR promotion described the CSR activities of the Sharp Group, and asked the suppliers to aggressively promote efforts toward CSR.



Malaysia Global Suppliers Conference

### Participation in Reverse Trade Fairs Aggressively Promotes Local Procurement

A reverse trade fair is the opposite of a traditional trade show where manufacturers have booths that exhibit things for sale. Instead, manufacturers display parts and materials they want to procure locally, in an effort to seek new suppliers.

Sharp has exhibited at the International Sourcing Fair (Shanghai, China) every year since 2005. The number of visitors to this trade fair is increasing every year, and it represents a good opportunity to advance global procurement. This year, the Sharp booth featured a hands-on exhibit of sample parts and materials greater in number and more varied than ever. Business discussions proceeded easily, and Sharp received many inquiries about sourcing pressed, machined, and molded items.



Sharp's booth

# For Shareholders and Investors

## Appropriate Return of Profits and Information Disclosure

One of the most important management principles for Sharp is to return a portion of profits to shareholders. By providing prompt, accurate, and wide-ranging information, Sharp is promoting communication with shareholders and investors in Japan and overseas, and the valuable feedback of these stakeholders is regularly relayed to Sharp management for future improvements.

Actions in Fiscal 2007		Objectives for Fiscal 2008
Objectives	Achievements	
<ul style="list-style-type: none"> <li>Improve information disclosure to shareholders and investors</li> </ul>	<ul style="list-style-type: none"> <li>Renewed contents of the investor relations website</li> </ul>	<ul style="list-style-type: none"> <li>Improve information disclosure to shareholders and investors and respond to the diversified needs of investors               <ul style="list-style-type: none"> <li>Expand the number of regions overseas hosting IR meetings</li> <li>Hold explanation sessions for individual investors</li> </ul> </li> </ul>

### Basic Policies Concerning Profit Sharing

Sharp considers distributing profits to shareholders to be one of the most important management issues. While maintaining consistently stable dividend payouts, and while considering its consolidated business performance, financial situation, and future business development in a careful and comprehensive manner, Sharp implements a set of policies to return profits to its shareholders, such as increasing the amount of periodic dividends.

Annual dividends in fiscal 2007 were 28 yen per share, which marked an increase for the eighth consecutive period. Sharp will strive to return its profits to shareholders, aiming for a dividend payout ratio of 30%, on a consolidated basis, in the future.

Sharp uses internal reserve funds for investment in future growth fields, the development of uniquely featured products and proprietary devices, overseas business development, and environmental protection.

#### Net income per share (consolidated) and cash dividends per share

	(fiscal year)				
	2003	2004	2005	2006	2007
Net income	55.37	70.04	80.85	93.25	93.17
Cash dividends	18	20	22	26	28

(yen)

### Active Investor Relations

Sharp is striving to disclose a wide range of information in a timely and accurate manner by proactively engaging in communication with shareholders and investors through domestic and overseas IR activities.

Sharp is continuing to go beyond its legal obligation to supply certain designated information by actively disclosing additional information about its businesses, as well as its management policies and strategies.

#### Communication with Institutional Investors and Analysts

In fiscal 2007, Sharp was actively engaged in individual interviews and meetings with institutional investors and analysts in Japan and overseas. Sharp also held quarterly financial results announcements, hosted factory tours, participated in conferences sponsored by securities companies, and hosted business strategy briefings with the participation of Sharp's management.

Sharp is also improving the content of its Japanese and English investor relations websites and working to assure that there is no information gap between Japan and overseas.

#### Communication with Individual Investors

In addition to enhancing the contents of the investor relations website in fiscal 2007, Sharp has improved the site's search capability and viewability. Sharp also held explanation sessions for salespeople in charge of individual investors at securities companies and participated in various seminars, where the company explained its business results and strategies and held question-and-answer sessions.

Through future IR activities, Sharp will continue to make sure a broad range of individual investors fully understand the condition of the company's business.

