



Samsung Electronics 2004 Green Management Report

Respecting Nature Serving Communities



Summary

This is the latest version of Samsung Electronics Green Management Report published since 1999. The report is a general introduction to the social contribution activities carried out by the Company, based on the corporate philosophy of “Green Management,” including those for environmental protection, industrial safety and employee health. The Company intends to use it as a stepping-stone to the efforts made towards the sustainable development.

The Company’s top management checked its contents after having it confirmed by each relevant unit of operation. The Company will make the utmost efforts to develop proper survey tools and publish of information so that every item of its environmental or social contribution activities may be presented in a more transparent way.

Scope of the Report

This report concerns the major accomplishments between September 2001 and December 2003, in relation to the previous Green Management Reports issued since 1999.

Reference Materials

For more information concerning this report, please visit the following:
Samsung Community Relations White paper (www.samsunglove.co.kr)
Samsung Electronics’ Annual Report (www.samsung.com)

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CEO Message



“In the 21st Century, Samsung Electronics will make a world in which humans live in harmony with nature”

Samsung Electronics regards people's well being and environmental conservation as the most crucial agendas in the 21st Century, strives to contribute to humankind with first-rate products and services and plays a leading role in making the world a place in which humans can live in harmony with nature. The Company keeps in mind that it can ensure continued development when it can win respect from diverse interests by fulfilling its obligations and responsibilities as a corporate citizen in matters related to the community and environmental conservation, while trying to maximize corporate value through garnering excellent operational results.

Based on such recognition, Samsung Electronics announced “Environmental Guidelines,” including establishment of an environmental-friendly management system in June 1992. In May 1996, the Company announced “Green Management,” which puts priority on environmental friendliness, industrial safety and employees' health in all units of operations.

All employees of Samsung Electronics have been united as one in the efforts to put the following factors into practice: management based on environmental friendliness and industrial safety, development of environmental-friendly products, efforts for minimization of environmental impact through improved production processes, an optimally safe and pleasant workplace and contribution to the community. The Company will continue to fulfill its role as a first-rate corporate citizen both environmentally and socially by putting into practice the idea of co-existence and sharing with other members of the community, based on the philosophy of Green Management that cherishes nature and lives.

The report contains a general introduction to the social contribution activities carried out by the Company's levels of operations made in the direction of sustainable development. We at the Company hope that this will help the readers understand it better.

Thank you.

A handwritten signature in black ink, appearing to read 'J. J. Yun', written in a cursive style.

January 2004
Yun Jong-yong CEO & Vice Chairman
Samsung Electronics Co.,Ltd.

Introduction

Samsung Electronics is a world-class business in the IT industry, engaged in the production of digital media, information and telecommunication products and home appliances. It has played a leading role in the efforts for people's affluent life and environmental conservation, based on the corporate philosophy that puts emphasis on nature and humanity

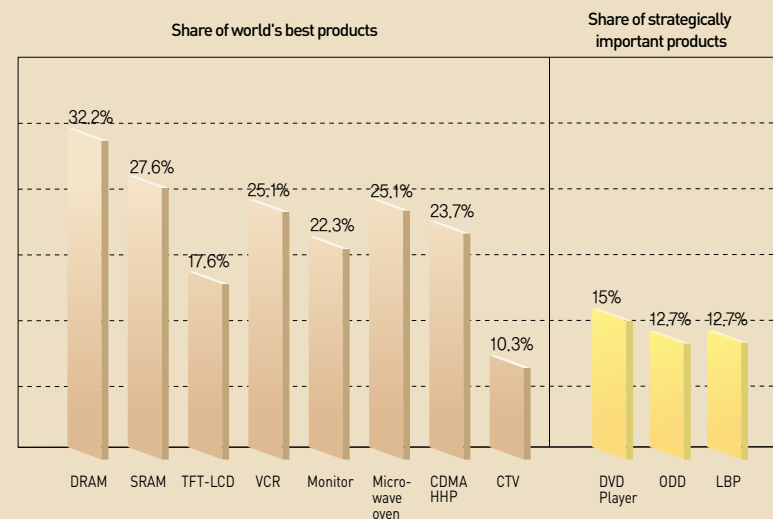
Introduction to Samsung Electronics

Samsung Electronics' digital technology extends into people's lives beyond the spatial and temporal limitations with its infiniteness extensibility. The Company aims to help people enjoy more conveniences and lead a more valuable life, whilst enhancing shareholder and customer value. The Company focuses on the home, mobile and office network and core parts in its operations to stay ahead of others in the digital convergence era.

Samsung Electronics thinks highly of its responsibility as a corporate citizen to contribute to humankind as well as to the local community. The Company served as a world-class business, participating as a partner in the 1998 Nagano Winter Olympics, the 2002 Salt Lake Winter Olympics, the 2002 Busan Asian Games, and as an official supporter of the Samsung Nations Cup Equestrian Contest. It has also positively engaged in social contribution activities, by providing support for the handicapped, information-based operations and environmental conservation activities.

Established in 1969 as a manufacturer of TV's, refrigerators, washing machines etc, it has grown to join the ranks of first-rate businesses in the electronics' industry. The Company expanded into the semiconductor business in 1988, becoming the world's first developer of 64 mega DRAM in 1992, was chosen as the No.1 IT business in the world in 2002 and selected as the No.1 business in the growth rate of brand value (appraised as \$8.3 billion) in 2002.

Products ranking No.1 in the world

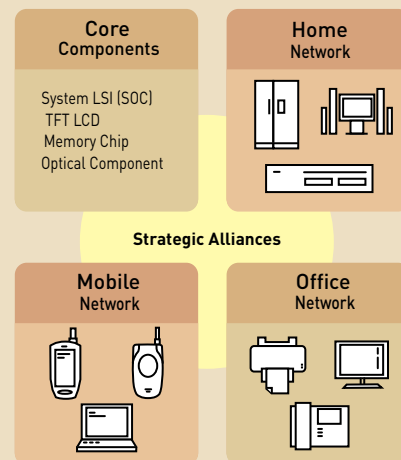


The Seoul-based company employs a total of 58,000 employees and 7 factories in Korea, as well as 23,000 employees overseas in 27 local production corporations.

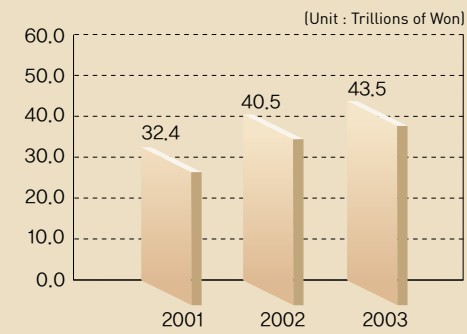
Diversified business structure

The various sectors, Digital Media, Telecommunication, Semiconductor, LCD and Digital Appliance sectors contribute to its company-wide profits. Its semiconductor boasts core parts technology, while the telecommunications sector is engaged in the telecommunication network business and the cellular phone handset business. Digital media and home appliance sector boast solid competitiveness in manufacturing. We aim for a leading role in the digital convergence era through synergies built by expansion of the TFT-LCD line, the semiconductor business and the network of overseas local production corporations in 2002 and 2003.

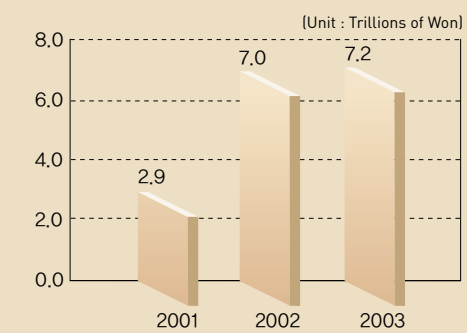
Business structure



Sales



Net profit



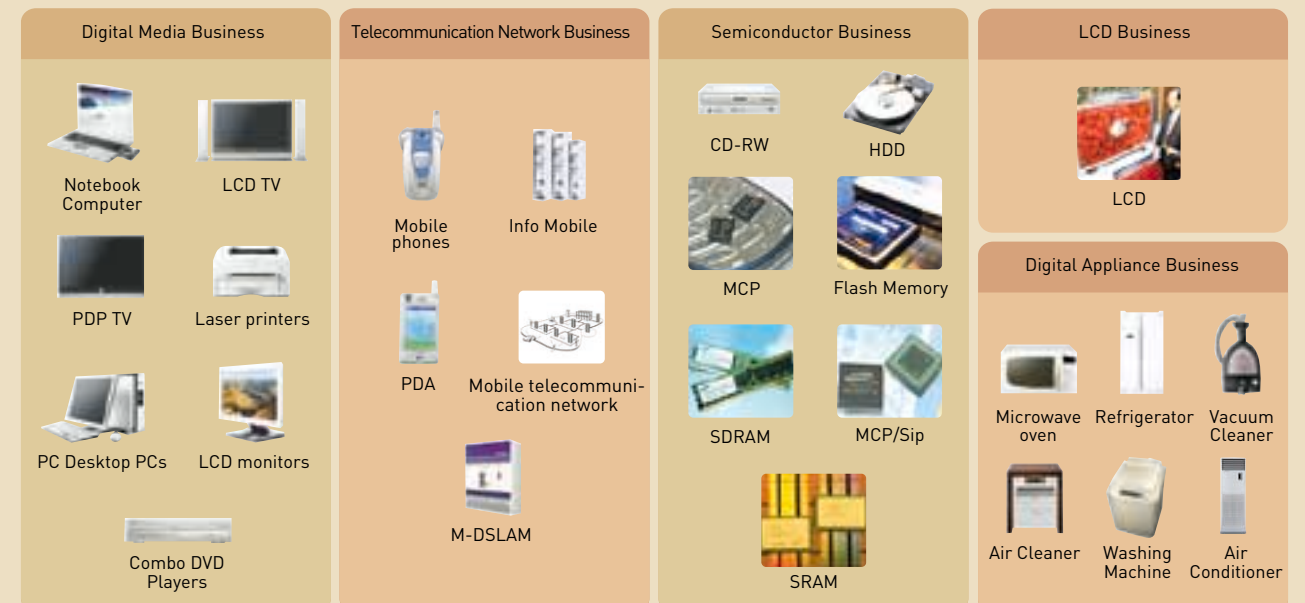
Operational Performance

Since its establishment, Samsung Electronics has made painstaking efforts to grow as a first-rate business respected by people. Looking at the operational performance in the past three years, the Company garnered more than 40 trillion won in annual sales and 5 trillion won in annual profit on average, showing a feat of posting a sales growth of 7% and 28%, respectively, in 2001 and 2002, while the IT industry was in recession. The Company was also acclaimed as "the business with the best corporate governance structure in Korea" by Asset Benchmark Research and as the "best business in Asia" by The Financial Asia of Hong Kong.

Major Products

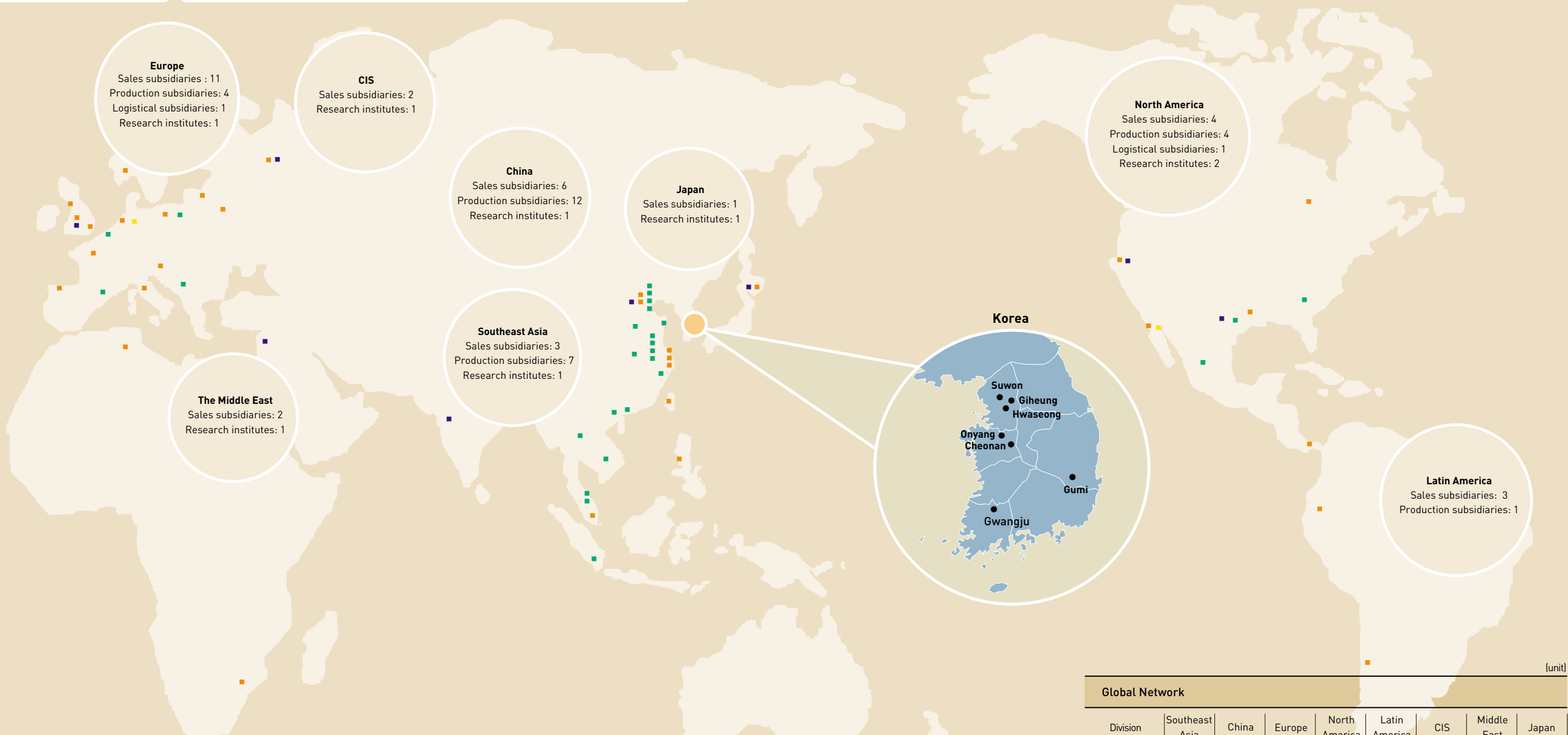
Samsung Electronics' factories both in and out of Korea are engaged in the production of multimedia products, such as monitors, CTVs, PCs; telecommunication products such as mobile phones, PDAs and mobile telecommunication equipment; semiconductor parts, including DDR SDRAM, SDRAM, flash memory, display drivers, LCDs; and home appliances, such as refrigerators, air conditioners and microwave ovens.