#### General Shareholders' Meetings

Sharp strives to create an environment that enables shareholders to exercise voting rights at the ordinary general meeting of shareholders: efforts include holding the meetings earlier than most Japanese companies, allowing shareholders to exercise voting rights by computers and mobile phones, participating in a platform for electronic voting rights for institutional investors, and posting English notices about the meetings on the website.

In June 2007, Sharp began using a larger venue, where its new products were on display, so that as many shareholders as possible could attend. Sharp is also enhancing information disclosure by making public the events of shareholders' meetings by posting video on the website the day after the meetings for a certain period of time.



### SRI (Socially Responsible Investment)\*

As of June 2008, Sharp was one of the stocks chosen for the following SRI indices:

- FTSE4Good Global Index (UK); March 2008
- Ethibel Sustainability Index (Belgium)
- Morningstar Socially Responsible Investment Index (Japan); September 2007
- KLD Global Climate 100 Index (US); May 2007



\* SRI: Investment in companies that fulfill not only their financial obligations but their environmental and social responsibilities as well.

# For Employees Creating a Fair, Positive, and Progressive Workplace

Sharp stresses the importance of basic human rights and personal dignity, provides opportunities to enthusiastic employees, and fosters the diverse abilities of all employees. Sharp is also promoting a workplace that utilizes employees' diversity, and is cultivating a system that supports employees in maintaining a healthy balance between their work and home lives.

Actions in Fiscal 2007		Objectives for Fiscal 2008
Objectives	Achievements	
<ul style="list-style-type: none"> <li>Promote continual development of diversified human resources and capabilities to deal with changes in the business environment</li> </ul>	<ul style="list-style-type: none"> <li>Developed a global human resource development system, the Global Mid-Level Professional Human Resource Development Program (GMP Program)</li> <li>Promoted career development rotations for engineers</li> </ul>	<ul style="list-style-type: none"> <li>Promote the cultivation of managerial personnel to support the development of global business                             <ul style="list-style-type: none"> <li>Promote the GMP Program</li> </ul> </li> <li>Promote diversity management                             <ul style="list-style-type: none"> <li>Introduce and develop a program to utilize the diversity of female, physically or mentally challenged and elderly employees, and non-Japanese employees in Japan</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>Promote the continuation of the Corporate Affirmative Action for Women Strategy Program and consider additions to it</li> <li>Expand and diversify systems for supporting the balance between work and family</li> </ul>	<ul style="list-style-type: none"> <li>22.3% of female employees held junior manager (semi-managerial) positions (up 5% from 2005 when the Corporate Affirmative Action for Women Strategy Program was initiated); 48 women were at the management level (27 more than in 2005)</li> <li>Initiated consideration of diversity management (strategy for utilizing employee diversity)</li> <li>Implemented partial salary and new benefits for childcare leave (started April 2008)</li> </ul>	

### Basic HR (Human Resources) Policy

For the mutual growth of both the company and employees' happiness, Sharp upholds the following principles.

- Implement a corporate-asset-oriented management strategy, which values the experience and technical skills of each employee
- Carry out flexible personnel placement with a focus on "putting the right employee in the right position," based on performance and ability, without favor or partiality
- Provide support so that each employee can deepen their expertise, as well as obtain knowledge and skills in a broad range

### Personnel, Education, and Training Systems That Value Employee Initiative and Diversity

Sharp Corporation systematically conducts human resource development, and has introduced a variety of personnel, education, and training systems (as shown below) that value the initiative and diversity of each employee and help them develop their individuality, motivation, and creativity.

In fiscal 2008, Sharp Corporation plans to implement the GMP (Global Mid-Level Professional Human Resource Development) Program to further foster mid-level personnel who can engage in on-site global business development activities.

### Basic Human Rights and Personal Dignity

The Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct stipulate the corporate policy and guiding principles for executives and employees regarding protecting basic human rights and personal dignity, such as the prohibition of both child and forced labor.

To promote these values, human rights seminars are held every year at each Sharp domestic site. At overseas bases, Sharp is making efforts to prevent the occurrence of human rights problems, in accordance with relevant local laws and regulations.

#### Next-generation human resource development systems

- Leadership program, Challenge course
- MOT (management of technology) program
- Master system

#### Systems for bringing out individual ability and motivation

- Personnel declaration/career development system, career development rotation
- Recruitment entry system
- Corporate Affirmative Action for Women Strategy Program
- SHINE program (for fostering young global employees)

#### Education, training, and self-development support systems

- Seminars classified by function and specialized field
- Correspondence course, Essential course
- Step-up campaign (qualification acquisition encouragement plan)

### Good Labor-Management Relationship Through Dialogue

Sharp respects employees' right to organize and right of collective bargaining based on the laws in each country and region, and promotes amicable, trusting relationships with labor unions.

In Japan, Sharp has monthly labor-management meetings: these include the Central Labor-Management Council, which involves top executives from both sides, and local labor-management meetings at each site, where opinions are exchanged on the business environment and labor-management issues.

In Europe, Sharp has held European Works Council meetings every year since 1997.

 Personnel, education, and training systems



Corporate Affirmative Action for Women Strategy Program training female leaders

For Employees  
Creating a Fair, Positive, and Progressive Workplace

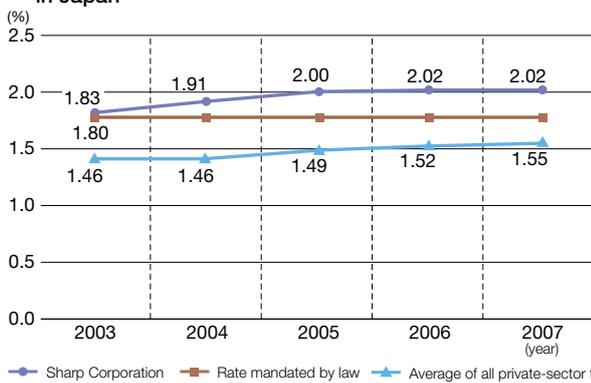
**Employing the Physically and Mentally Challenged and the Elderly**

Sharp Corporation remains committed to actively employing the physically and mentally challenged and creating a worker-friendly environment. In fiscal 2007, Sharp Corporation's physically and mentally challenged employment rate was 2.02%.

Sharp's efforts for the employment of the physically and mentally challenged have a long history. In 1950, Sharp incorporated a separate factory and named it the Tokusen Metal Limited Partnership, to help rehabilitate blinded war veterans. Today, its successor, Sharp Tokusen Industry Co., is making efforts as a special subsidiary to increase the special-needs employment level.

In employment of the elderly, those employees who have reached the mandatory retirement age of 60 can request reemployment with Sharp Corporation (until the age when they start receiving public pension).

**Physically and mentally challenged employment rate in Japan**



Note: Averages of all private-sector firms are based on a survey by the Japanese Ministry of Health, Labour and Welfare.

**Company-Wide Affirmative Action for Women<sup>\*1</sup> Promotion Campaign**

In October 2004, as the first step in its diversity management<sup>\*2</sup> program, Sharp Corporation established a team in charge of expanding opportunities for women within the Human Resources Group and began the Company-Wide Affirmative Action for Women Promotion Campaign.

The Corporate Affirmative Action for Women Strategy Program was started in June 2005. Since that time it has defined measures to be implemented, as well as targets, regarding matters such as the expansion of job fields for female employees and the promotion of women to managerial posts. Inter-departmental and inter-company collaboration has yielded results such as a wider range of areas where women can play important roles, increases in the percentage of female junior managers (semi-managerial positions), and a greater number of female managers.

<sup>\*1</sup> Affirmative action for women: A voluntary company effort that seeks to redress discrimination against women in employment and ensure equal opportunities (stipulated under the Law for Equal Employment Opportunity for Men and Women in Japan).