Major products



Global Network

Samsung Electronics maintains a total of seven overseas operations in Southeast Asia, China, Europe, North America, Latin America, CIS, the Middle East and Africa, setting up win-win strategies with local business partners, including production/sales subsidiaries, based on the corporate philosophy of co-existence



Samsung Electronics runs a network with a total of 27 production subsidiaries, 32 sales subsidiaries, 2 logistical subsidiaries and 8 research institutes all over the world, in addition to its headquarters and 7 factories in Korea. The Company is doing its best to exert all possible capabilities as a globalized business by carrying out unique R&D and marketing activities at each operation. The Company is taking a systematic approach in making inroads into overseas markets through in-depth understanding and research about local communities, based on the principle that local sub-

sidaries contribute to, and grow with, the countries where they are located.

As a globalized business, the Company will continue to cooperate with local business partners, including production/sales subsidiaries, for prosperity of local communities, based on the corporate philosophy of co-existence.

(unit)

Global Network								
Division	Southeast Asia	China	Europe	North America	Latin America	CIS	Middle East	Japan
■ Sales subsidiaries	3	6	11	4	3	2	2	1
■ Production subsidiaries	7	12	4	3	1	-	-	-
■ Logistical subsidiaries	-	-	1	1	-	-	-	-
■ Research institutes	1	1	1	2	-	1	1	1
Total(69)	11	19	17	10	4	3	3	2

※ For more details, refer to www.samsung.com.

Promotion of globalized operation

Samsung Electronics has increased investment in the Philippines, India, Mexico and Slovakia for supply of products most suited to local customers and regional development as part of the effort to bolster globalized operation.



A factory in Mexico

Qualification under the international environment and safety specifications

Samsung Electronics obtained certification for qualification under the international environment and safety specifications, ISO 14001 and OHSAS 18001, for overseas subsidiaries, as part of the effort to make the production facilities more pleasant and safer places to work for.

Development of environment-friendly hard disk drive

In August 2003, Samsung Electronics became the first company to put on the market an HDD (Hard Disk Drive) that does not contain lead, cadmium, hexavalent chromium or halogenated flame retardants.

The Company's VCR wins Green Marketing Grand Prize 2003

Samsung Electronics' VCR SV-K811 was awarded the 2003 Green Marketing Grand Prize from the Ministry of Environment and the Maeil Business Newspaper, for its excellence in environmental factors, such as recyclability, energy consumption and non-toxicity. The product is the first VCR in Korea that obtain the level of Environmental Declaration of products (EDP) in Korea.

The 2nd Consumption Culture Grand Prize in the sector of environmental friendliness

On October 19, 2002, Samsung Electronics received the 2nd Consumption Culture Prize in the sector of environmental friendliness from the Korean Consumption Culture Association in recognition of its leading role in environmental protection and the contribution to people's cozy lives.

Catch CO₂ 1030 Promotion of Catch "Carbon Dioxide 1030"

Samsung Electronics received the Presidential Award for its effort with the development of a process for PFCs gas treatment, application of alternate gas, the optimization of work processes and systematic activities for the reduction of energy consumption under the "Catch Carbon Dioxide 1030 Project" for epoch-making reduction of global warming materials.



Presidential Award for systematic activities for reduction of energy consumption

Construction of recycling center for electronic wastes

In June 2003, Samsung Electronics completed construction of the "Metropolitan Recycling Center" in cooperation with the Electronics Industry Environmental Council. The second one of its kind after the one in Asan, the center will be engaged in the recycling of electronic wastes, such as refrigerators, washing machines, etc.



The ceremony for completion of the "Metropolitan Recycling Center"

Highlights of Green Management

Samsung Electronics accomplished a lot both within and without through Green Management activities. It will continue to carry out environmental conservation activities, such as the developing of environment-friendly products and service and maintaining a safe and pleasant working environment at factories, based on Green Management and the Life-cherishing philosophy

Bolstering an environmental management system

In early 2003, Samsung Electronics upgraded the level of its Environment /Safety Committee with CEO heading it. In September 2003, the Company launched the Samsung European Environment Management Team in Milan, Italy to be better prepared for the more rigorous forthcoming regulations concerning electro- electric products, such as EU WEEE or RoHS.



Samsung European Environment Management Team (SEEM)

Launching Green procurement system

Samsung Electronics started operating the green procurement system designed to prevent environmentally risk that are faced with during the process of development and production, and promote the purchase of environmental-friendly raw materials and parts.

Afforestation in China for prevention of yellow dust flying to Korea

In April 2003, Samsung Electronics participated in afforestation activities in China as part of the effort to prevent yellow dust originating from desert areas in China from affecting the Korean Peninsula and block the spread of China's deserts. The Company provided support for the "Korea-China Future Forest Formation" event hosted by the Korea-China Youths Future Forest Center and sponsored by the Capital City Spiritual Civilization Coordination Council of the Beijing City Government.

Presidential Citation on World No Tobacco Day

Samsung Electronics carried out diverse non-smoking activities and its Health Promotion Council took steps to encourage employees to pay more attention to their health. In 2003, the Company received the Presidential Citation for outstanding achievement on the World No Tobacco Day



The Company replaced smoking rooms with non-smoking lounges for employees.

Improving the workplace environment through ergonomic interventions

Samsung Electronics makes positive efforts to enhance productivity and establish worker-centered ergonomic production lines, in addition to making a database based on the information obtained through ergonomic diagnosis for the intervention of production lines. As a result, the Company received the Ergonomic Design Award Special Prize in May 2002 from the Ergonomic Society of Korea. Also, in August 2003, it was designated as a model business at the 15th Triennial Congress of the International Ergonomics Association (IEA).



A case of improved production process



IEA members visiting Samsung Electronics' factory

2003 Korea Green Management Prize

Samsung Electronics received the 2003 Korea Green Management Prize. Prizewinners are selected through a multi-tier process of screening, such as the KGMI (Korea Green Management Index)-based consumer survey, business survey and the qualitative /quantitative environmental-friendliness assessment.



2003 Korea Green Management Prize

Management Philosophy

We will develop our technology and human resources to create superior products and services, thereby contributing towards a better global society

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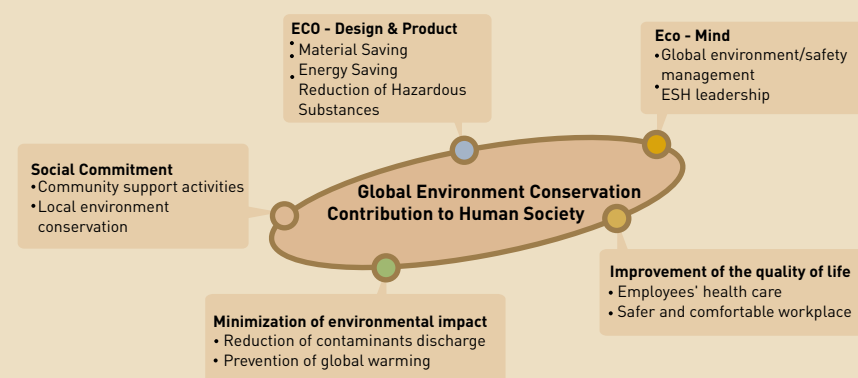
Samsung Electronics considers the continual development of its people to be one of its top priorities. The Company aims to develop new technologies to bring well-being to humankind, by fostering talented employees who can explore the future with creativity, open-mindedness and a sense of mission as a member of the international community.

Samsung Electronics believes good responsible management can be achieved through the harmonious combination of talented employees and technological prowess. The business activities of Samsung Electronics are always geared towards promoting prosperity for people of all races and cultures, all over the world. The Company's employees share our commitment to actively participate with customers, to recognize and confront global challenges and create a better future for all.

Samsung Electronics' Green Management

Samsung Electronics strives to be a company that contributes positively to human society, regarding the idea of co-existence with the planet as the most important factor for sustainable long-term success.

The Company aims to set an example for other businesses in the 21st Century, by practicing sustainable development and engaging in diverse social contribution activities. With the emphasis of their Green Management System on environment, safety and health, Samsung Electronics produces environment-friendly product designs, that consider the whole life cycle of a product from concept to end-of-life. The Company also strives to minimize significant environmental impacts by developing clean new technologies. Rigorous upstream management of hazardous materials ensures very high standards of employee health and safety, as well as more environmentally sound products.



Green Management Policy

Based on the reverence for "life", all of our business activities observe our Green Management Policy, which encourages respect for nature and contributes to the prosperity of human life and conservation of the environment. The company plays a leading role in creating a sustainable society by recognizing and implementing the environment, safety and health as crucial factors in all our business endeavors.

1. Operation of Green Management system

Under the Green Management system, we continue to make efforts to improve how we manage environmental, safety and health impacts occurring in production and service. We have committed to periodically publish the performance results of our Green Management system.

2. Compliance with Local and International regulations

We apply rigorous standards in the management of matters pertaining to the environment and safety. In addition, we strive to faithfully observe relevant laws, regulations and international agreements in order to be a good corporate citizen.

3. Fulfillment of life cycle responsibility for products and services

We will fulfill our responsibilities for our products and service, with environment and safety conscious designs, use of environment-friendly materials and the recycling of end-of-life products.

4. Continuous improvement of environmental aspects

We will continue to minimize the use of resources and energy through clean production technologies. The development of new advanced technology is used to reduce the output of materials known to cause negative environmental impacts such as Carbon Dioxide.

5. Realization of a safe and pleasant workplace

We will do what we can to prevent environmental or safety-related accidents, foster the atmosphere of a safe and pleasant workplace to help improve employee health and the quality of our lives.

6. Solid partnership with suppliers and contribution to the community

We will cooperate with suppliers in fulfilling Green Management policies, and will maintain excellent partnerships with them. This includes carrying out activities for environmental conservation and development of the local communities together.