<sup>\*2</sup> Diversity management (strategy for utilizing employee diversity) accepts the ideas and values of employees with diverse backgrounds (with regard to gender, age, or nationality) without being influenced by previous corporate or social standards. It is a strategy for promoting company growth and the personal satisfaction of employees by responding with rapidity and flexibility to changes in the business environment. (Taken from the Diversity Work Rule Study Group Report of the Japan Federation of Employers' Associations)

Corporate Affirmative Action for Women Strategy Program

**Efforts Supporting a Work/Family Balance**

Sharp Corporation is also systematically expanding various systems supporting the balance between work and family. In April 2007 Sharp Corporation was certified by the Japanese Ministry of Health, Labour and Welfare as a company that achieved the action plan of the Law Concerning the Promotion of Measures for Supporting Next-Generation Development.

In addition to the existing support systems, in fiscal 2007 Sharp decided to pay employee salaries for the first ten days of childcare leave, and also set up a new system of financial support covering childcare leave (these new measures took effect in April 2008).



The next-generation certification mark (nicknamed Kurumin) shows that the company is certified by the Ministry of Health, Labour and Welfare.

Systems to support work and family

**From Affirmative Action to Promoting Diversity**

Sharp's ongoing affirmative action efforts over the past three years have generated positive results in terms of creating an environment where female employees can excel. Sharp hopes to expand on this success with its Company-Wide Diversity Promotion Campaign, initiated in fiscal 2008 for the physically and mentally challenged, the elderly, and non-Japanese employees in Japan. Sharp is aiming to fulfill its one-of-a-kind business potential by making full use of the diversity of its employees.

**OVERSEAS TOPICS**

**Promoting a Safe Workplace with the Basic Principles of Compliance and Supporting Employee Growth**

Increasing awareness of employee rights and social standing is accompanying China's rapid economic development. In response to these social changes, the Employment Contract Law to protect employee rights went into effect on January 1, 2008.

To assure that it does not infringe upon any of the employee rights secured in the new law, Sharp assembled a project team including a core of personnel managers from Sharp Group companies in China. The team responded to the new Chinese law by focusing on the basic principles of compliance and supporting employee growth. In order to assure a safe workplace, Sharp revised its labor regulations and made sure the new regulations were adopted at all Sharp companies in China before the new law took effect.

In addition, major decisions affecting the treatment of employees are being made in a democratic way. Self-management for employees is now mandatory under the new law. Therefore, Sharp and the labor unions cooperated to establish the Employee Representative Assembly run by and for employees. Sharp supports and respects the Employee Representative Assembly as a more democratic process in company management.



Wuxi Sharp Electronic Components Co., Ltd. (WSEC) employees at the first Employee Representative Assembly

Personnel data

For Employees

# Creating a Safe and Secure Workplace

In order to create a work environment where all employees can work safely and maintain good mental and physical health, Sharp carries out various activities based on theme-based targets for each month and is expanding education to raise awareness about safety and health. Sharp has also formulated the Healthy Sharp 21 program to support improving the health of employees as well as their families.

Actions in Fiscal 2007		Objectives for Fiscal 2008
Objectives	Achievements	
<ul style="list-style-type: none"> <li>Strengthen industrial accident risk reduction activities</li> <li>Improve safety and health awareness of newly assigned temporary staff and employees of subcontractors stationed inside Sharp sites in Japan</li> <li>Strengthen efforts to promote mental health care</li> </ul>	<ul style="list-style-type: none"> <li>Conducted safety and health inspections at 10 major domestic plants</li> <li>Promoted major bimonthly theme-based targets (six themes in total)</li> <li>Provided safety and health education for newly assigned temporary staff and employees of subcontractors at each site</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen industrial accident risk reduction activities                             <ul style="list-style-type: none"> <li>Conduct regular safety and health inspections at 11 major domestic plants</li> <li>Continue with preparations for the introduction of an occupational safety and health management system</li> </ul> </li> <li>Continue strengthening efforts to promote mental health care                             <ul style="list-style-type: none"> <li>Expand the support system for employees taking or returning from medical leave due to mental health reasons</li> <li>Continue to carry out stress checks for all employees</li> </ul> </li> <li>Continue strengthening measures against lifestyle diseases                             <ul style="list-style-type: none"> <li>Attain 100% participation in periodic physical checkups (including special health exams)</li> <li>Strengthen guidance for employees with metabolic syndrome (improving exercise, diet, and smoking habits)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>Strengthen measures against lifestyle diseases</li> </ul>	<ul style="list-style-type: none"> <li>Distributed a handbook to all employees</li> <li>Set up a counseling system through an outside medical service institute</li> <li>Carried out mental health training for all employees</li> <li>Carried out stress checks for all employees</li> </ul>	
	<ul style="list-style-type: none"> <li>Achieved periodic physical checkup rate of 99.9%</li> <li>Promoted weight-loss programs for employees with metabolic syndrome</li> <li>Promoted company-wide fitness programs</li> <li>Promoted company-wide walking programs such as team walking</li> </ul>	