January 2004

Major Performances of Green Management and Future Plan

Samsung Electronics strives to set examples for others to follow in the development of environment-friendly products, as well as activities for social contribution and improvement in environment, safety, and health standards. Following its announcement of Environment-Related Guidelines in 1992 and the Green Management in 1996, the Company is publicly committed to contribute to humankind through sustainable growth

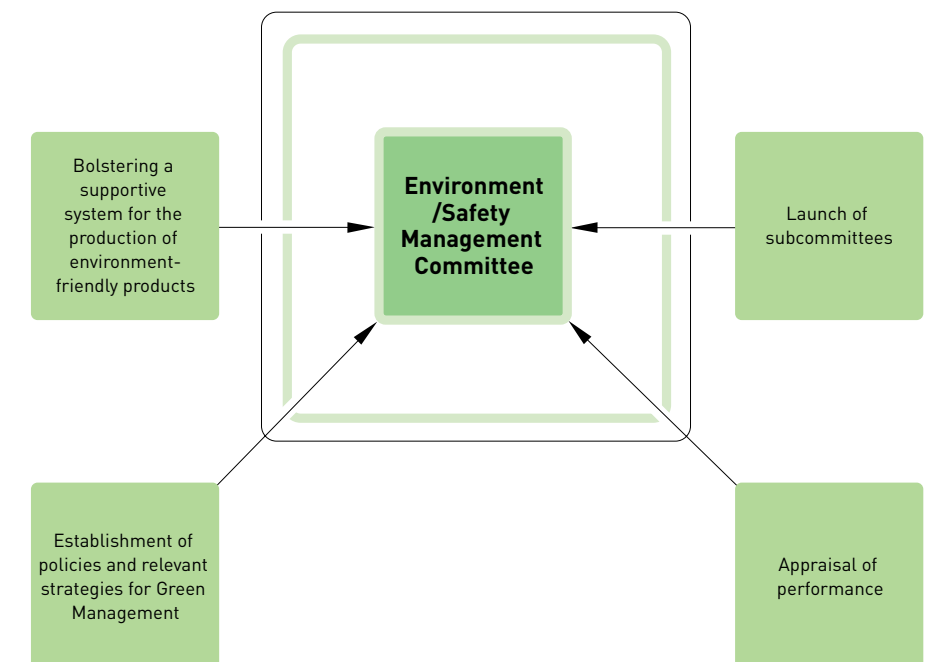
Policy	1992	1995	2000	2005
Operation of Green Management	Announcement of environment-related guidelines	Announcement of Green Management All domestic factories obtained ISO 14001 certification. (1996)	Domestic factories obtained OHSAS 18001 certification. All overseas factories obtained ISO 14001 certification. All overseas factories obtained OHSAS 18001 certification.	Wider pursuit of sustainable management A leading company in sustainable management
Activities for Environment-friendly Products		Adoption of LCA/DIX methodology Implementation of LCA/DIX	Development of LCA tool for designers Establishment of Asan Recycling Center	Development of Eco Product System Development and application of integrated eco-design system Establishment of Metropolitan Recycling Center Operation of global recycling networks Domestic application of Green Procurement Expanded overseas application of Green Procurement Operation of optimized Green Procurement System Application of lead-free solder in VCR Lead-free solder mass production readiness for all products Optimization of Green Procurement system Application of lead-free solder to all products Development of green semiconductors Development of environment-friendly HDD Expansion of environment-friendly products on market
Environmental Improvement Activities		Encouragement of use of LNG, pollution-free fuel Installation of in-house incineration facility Adoption of TMS	Decision on voluntary reduction of WSC PFCs	Reduction of PFCs by 10% from 2001 "Catch Carbon Dioxide 1030 Project" initiated Reduction of PFCs by 20% from 2001 Reduction of PFCs by 30% from 2001
Safety/Health-Related Activities	Opening of Industrial Safety Exhibition Center Campaign initiated for 10 million Signatures for expulsion of industrial disaster Opening of Health Management Center (1989)	Commencement of support for safety management for subcontractors Establishment of Samsung 3119 Emergency Aid service	Registered as the safest factory in the Guinness Book of World Records Refurbishment of Center for First-Hand Experience of Environment/Safety-Related Matters	Received NSC Award Special Prize Ergonomic interventions in production Received Ergonomic Design Award Development of health index Total Health Promotion taking root Establishment of Best Well-Being!
Social Contributions	Commencement of social contribution activities (1993)	Establishment of a factory for the handicapped (1994) Launch of Samsung Voluntary Service Corps Campaign for protection of mountains and streams	Ecological restoration activities	Korea-China Future Forest Formation Formation of nature-friendly factories



Operation of Green Management

Samsung Electronics' Environment/Safety Management Committee establishes policies and strategies related to its Green Management and periodically appraises the performance. In 2003, the Committee launched an Eco-Product Subcommittee and Eco-Design Subcommittee as part of the effort to bolster the supportive system for the production of environment-friendly products.

16 Operation system of Green Management



Operation system of Green Management

Samsung Electronics' Environment/Safety Management Committee establishes strategies for Green Management to be put into practice by factories both at home and abroad

Operation of Green Management
 Activities for Environment-friendly products
 Environmental Improvement Activities
 Safety/Health-Related Activities
 Social Contributions

Global Environment/Safety Management

Environment/Safety Management Committee

Samsung Electronics' Environment/Safety Management Committee, led by the CEO, has five subcommittees in charge of eco-designs, eco-products, green production, lead-free soldering and eco-devices. Each subcommittee promotes activities assigned to it in connection with factories both at home and abroad.

The environment/safety management system is operated on the plan-do-check-action cycle and objectives for continual improvement are established early each year. The Company carries out internal environment/safety-related auditing once or twice a year, monitoring the relevant performance by factories and providing support for related firms' relevant activities.



A scene of the Environment/Safety Management Committee

Samsung Electronics' Environment/Safety Management System



As part of the effort to reduce environmental impacts in its general management activities and make factories safe places to work at through proper risk management, all domestic factories of Samsung Electronics obtained the ISO 14001 Certifications starting from 1996 and the OHSAS 18001 Certifications starting from

1999. A total of 17 of the 27 overseas factories obtained the ISO 14001 Certifications by the end of 2003. The others will also obtain the Certification by the end of 2004.

The Company was also designated as an environmental-friendly business by the Ministry of Environment for its positive activities in the reduction of contaminants throughout the production process and overall environmental-friendly activities.

Environment/Safety-Related Certifications Obtained by Samsung Electronics' Domestic Factories

Factory	ISO 14001	OHSAS 18001
Suwon Factory	1996.10	2000.11
Giheung Factory, Hwaseong Factory, Onyang Factory, Cheonan Factory, Gumi Factory	1996. 9	1999.12
Gumi Factory	1996.11	2002.10
Gwangju Factory	1996.10	2002.10

Environment/Safety-Related Certifications Obtained by Samsung Electronics' Overseas Factories

Region	Name of Local Corporation	Certification	
		ISO 14001	OHSAS 18001
North America (3)	SAMEX	2000.12	2003.12
	SAS	2001. 1	-
	SEDA	2001. 2	-
Europe (4)	SEUK	1999. 11	-
	SESA	2003. 1	-
	SEH	2001.10	-
	SESK	2003.10	2003.10
Southeast Asia (6)	SEIN	2003. 4	2003.10
	TSE	2001. 12	2003.11
	SDMA	1999. 8	2002. 8
	SIEL	2000. 6	2003. 8
	SAVINA	2001. 12	2002.12
	SEPHIL	2002. 9	2003.10
China (4)	TSED	2001. 1	2003.12
	TSEC	2000. 2	-
	SSEC	2003.11	-
	SESC	2003.12	2003.12

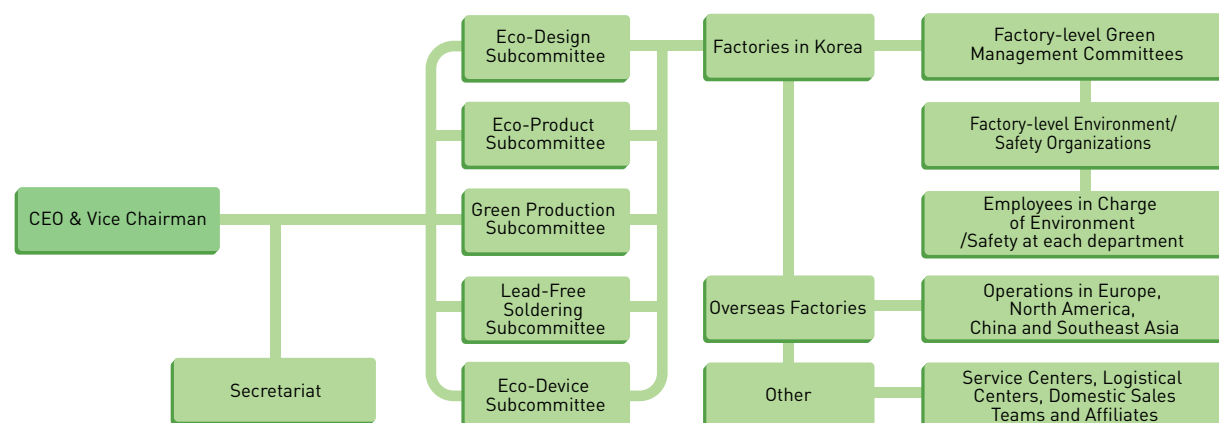


ISO 14001 Certificate



OHSAS 18001 Certificate

Organization of Environment/Safety Management Committee



Systematic Environment/Safety Management System

Samsung Electronics systematically carries out its environment/safety management system, including the following:

GMIS (Green Management Information System)

Under the GMIS, Samsung Electronics provides all-out support for environment, safety and health-related matters, and systematizes and utilizes relevant information to improve competitiveness. The system, which was developed by the Giheung Factory in 1998, is now adopted in the Hwaseong, Onyang, Cheonan, Suwon, Gumi and Gwangju factories.

The system contributes to the systematic management of contaminants and helps the management make prompt decisions through the provision of environment/safety-related information. It also helps the Company stay up-to-date about the information related to follow-up management of ISO 14001-related matters or international regulations on the use of energies and chemicals.

Utilization of EPS (Eco-Product System)

Under the EPS (Eco-Product System), Samsung Electronics provides tools and data designed to appraise the environment-related harm of products and raw materials in an effort to cope with environmental regulations both at home and abroad, including RoHS and WEEE. The system is chiefly comprised of LCA, Eco-Design, Green Purchasing, Green Accounting and CS.

Samsung Health Improvement Network for Employees

Keeping in mind that the employees' health leads to corporate competitiveness, the Company operates the Samsung Health Improvement Network for Employees (SHINE), which goes a long way in the promotion of the employees' health by indexing their obesity, drinking, living habits and stress.

Safe Clinic System

Under the Safe Clinic System, safety-related points for improvement are delivered to the factories online. The system is another example of Samsung Electronics' effort to make its factories safer and more pleasant workplaces through the adoption of a system for computerization of safety-related check results and prompt feedback, application of tools for analysis of data and education for prevention of problems.

E-learning System

Samsung Electronics operates company-wide environment/safety-related multi-level educational programs suited to specific needs, i.e. for manager-level employees, working-level employees, etc. The semiconductor sector, in particular, sets an example for other sectors to follow with its web-based Learning Management System.

Facility Management System

This system, which has been operating since 2001, goes a long way in the accuracy of tax-related reports and bringing about tax-saving effects through improved operational efficiency and registration of relevant data, in addition to extension of the durability of buildings and prevention of accidents through proper management of facilities, as well as systematic data management related to the history of checking the facilities.



Anti-Disaster Center Situation Room



A training session of the Samsung 3119 Emergency Relief Aid Corps

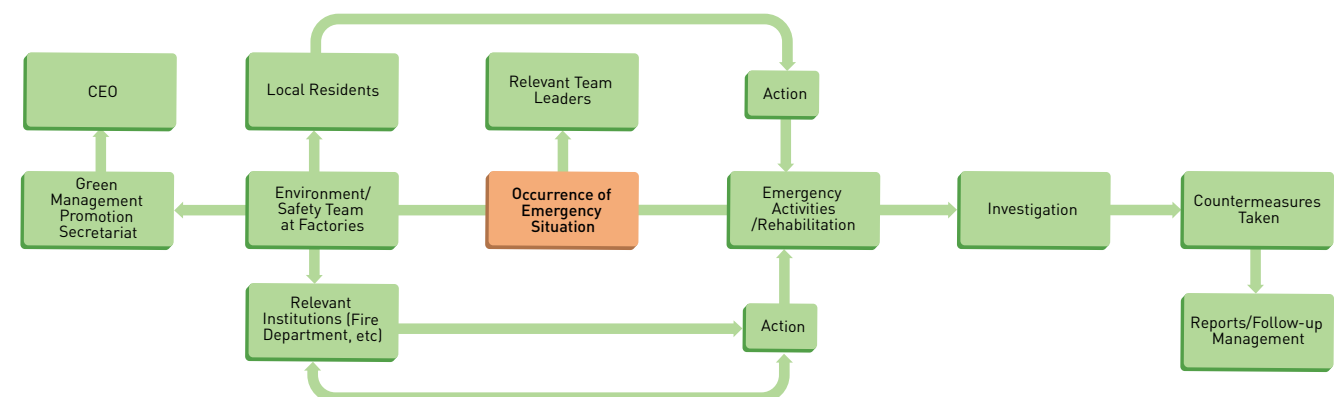
Crisis Management System

Under the Crisis Management System, Samsung Electronics exerts the utmost efforts to minimize environment/safety-related risks through the installation of hi-tech facilities against emergencies such as an explosion, a general surveillance system and an in-house firefighting organization, in addition to carrying out training sessions periodically, depending on various crisis-related scenarios.

Additionally, the Samsung 3119 Emergency Relief Aid Corps, the first of its kind in Korea operated by a private business, has provided professional aid in disaster relief activities for local communities since its launch in October 1995.

Types of disasters Samsung Electronics is ready for		
- Fire and explosion	- Snow-related disaster	traffic accident)
- Leakage of hazardous materials	- Collapse of a building	
- Food poisoning	- Environmental contamination	
- Biochemical terror	- Accidents (fall, burn, electrification or	
- Natural disaster		

The Emergency Relief System Diagram

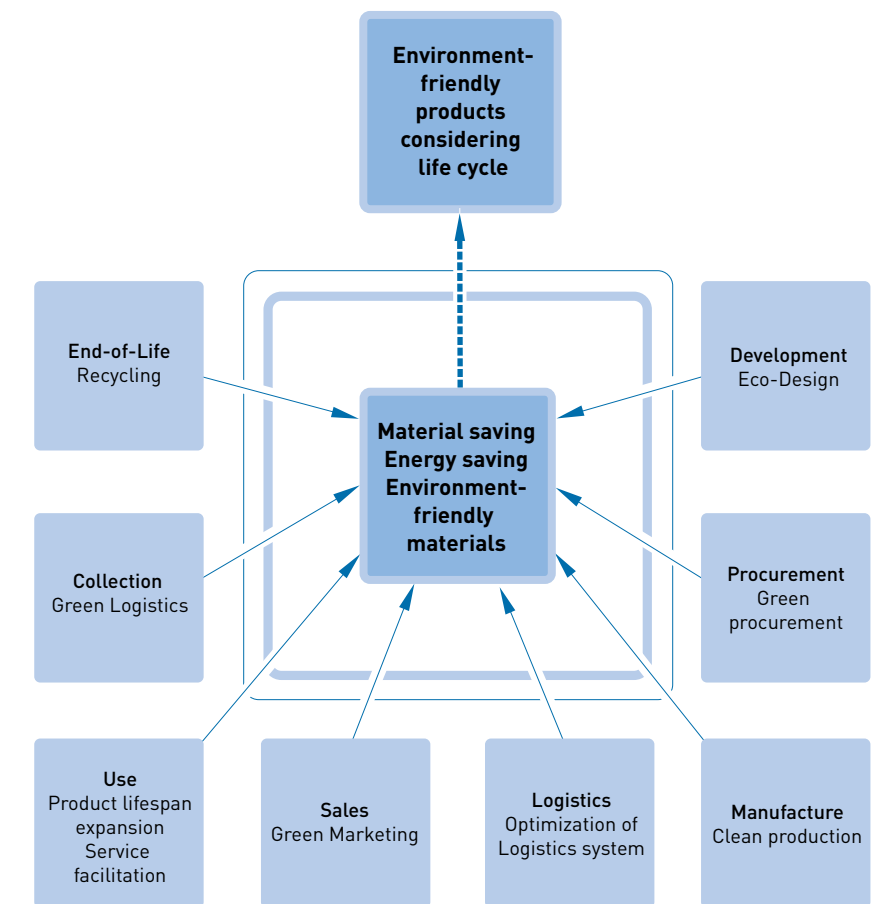




Activities for Environment-friendly Products

Samsung Electronics continues to develop environment-friendly and reliable products by improving the environmental aspects through their life cycle, from design, through production and use to end-of-life. To accomplish this, the company is developing environment-friendly products at every stage of the life cycle, focusing on material and energy saving and using environment-friendly materials.

22 Eco-Design | 24 Green Procurement Management & System | 26 Material Saving Activities | 28 Energy Saving Products
 30 Using Environment-friendly Materials | 32 Examples of Environment-friendly Products | 36 End-of-Life Product Recycling



Eco - Design

Samsung Electronics developed eco-design manuals in 1997 and carries out environmental assessment and improvement of products by using LCA and DfX softwares

Operation of Green Management
 Activities for Environment-friendly products
 Environmental Improvement Activities
 Safety/Health-Related Activities
 Social Contributions

In order to alleviate the environmental impact during the life cycle of a product, the improvement activities at design stage is the most important and effective. Samsung Electronics has developed eco-design manuals in 1997 and built infrastructure to produce environment-friendly products from the design stage by utilizing LCA (Life Cycle Assessment) and DfX (DfR/S/D/A, Design for Recycle/ Service/ Disassembly/ Assembly) softwares to examine the environmental impact of its products. In addition, Samsung Electronics is trying to develop environment-friendly products in a more systematic way by using the green procurement system to examine whether components and raw materials have hazardous substances. The eco-design identifies and assesses environmental factors at the stages of the basic product development processes: Concept, Plan, Development and Production. Assessment methodologies and criteria at each stage are used according to the objectives established in planning the product. With the importance of eco-design, checking items and criteria for environmental assessment will be added regularly.

LCA (Life Cycle Assessment)

Samsung Electronics adopted the LCA tool for its microwave range ovens in 1995 and since then has expanded the tool to other products each year for environmental assessments and improvement of products. Especially with the introduction of Environmental Declaration of Products in Korea, Samsung Electronics is using the tool as a way of marketing and provides customers with environmental information on a product.

DfX design technique

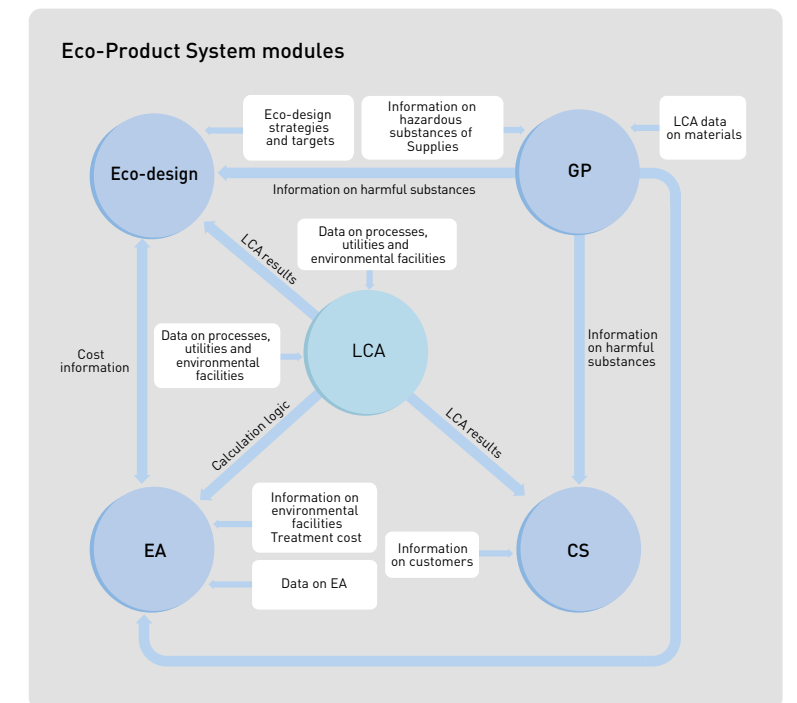
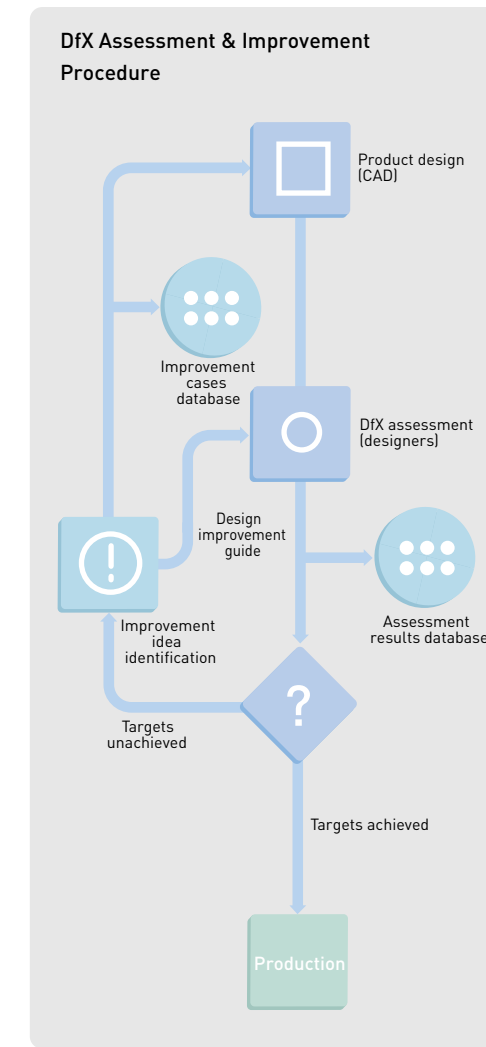
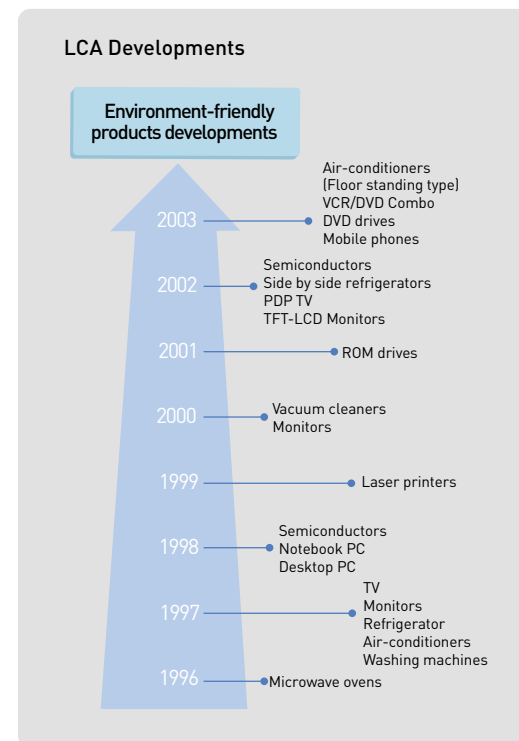
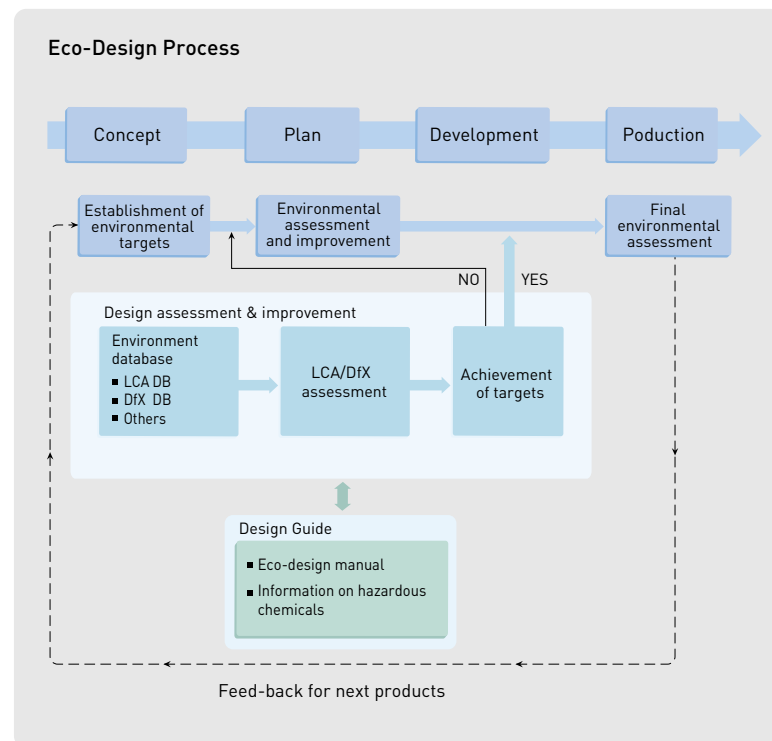
DfX (DfR/S/D/A, Design for Recycle/Service/Disassembly/Assembly) tool was first used in trials of TVs, washing machines and refrigerators in 1995, and since 2002 it has been applied to all products to comply with EU's recycling regulations. In addition, the tool is being improved and the infrastructure is being built in each business unit for all designers to use DfX tool.

Eco-Product System development

Samsung Electronics' Semiconductor Business and LCD Business have developed Eco-Product System (EPS) - a total environmental assessment tool — to respond to environmental regulations home and abroad. The EPS enables to assess and improve products and components in terms of environmental protection.

The system is composed of 5 modules; LCA (Life Cycle Assessment), Eco-Design, Environmental Accounting (EA), Green Procurement (GP) and Customer Service (CS). These modules share their results for systematic assessment.

LCA is carried out using data collected through the existing internal system on processes, materials and pollutants. The results from LCA are used for CS and Eco-Design, and the operation logic used in LCA is also used in EA to calculate costs. In addition, the information on materials and harmful substances in supplies collected through the green procurement is provided to customers, and used to identify materials and harmful substances during product development. Samsung Electronics stores environmental data on database through the Eco-Product System to enhance the products' competitiveness, whilst responding to customer needs.



Green Procurement Management & System

Samsung Electronics is operating the green procurement system for its Supply Chain Environmental Management (SCEM) of all materials and components. The green procurement system helps to cooperate with the company's affiliates for environmental management, and to provide environment-friendly products to customer

Operation of Green Management
 Activities for Environment-friendly products
 Environmental Improvement Activities
 Safety/Health-Related Activities
 Social Contributions

Samsung Electronics' supply chain environmental management efforts aim to carry out the following three missions.