For Employees

## Labor and Management Discuss and Promote Safety and Health

Sharp Corporation has established the Basic Philosophy and the Safety and Health Principles in the area of safety and health. Every year, the company formulates specific objectives and action plans with the goal of totally eliminating industrial accidents.

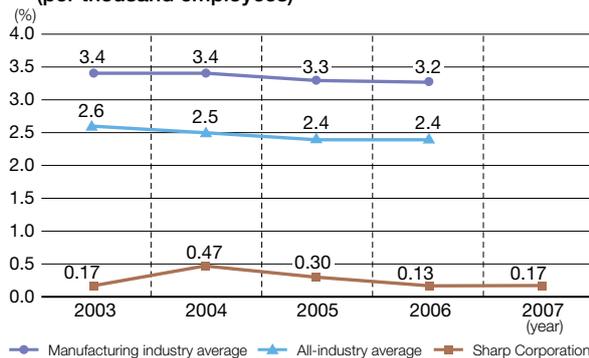
Every two months, Sharp Corporation also holds Central Safety and Health Committee meetings that bring Sharp and the labor union together. Participants confirm the status of company-wide safety and health efforts and share valuable information. The Central Safety and Health Committee members have also assembled a team that conducts safety and health inspections at each plant.

In addition, each site plans and carries out various activities based on monthly labor-management safety and health committee meetings. And since fiscal 2006, each site has held monthly safety and health meetings with subcontractors' site managers to further improve the safety and health of their employees stationed inside Sharp sites.

At Sharp Corporation, the annual rate of industrial accidents per thousand employees (resulting in a leave of absence lasting at least four days) was 0.17 in 2007. Sharp's rate continually remains well below the national average for the manufacturing industry.

In the future, Sharp will work to address the latent risk of accidents and implement proactive safety measures to prevent or reduce accidents. To do so, Sharp will build an occupational safety and health management system, based on the Plan-Do-Check-Act (PDCA) cycle, that promotes safety and health activities in an organizational and voluntary way. Sharp aims to have this system in place at all production sites within three years, as it pursues its ongoing goal of creating a safe and comfortable workplace.

■ Annual industrial accident rates in Japan (per thousand employees)



Note: Averages for all industries and the manufacturing industry are based on a survey by the Japanese Ministry of Health, Labour and Welfare.

## Health Promotion for Employees and Their Families

Sharp created Healthy Sharp 21, a comprehensive health-promotion program in Japan for employees and their families that includes voluntary fitness programs to prevent or remedy lifestyle diseases.

Sharp also gives employees periodic physical checkups, with 99.9% of all employees in Japan undergoing these checkups in fiscal 2007. There is also active follow-up for employees who are screened for further medical examinations in the form of reexaminations and health guidance.

In fiscal 2008, the Japanese government began a policy of special health exams and health guidance to help people avoid or treat metabolic syndrome. In line with this policy, Sharp will create programs in Japan that encourage employees to make lifestyle changes involving diet, exercise, and smoking, and to raise their awareness of health self-management.