1. To comply with global environmental regulations and build the response system for the unexpected environmental-associated events.
2. To promote products' environmental quality by developing environment-friendly products through environmentally qualified materials, components and semi-finished goods.
3. To develop and produce products with lower environmental load to contribute to the global environment conservation, thereby enhancing the corporate image.

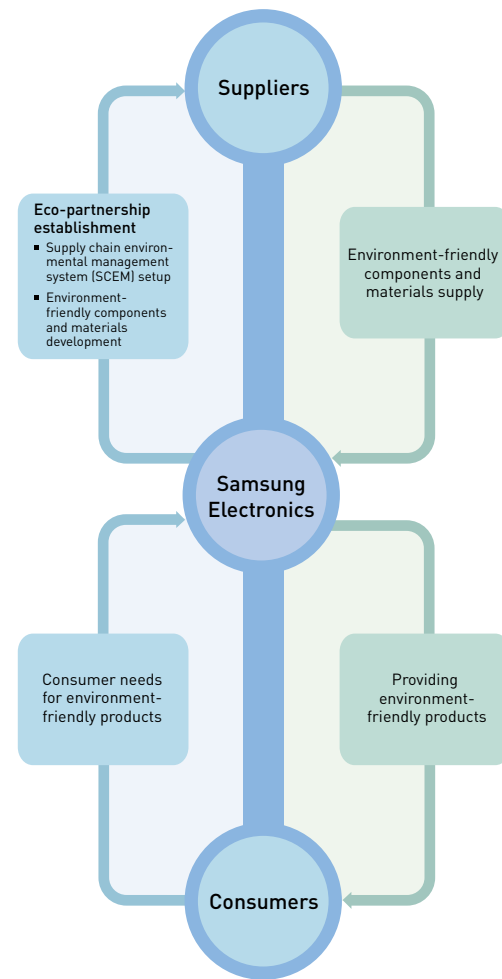
In 2001 Samsung Electronics announced the general guidelines for green procurement system and launched a trial and then the system further applied to its all affiliates in 2003. In 2004 the Company will expand the system to all of its overseas affiliates. The supply chain environmental management focuses on both the environmental management system of the affiliates and environmental quality of components and materials.

Environmental Management

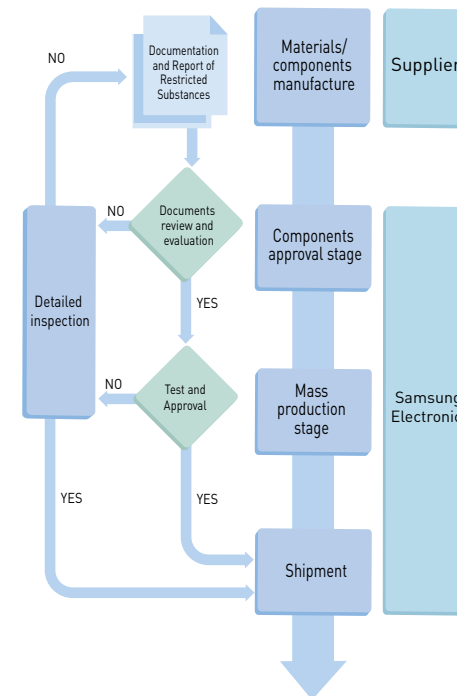
Samsung Electronics ensures the product quality by carrying out the environmental management assessment of the suppliers. From 2004, all the suppliers are required to attain "Eco-partnership Certification" which is only issued by SEC after the company evaluates and monitors their environmental management system, their production processes and facilities.

If the suppliers are not qualified by this assessment process, they are required to submit their environmental management plan for complying with Samsung Electronics' Eco-partnership certification requirements.

Green Procurement System



Restricted Substances Control System



The Company continuously audits and promotes the suppliers to improve their Environmental Management System. Through these evaluation processes, the qualified suppliers will build a solid partnership with the Company, but the others are the likelihood of losing SEC Approved Supplier status from 2005. Samsung Electronics will drive the suppliers to improve their management system by promoting the competitive environment.

Environment management of components and materials

Samsung Electronics' environmental management aims to help produce products that will satisfy customers by identifying banned and restricted substances contained in the components and then stop using them or improve them to comply with environmental regulations and public health.

The chemicals restricted and managed currently include cadmium, lead, mercury, hexavalent chromium, and brominated flame retardants. In 2004, the chemicals in management will further increase after careful assessments and analysis on products.

To improve the Company's chemical management, Samsung Electronics is collaborating with Japan Electronics and Information Technology Industries Association (JEITA), European Information, Communications and Consumer Electronics Technology Industry Association (EICTA) and Electronic Industries Alliance (EIA) in USA. In addition, Samsung Electronics will designate restricted substances and publicize the general guidelines to its suppliers.

Environmental inspection and test on components and materials are not only carried out for verification for affiliates but also in the stages of approving components and sending them into the production process.

The Company operates a green procurement web site at <http://glonets.samsung.com> to share green procurement-associated policies and to allow suppliers to upload documents for review and exchange information effectively.



Green Procurement System Web Site

Material Saving Activities

Samsung Electronics develops material saving products considering their life cycle and uses packaging materials made based on the 3Rs policy (Reuse, Reduce and Recycle)

Operation of Green Management
 Activities for Environment-friendly products
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Material Saving Through Structural Change and introduction of New System

Samsung Electronics has developed the 'Water saving tub', 'Magic filter' and 'Detergent coordination system' to minimize the amount of water and detergent for washing machines.

By minimizing the number of holes in the tub and rotating the pulsator at a high speed to maximize water circulation, the Water saving tub succeeds in suppressing incoming water from flowing out and maintains high water levels and allows for 20 % less water consumption.

The rinsing function supplies water while rotating the pulsator at a lower speed of 40 rpm to drench laundry thoroughly and then removes moisture from the clothes at a high speed to eliminate detergent lather completely. The magic filter removes the dust from the water after washing independent of water level. The Detergent coordination system automatically determines detergent amount depending on washing conditions such as laundry load, contamination degree and water temperature.

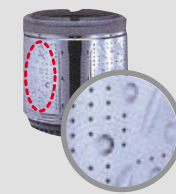
Material Saving Through Component Sharing

Samsung Electronics is trying to share and standardize components that would be commonly used in its all products. Sharing and standardizing components is important for efficient recycling. For microwave ovens, the metal-walled interior and power cables are shared and the high voltage transformers have been standardized. Some mobile phones share their external designs regardless of whether they are developed for domestic or international use. In addition, PCs achieved 27% components sharing ratio in 2002.

Material Saving Through Component Reduction

An electronic product is composed of a variety of components. Reducing the number of components can generally save energy in production process and maximize recycling. The HDDs, Spinpoint VL40 model has reduced components by 11.7% and the weight by more than 30% compared to 2001 models. MiniLite™, a compact optical fiber cable, was developed to reduce diameter by 25% and weight by 46%, and gives the additional advantage of saving energy for installation. For vacuum cleaners,

Comparison of Water saving tub and Traditional tub



Traditional tub
 Many holes located over the tub. A lot of water is wasted as water flows out through the holes continuously.

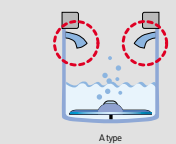


Water saving tub
 The number of holes is minimized. The pulsator rotates at a high speed to prevent incoming water from flowing out, thus reducing the amount of water use.

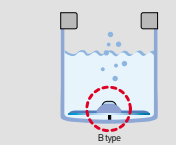
Comparison of Magic Filter and Traditional Filter



Magic Filter
 Two Magic Filters, installed from the top to the bottom of the tub, removes dust from water efficiently.

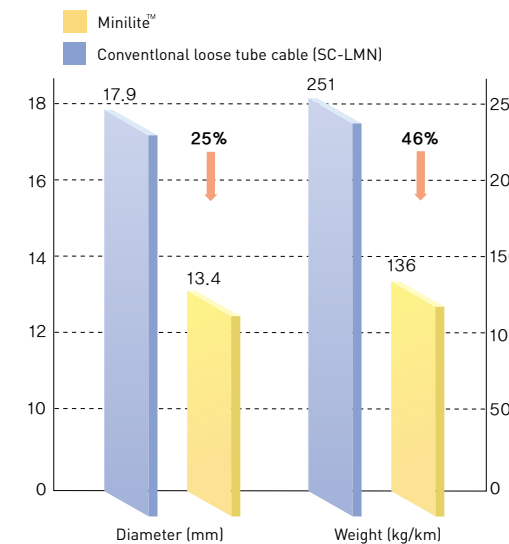


Traditional Filter
A type: Removing dust is limited. : The filter is too small and high to remove dust regardless of water height in tub.



B type: Removing dust is also limited. : The filter is located at the bottom of tub, so it can remove only dust of bottom.

Material Saving in Optical Fiber Cables



Design for Manufacture and Assembly (DfMA) was applied to reduce the number of components. After dividing the components into essential and removable categories, components were reduced by 10% and assembly time got 30% more faster.

Material Saving Packaging

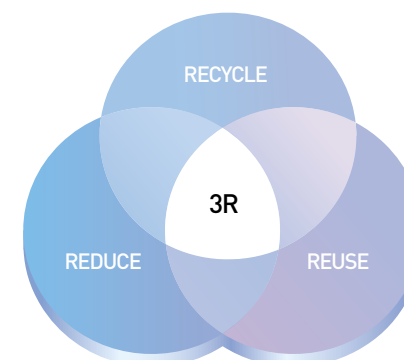
Samsung Electronics follows the environmental packaging guide based on the 3Rs policy, beginning from the packaging design stage in order to minimize the environmental impact of packaging materials.

The 3Rs represents Reuse, Reduce and Recycle; Reuse refers to increasing the use of recycled materials, Reduce refers to minimizing the amount of packaging materials and Recycle refers to using packaging materials that are easy to recycle and establishing collection/recycling recovery system.

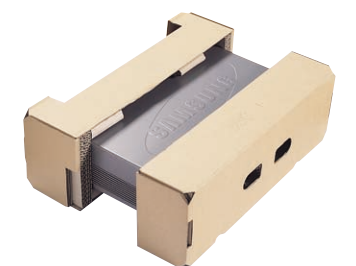
The Company uses computer simulations for packaging design and secures reliability through the dropping test, for example.

Such efforts result in recyclable paper-based cushion, which is used for packaging VCRs, printers, PCs, mobile phones and so on. And Citizen's Alliance For Consumer Protection of Korea (CACPK) awarded "Green Packaging Winner" to VCR and PC packaging in 2002 and to 15" LCD monitor packaging in 2003.

3R - The basic Environmental Packaging Principle



Green Packaging Winner Prize 2002



Paper-based Cushion

Development of Energy Saving Products

Power consumption is an important factor of environmental impact. So Samsung Electronics is trying to reduce not only the power consumption of a product in its use, but its standby power consumption

Operation of Green Management
 Activities for Environment-friendly products
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LCD TVs - "Energy Winner" Grand Prize

VN40K0, a 40" LCD TV model, was awarded the "Energy Winner" Grand Prize by the Citizen's Alliance For Consumer Protection of Korea (CACPK), for its excellent ability in energy saving. This product adopted the Power Factor Correction (PFC) function, which reduces power loss during power transmission, as well as reducing standby power consumption to less than 1W thanks to standby circuit and secondary micom.

Power factor is the ratio of the actual current to the apparent current. General power circuits have a 0.6 power factor, while VN40K0 improved its power factor to 0.99 by adopting the Power Factor Correction function.

Notebook PCs - Low power consumption products

Samsung Electronics is trying to develop notebook PC adapters and batteries with low power consumption. Through high efficiency circuit design, elimination of unnecessary fan operation and user-specific power saving system, the Company developed Notebook PCs with power consumption improved of up to 30% as compared to 2000 models, in terms of the carbon dioxide emission factor.

Air Conditioners - Energy saving using the DESS system

Samsung Electronics has developed extremely efficient power saving floor standing type air conditioners- AP-1590/1890/2390 -adopting the TS (twin & single) compressor and a highly efficient BLDC (Brush Less Direct Current) fan motor. The Digital Energy Saving System (DESS) with the TS compressor is the cooling cycle system for extremely efficient power consumption that can operate either 1 or both of two cylinders according to the indoor cooling level. And the BLDC fan motor allows optimum torque whilst the air conditioner operates and reduces power consumption by 60% as compared to traditional fan motors. The AP-1890 model was awarded the "Energy Winner 2002" prize for its performance.

HDD- Reduction of Power Consumption

Samsung Electronics has reduced the maximum power consumption, average power consumption and standby power consumption of its HDD (Hard Disk Drive, SV0401H model) by 10%, 3% and 29%, respectively.

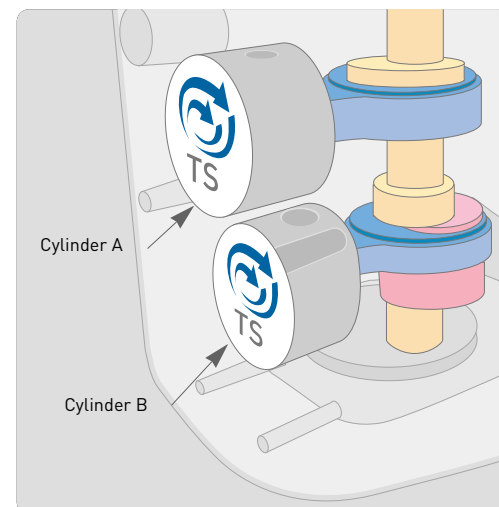
These resulted from adoption of the Marvell Tristar 1P (a new chip technology), reduction of the head number and friction between the head and the disk, and optimized IC control in the standby mode.



LCD TV: Awarded "Energy Winner" Grand Prize



Low Power Consumption notebook PC using a power saving control system



TS compressor's structure and operation (floor standing type air conditioners): Variable cooling operation by two cylinders that compress refrigerant according to load



A mobile phone using energy saving charger

Energy Saving Label

Energy Saving Label in Korea

The label is given to products that have satisfied the Government's energy saving standards. Samsung Electronics produces and ships products that satisfy this standards.

Energy Star

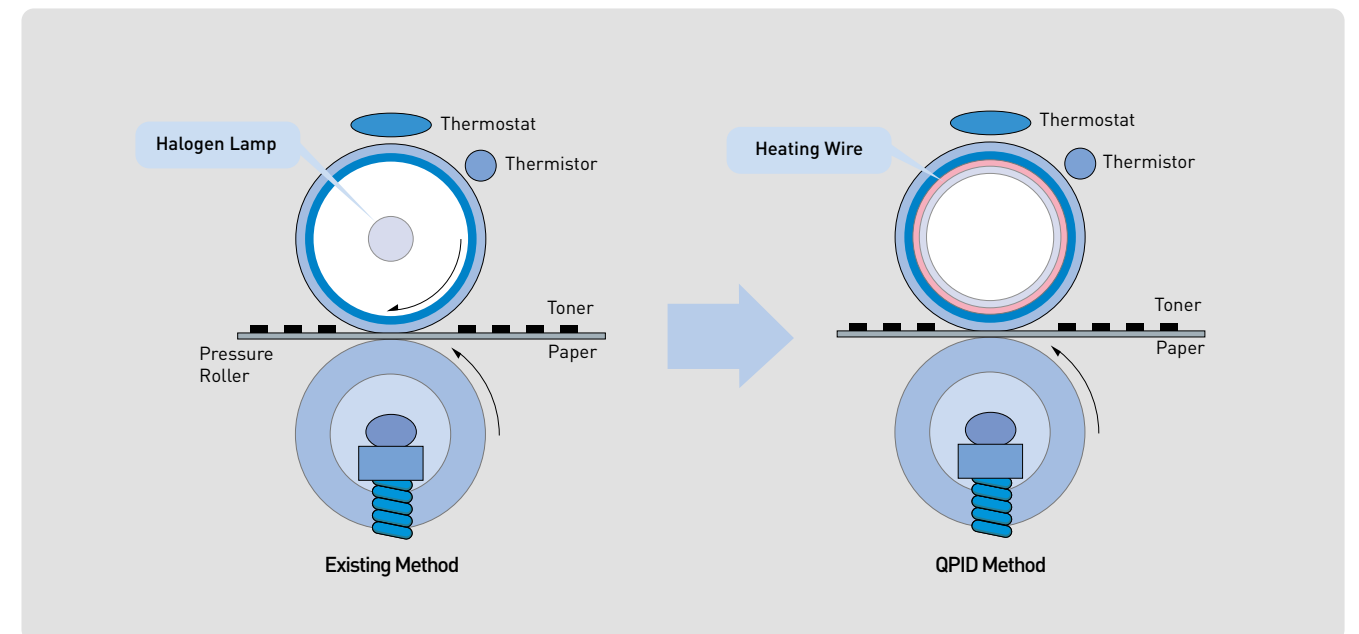
Samsung Electronics complies with the standards of Energy Star Label, an international energy saving label.

Mobile Phones - Energy Saving Label acquired

All battery chargers for mobile phones and PDA of Samsung Electronics have acquired the Energy Saving Label given by the Korea Energy Management Corporation (KEMCO). The standby power consumption of the chargers is below 0.5W, lower than 1W, which is the limit to acquire the Energy Saving Label.

Printers - Change of fusing technology

Generally the fuser of laser printers uses heating lamp, which currently consumes too much heat-up time and energy. In addressing this flaw, Samsung Electronics developed a printer which adopts heating wire-based Quick Printer Initiating Devices (QPID), thus reducing heat-up time from 180 seconds to 60 seconds, which is down by 67% and heat-up power consumption by 80% from 150Wh to 30Wh (for 1750 V2 model).



QPID Fusing technology: Replace the lamp, a heat source, with heating wire to reduce the heat-up time and power consumption

Using Environment-friendly materials

Samsung Electronics is restricting or prohibiting the use of materials suspected of directly or indirectly harming human bodies or to the Global environment, and is making active efforts to develop alternative materials and application technologies to apply more environment-friendly materials to its products

Operation of Green Management
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Lead-free Solder

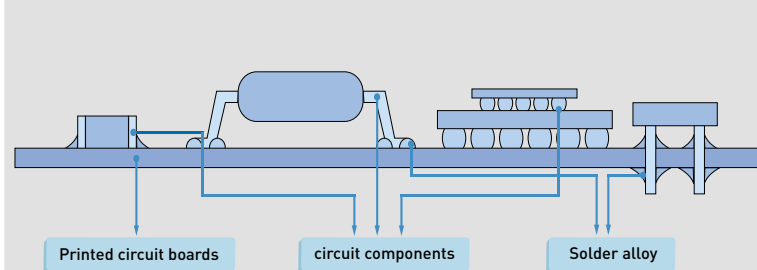
Samsung Electronics is pursuing application of lead-free solders to printed circuit board assemblies to eliminate harmful lead element from all products.

Development of lead-free solder products has been started in 2001 in Samsung Electronics. And the Company secured lead-free soldering technology for several products including HDD (Victor Rev 3.0), printer (SCX5312), monitor (BU150 MP1.1) and DVD/CDRW combo drive (SM-348B) in 2002 and for all other product categories in 2003.

Samsung Electronics produces and sells VCR, VCR/DVD Combo products and HDD with lead-free solder and will produce the other products with lead-free solder by 2004. The Company is trying to secure lead-free soldering technologies as reliable as traditional Sn-Pb solder process by development of optimal working conditions based on 6 sigma and reliability assessments. The Company is also trying to secure full reliability for circuit components and printed circuit board assembly with different melting points of lead-free solders.

Since the second half of 2003, Samsung Electronics has been attaching 'LF (Lead-Free)' label on printed circuit boards with lead-free solder. This makes products distinguished from the others and, also shows Samsung Electronics' commitment to using lead-free solder.

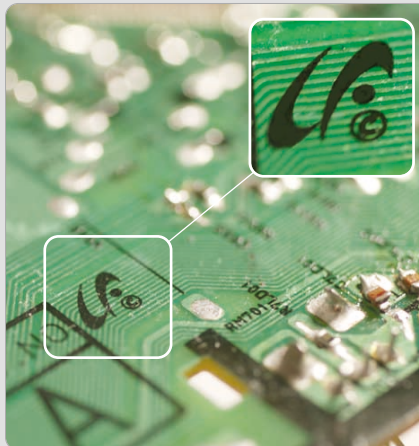
The scope of lead-free soldering applications



Lead-free solder labels and examples

Lead-free solder labels are differently marked according to the solder materials.

- Sn-Ag-Cu type ----- 'a' marked
- Sn-Zn-Bi type----- 'z' marked
- Sn-Ag-In-Bi type----- 'i' marked
- Sn-Cu type----- 'c' marked



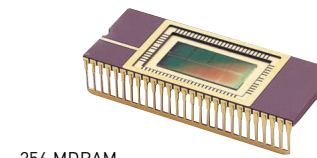
An example of using Sn-Cu type solder mark



The printed circuit board assembly in Combo drives



The printed circuit board assembly in VCRs



256 MDRAM



Hard Disk Drive



Refrigerator using alternative refrigerant



Air conditioner using alternative refrigerant

Environment-Friendly Semiconductors & Hard Disk Drives

Semiconductors

In 1998, Samsung Electronics has researched substitute materials for harmful elements like lead in semiconductors and developed the technology introducing more environment-friendly materials, and in May 2001 the company eliminated lead (Pb), halogen compounds such as Chlorine, Bromine and Antimony and successfully developed a memory, memory modules and ASIC using new materials such as tin and bismuth.

As these 'green' semiconductors demonstrated excellent results in their life and environment tests. The Company plans to expand these technologies to all semiconductors in 2004 and TFT LCD in 2005.

Hard Disk Drives

In August 2003, for the first time in the world, Samsung Electronics shipped hard disk drives (PL40), which did not include lead, cadmium, hexavalent chromium and halogen flame-retardants. Main improvements include development of lead-free solder and lead-free paints and coating agents, of which application will be expanded to all models by 2004.

Alternative Refrigerants

Samsung Electronics has replaced CFCs with alternative refrigerants for refrigerators and air conditioners and is expanding production of alternative refrigerant-based products. For refrigerators, the company has prohibited the use of CFCs as refrigerants and blowing agents from 1996 and currently uses HFC-134a and iso-butane (R-600a) as alternative refrigerants and cyclo-pentane as a blowing agent. In case of iso-butane, ODP (Ozone-layer Depletion Potentials) is '0 (Zero)' and GWP (Global Warming Potentials) is very low, so the Company tried to expand the use of iso-butananes and developed iso-butane BLDC motors to SR-L679EV and SRL39WEB models.

For air conditioners, the Company began using HFC refrigerants such as R-407C and R-410A since 1998 and is now applying the refrigerant to all air conditioners for Europe, whilst planning to apply them to cooling/heating air conditioners from 2004.

Examples of Environment-friendly Products

Samsung Electronics is trying to develop and provide environment-friendly products to customers. Commodity electronics such as refrigerators, air purifiers, drum-type washing machines, mobile phones, VCRs, laser printers and TFT LCD monitors are being reborn as more environment-friendly products

Operation of Green Management
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TFT-LCD Monitor (NB21BS)

Samsung Electronics leads the world in monitors, for its superior performance, as well as its environmental aspects. Many products including NB21BS have acquired TCO'03, a well-known environmental quality certificate of Sweden. TCO'03 certificate does not only evaluate environmental aspects but also values ergonomics, safety, specific adsorption rate and so on. The model contains limited cadmium, lead and halogen substances according to the certificate's criteria and uses an easy removable mercury lamp for disassembly and plastic parts of the same material for recycling.

Laser Printer (ML-1750)

The laser printer ML-1750 has acquired the Korea Eco Label. This product reduces operation and standby power consumption by 50% (from 13.9W to 7.1W in its power saving mode) based on an environment-friendly design and adopts the automatic power saving mode to prevent unnecessary use of power. Printing noise and ozone generation of the product are 50dB and 0.0038ppm which are 10% and 30% less respectively, than the limit of Blue Angel of Germany. In addition, the product adopts toner saving functions, which saves toner use by 40%.

VCR (SV-K811)

Thanks to environmental improvements focusing on recyclability, low energy and reduction of hazardous substances, SV-K811, a Samsung Electronics VCR, was awarded Green Marketing Grand Prize 2003, which was organized by the Ministry of Environment and Maeil Business Newspaper and hosted by Environmental Management Corporation. SV-K811 uses paper-based cushion and fewer components, and indicates the material identification on plastic parts for easy recycling. Also the products pursues low energy consumption of 0.9W of standby power consumption and harmlessness to human by adopting lead-free solders and removing halogen substances from printed circuit board and packaging materials. Lead-free solders were introduced in 2001 and currently are used in VCRs and VCR/DVD combo products. SV-K811 was the first among the VCRs in Korea having acquired the Korea Eco Label.

Optical Disk Drives

(Desktop PC component)

Samsung Electronics' CD-RW drives acquired the Korea Environmental Declaration of Products(EDP) label for the first time in the category of optical disk drives in March 2003, afterwards, including DVD drives, CD-ROM drives and COMBO drives received the same label.

The CD-RW reduced weight by 36% and number of components by 18% as compared to the 2001 model, and also improved in components standardization and using paper-based disk packaging. Since 2002, Samsung Electronics have expanded the scope of optical disk drives with lead-free soldering by securing production technology for products with lead-free solders.

Environmental Labeling

ISO defines 3 kinds of environmental labeling; Type I label is given to products that have passed predefined criteria, for example 'Korea Eco Label' in Korea, Type II label is Self-declared Environmental statement and Type III label is publicizing the results of LCA with third party verification, for example Environmental Declaration of Products (EDP) in Korea.