## Mental Health Care

In order to help its employees prevent and deal with mental illnesses at an early stage and support their smooth return from medical leave, Sharp Corporation has developed a counseling system involving medical specialists, company counselors, and an outside medical service institute. To promote correct awareness of mental health, the company also conducts various training and awareness activities.

Also, as part of periodic health checkups, Sharp Corporation carries out mental stress checkups on all employees (based on self-diagnosis, 97.1% participation rate). For employees who have been found to have high stress levels, the company provides training to enhance their capacity for self-management and gives one-on-one counseling through company physicians and counselors.

In fiscal 2007, Sharp distributed a mental health handbook, expanded in-house mental health counseling, and strengthened consultation using outside medical service institutes.

Sharp also plans on continuing to expand the support system for employees taking or returning from medical leave due to mental health reasons.

 Health and safety data

For Local Communities

# Social Contribution Activities as a Corporate Citizen

With the Sharp Green Club (SGC) acting as the umbrella organization, Sharp conducts community-based activities that contribute to society in Japan and overseas. Since fiscal 2004, Sharp has also been creating Sharp Forests all around Japan in areas where Sharp bases and sales offices are located.

Actions in Fiscal 2007		Objectives for Fiscal 2008
Objectives	Achievements	
<b>Japan:</b> <ul style="list-style-type: none"> <li>• Create Sharp Forests at 10 or more locations</li> <li>• Provide environmental education at 500 elementary schools for the year</li> <li>• Expand local social contribution activities at sales and service bases</li> </ul> <b>Overseas:</b> <ul style="list-style-type: none"> <li>• Expand activities centered on the Sharp Charity Foundation in China</li> <li>• Develop a network for social contribution activities at overseas bases</li> </ul>	<ul style="list-style-type: none"> <li>• Created Sharp Forests at 10 locations</li> <li>• Provided environmental education at 537 elementary schools</li> <li>• A total of 12,836 people participated in 572 local social contribution activities at 85 bases</li> <li>• In China, provided scholarships (about 180 people at 11 universities), donated Sharp products (about 150 air purifiers to approx. 60 public hospitals), planted trees to control drifting sand and dust in Tianjin, and carried out beautification campaigns in areas near Sharp bases</li> <li>• Developed a network to gather information on environmentally related social contribution activities from overseas bases</li> </ul>	<ul style="list-style-type: none"> <li>• Continue Sharp Forest activities</li> <li>• Provide environmental education for at least 500 elementary schools for the year</li> <li>• Continue local social contribution activities at all Sharp sales and service bases</li> <li>• Continue activities centered on the Sharp Charity Foundation in China</li> <li>• Expand environmental education in overseas regions</li> </ul>

## Sharp Green Club (SGC) Expands Social Contribution Activities

In June 2003 in Japan, Sharp and its labor union jointly established the Sharp Green Club (SGC) as an organization to plan and manage a variety of social contribution activities (mainly volunteer environmental activities).

SGC promotes various activities such as cleanup campaigns and tree-planting activities in local areas, with the aim of providing employees with opportunities to contribute to communities by participating in activities with local citizens, while becoming more aware of the importance of the environment and volunteering. In fiscal 2007, a total of 27,405 employees participated in SGC activities.

Since 2001, the Fukuyama Plant has been participating in beautification campaigns around the area. This year, as part of the 49th Annual Fukuyama Public Health Rally, the efforts of employees won high ratings and garnered a letter of thanks from local authorities as "a local organization or group who has had an impact on environmental beautification, particularly in support of cleanup activities."

One of the main activities of SGC is to create Sharp Forests in areas near Sharp bases and sales offices around Japan. In fiscal 2007, SGC added the Sharp Kagawa Forest and the Fukuoka Sharp Takasu Forest to its roster, and also made preparations to establish new forests in Kameyama and Okinawa. Altogether, SGC has developed Sharp Forests in 10 locations nationwide.