Korea Environmental Declaration of Products (EDP) Label

Samsung Electronics acquired EDP Labels for TFT-LCD monitors (SyncMaster 175P) and a 42" PDP TV (PAVV SPD-42P2S1) in May in 2002 and then for a refrigerator (SRS-768CC), an air conditioner (AP-1240) and optical disk drives for PCs. The Environmental Declaration of Products is one of the 'Environmental Labeling Type III', indicating the whole quantitative environmental load, generated during material extraction, manufacture, distribution, consumption and end of life. The information on Environmental Declaration of Products is provided at 'www.edp.or.kr'



NB21BS



ML-1750



SV-K811



Optical Disk Drive



Air Purifier (AC-120AW)

Samsung Electronics' air purifiers are equipped with 12 stages of air purification system and acquired Korea Eco Label for its environment friendliness as well as the CA (Clean Air) label from Korea Air Cleaning Association.

Its Double e-HEPA (Electric High Efficiency Particulate Air) system absorbs 99% of dusts, virus, bacteria and mold. Silver nano-technology is Samsung Electronics' patented technology, which coats silver on the filters, effective in removing 99.99% of virus,

mold and bacteria.

In addition, the product maximizes purification performance by using photo catalyst deodorization, a four faced absorption system and a high efficiency motor with noise measuring below 20dB. The product is extremely efficient in energy consumption and electricity costs only total 37 Korean won (around 0.03 USD) even if used 24 hours a day. The filter can be washed with water and is extremely durable, thus reducing its impact on the environment.



AC-120AW



Side by side Refrigerator (SRT668FDI)

Zipel SRT668FDI adopts separate cooling system for the freezer and refrigerator compartments, and has a rapid cooling rate, which is excellent in maintaining freshness and power saving. Zipel uses Inverter Technology to reduce power consumption by 12% compared to existing products and makes less noise than the library. The inverter controls the refrigerator's freezing and cooling capabilities according to outside room temperature, frequency of refrigerator door opening and amount of stored food. In addition, the refrigerator adopts Nano Health System, an anti-virus system, which prevents propagation of microorganism, and stores food safely.



SRT668FDI

Drum-type Washing Machine (SEW-HR125)

Hauzen SEW-HR125, a drum-type washing machine, was awarded the 'Energy Winner Prize' in 2003 for its excellent performance in 3 core technologies; water saving, energy saving and low vibration /noise. Power saving technology includes a function cutting off standby power consumption totally, and an automatic dry function that senses the dryness level.

Zero standby power consumption means a reduction of 24,455Wh annually, equivalent to power used for washing laundry once a day for 5 months. The washing machine is equipped with a Water Turbine to save water, a washboard and lifter structure, and an inclined drum that does not require full water levels. To lower vibration and noise, BLDC motor and high-performance oil damper used in vehicles were adopted. Finally the product utilizes Silver Nano-technology to promote anti-virus effects in consideration of users' health.



SEW-HR125

Mobile Phone (SPH-X4200 and others)

The mobile phone SPH-X4200 is famous for its beautiful design. The same external design was applied to mobile phones regardless of domestic or international use. The similar external design allowed for the use of common antennas, batteries, keys and TFT-LCD modules. The phone succeeded to reduce the size of components through single and slim circuit components and saved resources. Samsung Electronics reduced standby power consumption up to 0.5W, far lower than 1W a standard for the Energy Saving Label.



SPH-X4200

Environment-Friendly Semiconductor Web Site

In September 2003, Samsung Electronics opened a web site on environment-friendly semiconductors. To respond to customers' request the web site releases information on semiconductors such as Samsung Electronics' environment-friendly semiconductor development strategies, status of products in development and production, quality and reliability tests and future roadmap.

Releasing this professional and practical information shows Samsung Electronics' commitment to leading in standardization and development of environment-friendly semiconductors.

[www.samsung.com/product/semiconductor/divisionpolicy/ECOproducts/index.html]



End-of-life Product Recycling

Recycling is the initial step towards environmental preservation. Samsung Electronics is willing to take the lead in realizing the sustainable society through end-of-life products recycling

Operation of Green Management
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Collection and Recycling of Electronic waste in Korea

Establishment of Recycling scheme

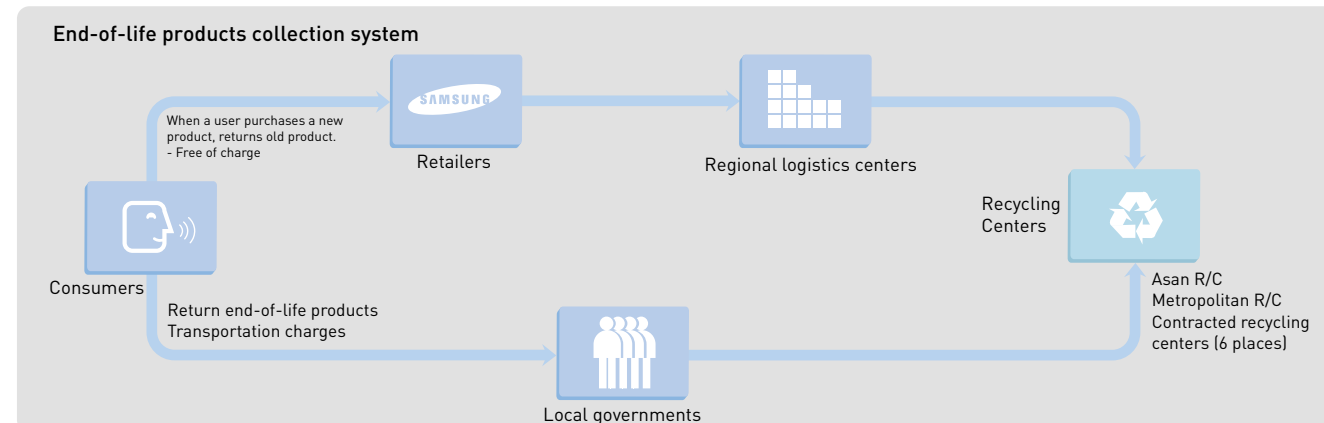
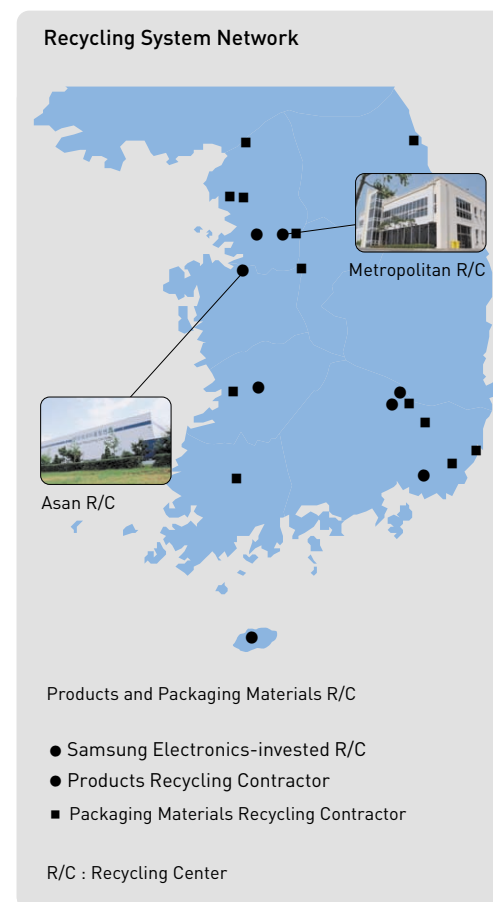
Samsung Electronics is the first electronics company in Korea to establish a collection and recycling system of electronic waste no longer used by customers. By taking an initiative to realize the sustainable society. Samsung electronics is contributing to environmental protection and the efficient use of resources.

Collection System

For upgraded customer services, Samsung Electronics established a collection system that includes approximately 1,560 retail stores and 28 logistics centers nationwide, which engage in collecting end-of-life electronic goods.

Recycling System

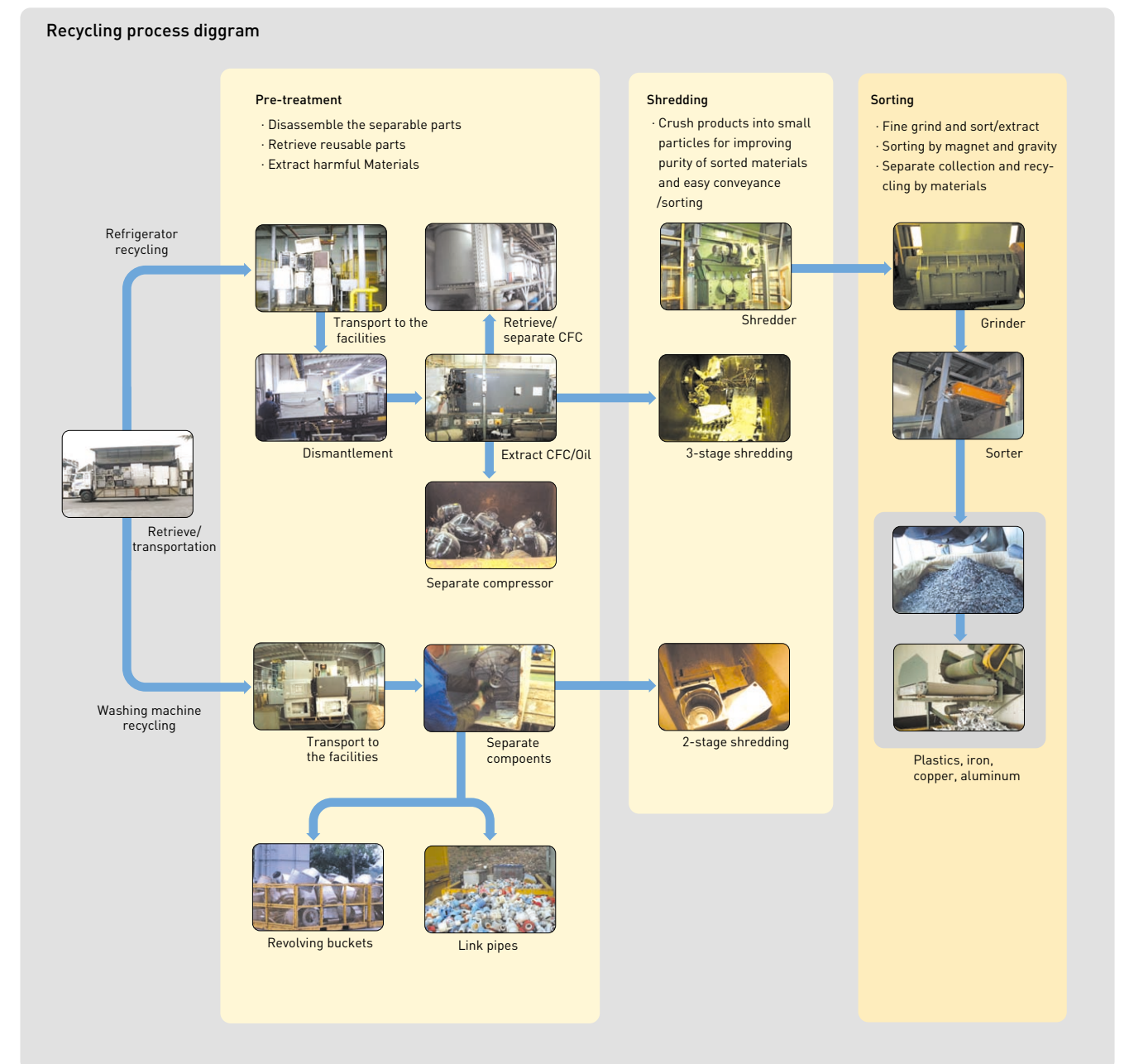
Collected electronic waste is processed by the recycling system network consisting of Asan Recycling Center, located in Asan, Chungcheongnam-do, fully funded by Samsung Electronics, the Metropolitan Recycling Center established by Samsung and four other Korean electronics companies (May, 2003) and other six contracted recycling plants. The end-of-life electronic goods processed in the recycling system are refrigerators, washing machines, TVs, air conditioners, microwave ovens and VCRs.



Asan Recycling Center

The Samsung Recycling center located in Asan, Chungcheongnam-do oversees more than 270,000 electronic waste, which are dismantled by an automatic system (3 staged process: pre-

treatment → shredding → sorting). In this process, iron, copper, aluminum, plastic, CFCs, etc. are categorically divided for recycling. The center is operating facilities to extract and separate refrigerants (CFC-12) and oil from refrigerator's compressor and to retrieve CFC-11 gas.



Recycling Status

In Korea, the Extended Producer Responsibility (EPR) program has operated since 2003. Currently refrigerators, washing machines, TVs, air-conditioners and PCs fall under the scope of EPR and mobile phones, and audio sets will be added in 2005. About 420,000 units of electronics were recycled in 2001 and 530,000 units in 2002. More than 600,000 units of electronics were recycled in 2003.

In 2003 the recycling ratio of refrigerators and washing machines from Samsung Electronics was 79% and 90%, respectively and most metals, non-metals and plastics were recycled. In the future Samsung Electronics will develop easy-to-recycle products by considering recycling factors in its design stage as well as developing cutting-edge recycling technology for increasing the recycling ratio.