In Nara Prefecture, SGC has been involved in ongoing activities to preserve the environment of the SGC Asuka Forest since 2006. These efforts have been greatly appreciated, and the local Asuka Village administration presented Sharp with a certificate of gratitude recognizing Sharp for its distinguished services to the area.

Individual overseas sites have also carried out a variety of activities, such as tree-planting, cleanups in local communities, and environmental education classes at schools.

Sharp will continue to work closely with local communities to put energy into activities to protect the environment.



Sharp Green Club Asuka Forest

## Leave Systems to Support Social Contribution Activities

To raise awareness and support the participation of employees in voluntary social contribution activities, Sharp Corporation in Japan has introduced a volunteer leave system and a multipurpose leave system.

Under the volunteer leave system, employees can take up to a one-year leave from work to engage in volunteer activities that constitute a significant contribution to society. Under the multipurpose leave system, employees can receive eight days of extra paid leave per year to help out in the local community, care for ill, elderly, or mentally or physically challenged family members, or perform other socially valuable activities.

## Approximately 160 Students Accepted for Internships

Sharp Corporation has an internship program in Japan that gives university students on-the-job training to support their career development.

In fiscal 2007, the company accepted about 100 liberal arts students into its business internship programs and about 60 science and technology students in its technical internship programs.

## Cosponsoring the Asian Pacific Awards

The Asian Pacific Awards (sponsored by Mainichi Newspapers Co. and Asian Affairs Research Council) honor distinguished published works on topics such as politics, economics, diplomacy, and culture in the Asia-Pacific region. Sharp has been a cosponsor since the start of these awards in 1989, as part of efforts to contribute to development in the Asia-Pacific region. The commendation ceremony of the 19th Asian Pacific Awards was held in November 2007.



19th Asian Pacific Awards ceremony



## Local Social Contribution Activities in Japan and Overseas



### Activities in Support of Local Communities

In addition to participating in various campaigns in cooperation with local crime prevention associations and traffic safety associations, Sharp is deepening exchanges with local communities by sponsoring programs such as summer festivals and sports and cultural events.

Each year, Sharp sites take part in various events. The Sharp head office distributes and mounts protective mesh covers on bicycle baskets as part of a campaign to prevent opportunistic theft (bag-snatching), the Nara Plant cosponsors the National Goldfish Scooping Competition, and the Advanced Development and Planning Center in Tenri, Nara, cosponsors the Yamabiko Concert.



### Environmental Classes at Eco Art Festa Osaka

The Eco Art Festa Osaka is an event held to nurture creative talent and awaken environmental awareness in individuals, as part of the city of Osaka's efforts to build a creative urban community.

At this event in November 2007, Sharp held classes on the environment aimed at parents and children selected from those who responded to a public announcement. Sharp employees served as teachers/lecturers. The class was held while cruising Osaka Bay on board a public relations boat operated by the Port of Osaka. This class presented a good opportunity to deepen the understanding of Sharp's efforts toward the environment through discussions of topics such as recycling, solar power, and LEDs.



### Participating in Community Flower Planting

In July 2007, Sharp staff from its Utsunomiya Building, a sales and service base, participated in an event to transplant cosmos flower seedlings along the Cosmos Road, a bicycle path that runs along the Tagawa River, which flows through the city of Utsunomiya. This activity has been conducted by a branch of the Utsunomiya River Protection Association since 1996, and Sharp has been participating since 2004. About 30 employees and their families joined in this activity.



### Contributing to Community Beautification Campaigns (SEMEX/Mexico)

In October 2007, Sharp Electrónica Mexico S.A. de C.V. (SEMEX) held its Beach Cleanup Day at El Bebé Beach in Rosarito, Baja California. Approximately 340 employees and their families and friends participated in the event.

The event saw the participation of officials of the municipality, who provided heavy equipment and machinery to haul away the accumulated trash. The Red Cross also assisted with stand-by emergency units and the help of staff members. With the support of these groups, participants collected nearly 14 tons of garbage.



### Invitation to Local Children (SATL/Thailand)

In Thailand, the second Saturday in January is Children's Day. This day celebrates their healthy growth and development with a variety of fun events.

On January 12, 2008, Sharp Appliances (Thailand) Ltd. (SATL) celebrated Children's Day by inviting local children to play games and receive gifts of sweet treats and school supplies.

### Support for Youth Environmental Awareness Program (SEGA/Germany)



Sharp Electronics Germany and Austria (SEGA) is supporting a project called "Pupils Become Climate Observers" put forward by the German Institute for Weather and Climate Communication. The first meteorological station was completed at a comprehensive school in the city of Hamburg, where SEGA is located. Under this project, by the end of 2008, a total of 10 meteorological stations will have been built at Hamburg-area schools.

This project is an opportunity to generate interest in climate issues among the younger generation, which SEGA expects could lead to Hamburg becoming a model city for environmental protection.

 Local social contribution activities

# Third-Party Review



## Independent Review Report on "Environmental and Social Report 2008"

To the Board of Directors of Sharp Corporation

### 1. Purpose and Scope of our Review

We have reviewed "Environmental and Social Report 2008" (the "Report") of Sharp Corporation (the "Company") for the year ended March 31, 2008. Our engagement was designed to report to the Company, based on the results of our review, the credibility of the environmental performance indicators, social performance indicators and environmental accounting indicators (the "Indicators") for the period from April 1, 2007 to March 31, 2008 included in the Report.

The Report, including the identification of material issues, is the responsibility of the Company's management. Our responsibility is to independently report the results of our procedures performed on the Indicators.

### 2. The Standards and the Criteria used in our Review

We conducted our review referring to the "International Standard on Assurance Engagements 3000" (December 2003) issued by International Federation of Accountants (IFAC) and in accordance with the "Practice Guidelines for Assurance Engagements on Sustainability Information" (revised February 2008) issued by the Japanese Association of Assurance Organizations for Sustainability Information, with the criteria which are the standards the Company formulated (the "Company's Standards") drawing upon references including "Environmental Reporting Guidelines (Fiscal Year 2007 Version)" (June 2007) issued by the Ministry of the Environment of Japan and "Sustainability Reporting Guidelines Version 3.0" (October 2006) issued by Global Reporting Initiative.

### 3. Procedures Performed

We have performed the following review procedures;

- (1) With respect to the Company's policies for compilation of the Report, interviewed the Company's responsible personnel.
- (2) Assessed the Company's Standards used for collecting, compiling and reporting the Indicators.
- (3) With respect to the way of collecting the Indicators and the process flow of calculating them, interviewed the Company's responsible personnel and reviewed the systems and processes used to generate the values of the Indicators.
- (4) Compared the Indicators on a sample basis with the supporting evidences to test the conformity in collection, compilation and reporting of the Indicators to the Company's Standards.
- (5) Made on-site inspections of the Company's facilities domestic and overseas.
- (6) Evaluated the overall statement in which the Indicators are expressed.

### 4. Results of the Procedures Performed

We believe that our review procedures provide a reasonable basis for our conclusion.

Based on our review, nothing has come to our attention that causes us to believe that the Indicators in the Report are not collected, compiled and reported, in all material respects, rationally and in accordance with the Company's Standards.

Our firm and engagement members have no interest in the Company which would have to be disclosed pursuant to the provisions of the Assurance Standard for Environmental Reports (pilot version) issued by the Ministry of the Environment of Japan.

*KPMG AZSA Sustainability Co., Ltd.*

KPMG AZSA Sustainability Co., Ltd.

Osaka, Japan  
June 18<sup>th</sup>, 2008

# Information on Sharp's Website

Additional information related to this Environmental and Social Report can be found on Sharp's website at:

<http://sharp-world.com/corporate/eco/report2008/>

The contents of the website are subject to update, revision, and deletion without prior notice.

Environmental and Social Report Contents		Information on the website	See page(s) in the report	
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# SHARP

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Printed with VOC (volatile organic compound)-free ink



Published July 2008  
Printed in Japan