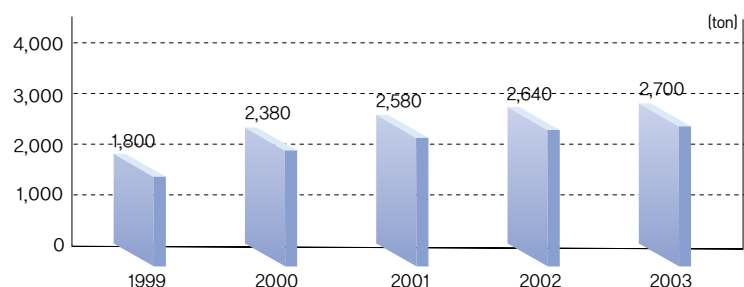
Expanded Polystyrene (EPS) Recycling

EPS packaging material is collected by regional logistics centers and recycled at 12 specific recycling centers, which are in partnership with Samsung Electronics.

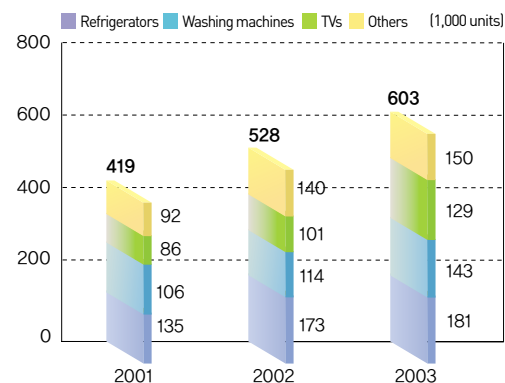
A EPS compressor was developed and operated to improve the recycling efficiency and collected EPS is surrendered and processed into pallets, to be used for construction materials and picture frames.

The recycling ratio of EPS achieved by the recycling system was 60%, or 2,700 ton, of all EPS used in 2003.

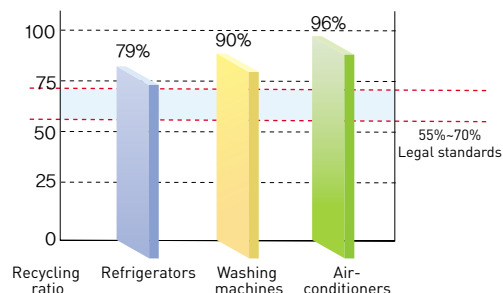
EPS recycling developments



End-of-life products recycling progress



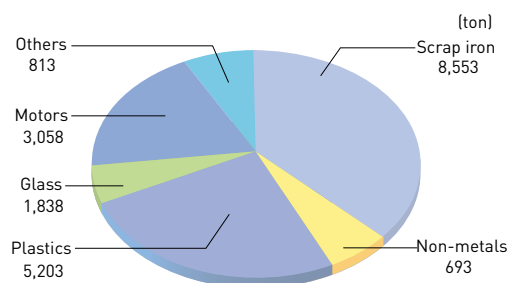
Recycling ratio (2003)



Evaluated based on the first recycled amount at Asan R/C

$$\text{Recycling ratio (\%)} = \frac{(\text{Input material weight} - \text{Material weight to incineration and landfill})}{\text{Input material weight}}$$

Resource recovery from end-of-life electronics (2003)



Overseas Recycling Activities

Participation in UNEP Mobile Phones Partnership Initiative

Samsung Electronics made a joint declaration in December 2002, with UNEP and other top 10 mobile phone manufacturers for environmentally sound management of mobile phone. The Company is making joint efforts with other mobile phone manufacturers to prevent environmental contamination by end-of-life mobile phones and to promote recycling of the mobile phone.



UNEP Signing Ceremony for Environmentally sound management of mobile phone



Samsung Electronics European Environmental Management Team

Europe

As the WEEE directive came into effect in February 2003, electronics manufacturers have responsibility for the establishment of collection and recycling system of end-of-life products. Samsung Electronics is tracking information on recycling systems and legal trends and making efforts for the compliance with the legislation. For this purpose, Samsung European Environmental Management network (SEEM) was launched in September 2003.

Japan

Japan enacted the Home Appliance Recycling Law, and now refrigerators, washing machines, TVs, air-conditioners and PCs fall within the scope of this law.

Samsung Electronics gets a membership in the consumer electronics recycling organization of Japan. Samsung Electronics recycled about 79,000 units in 2001 and 109,000 units in 2002. Since October 2003, the Company keeps partnership with Mitsubishi Electric & Electronics and others for the compliance with the recycling law for PC.

USA

USA holds recycling programs for electronic waste and each state has recently been preparing a bill to make recycling electronic waste compulsory.

Samsung Electronics is reviewing participation in public pilot project for the preparation for the compliance with the law.

China

There has been increased attention to environmental protection and recycling-associated activities in China. Samsung Electronics declared the "Environmental-friendly Management of Mobile Phones" with other manufacturers under the sponsorship of the State Environmental Protection Administration of China in October 2003.

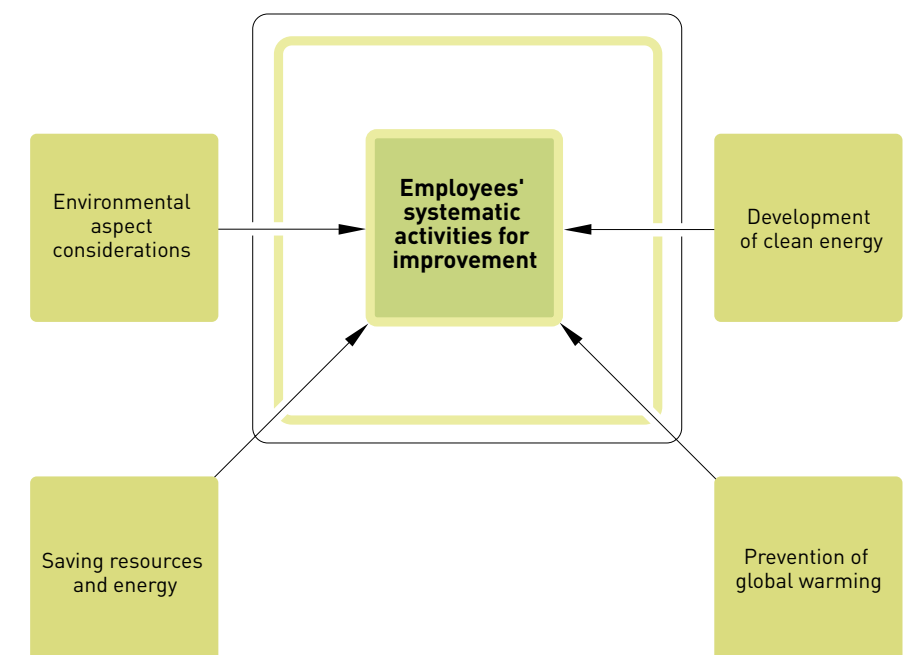


Environmental Improvement Activities

Samsung Electronics is engaged in diverse environmental improvement activities ranging from efforts made to minimize environmental impact caused by production to the recycling of resources, using environment-friendly materials and applying clean energy and technology where possible. The Company's employees are making concerted efforts to apply optimal production systems conducive to the prevention of global warming and minimize discharged contaminants.

42 Prevention of Global Warming and Energy Management | 45 Activities for Minimization of Environmental Impact |

53 Communication with Interested Parties



Prevention of global warming and energy management

Samsung Electronics has played a leading role in environmental conservation, promoting the "Catch Carbon Dioxide 1030" project designed for the voluntary and epoch-making reduction of carbon dioxide

Operation of Green Management Activities for Environment-friendly products
 Environmental Improvement Activities
 Safety/Health-Related Activities
 Social Contributions

Though the total volume of carbon dioxide emitted by its factories accounts for less than 1% of the entire picture of carbon dioxide emission in Korea, Samsung Electronics pushes ahead with the "Catch Carbon Dioxide 1030" project for voluntary and epoch-making reduction of environmental contaminants, in addition to the voluntary control of the use of other materials causing global warming, as part of the effort for environmental conservation.

Efforts for prevention of global warming

- In April 1999, the WSC (World Semiconductor Council) reached a consensus to reduce the absolute emissions of PFCs (perfluoro compounds) from semiconductor fabrication facilities by 10% or greater (based on 1997) by the year 2010.
- In December 1999, it was decided that the technology for treatment of PFCs and alternate gases that can replace them would be developed on a national level.
- In August 2002, the technology for treatment of PFCs and alternate gases that can replace them was developed.
- The process for cleaning semiconductor CVD was developed. The technology for cleaning alternate gases, using non-nitrogen a trifluoride remote plasma source was developed and as a result can reduce 90% of the PFC emission.

The Catch Carbon Dioxide 1030 Project

Under the project (the Company's commitment to the reduction of global warming emissions by 30% from the 2001 figure by 2010), the Company

plans to reduce emissions by 70% for existing lines and more than 90% for new lines installed in or after 2002 through the development of clean technology, application of alternate gases and optimization of the production process for reduction of the use of PFCs.

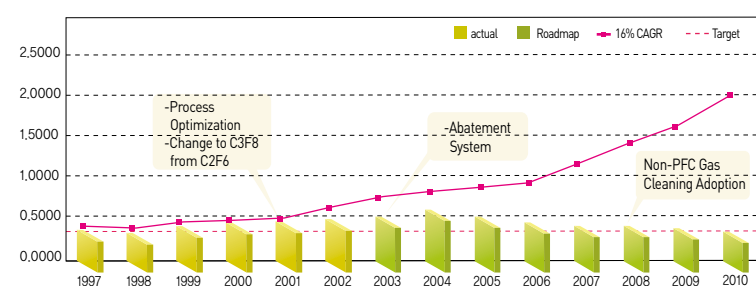
Application for Patent for PFCs Removal System

Under the system (fixed in an emission duct) designed for water treatment of emitted PFCs by directly applying electric energy under normal temperature and pressure, Samsung Electronics has saved about 114.3 billion won that would have otherwise been spent on treatment of PFCs. The system is applying for a patent as the first technology for treatment of PFCs. Its efficiency in treatment of PFCs boasts higher than 90%.

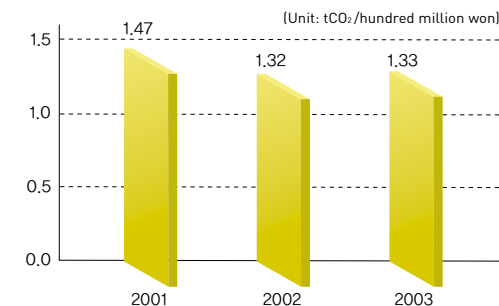


A facility for removal of PFCs

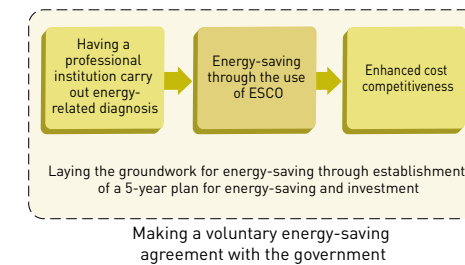
PFC Emission Roadmap



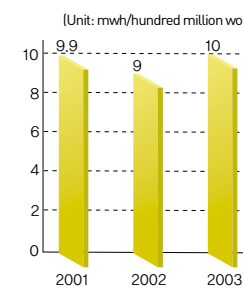
Status of carbon dioxide generation



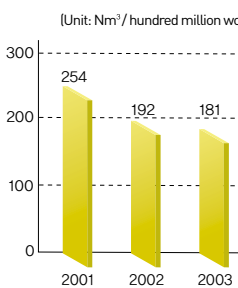
Energy Service Company



Power consumption



LNG consumption



The Energy-Saving Voluntary Agreement with the government



The Presidential Award for Samsung Electronics Giheung Factory for its exemplary part in energy-saving



The representative of Samsung Electronics is receiving the Presidential Award for its exemplary part in energy-saving in 2002

Energy Management

Samsung Electronics does what it can to reduce energy waste and develop energy-saving products.

Major Activities for Energy-Saving

Promotion of energy-saving activities participated in by all employees

- Diverse activities, including the selection of energy-watchers, a periodical meeting of department heads in charge of energy-saving, setting one day a week as Energy-Saving Day, the operation of energy-checking teams and the location of examples of energy-wasting.
- Under the computerized "E-Energy Cost Reduction Management" system, semiconductor factories carry out prompt and accurate management of the energy cost reduction plan, sharing relevant information and exemplary cases with each other.

Positive participation in the government's energy-saving measures and adoption of incentive systems

Samsung Electronics laid the groundwork for energy saving through the establishment of a 5-year plan for energy saving and investment, having a professional energy institution check waste factors.

Positive energy-saving activities, including enhancing the efficiency of production facilities

The Company does its best to reduce energy-wasting factors by enhancing the efficiency of production facilities and applying optimal operational conditions, and purchasing energy-efficient facilities. This way, the Company reduced power consumption by up to 25%. The Giheung and Suwon Factories received the Presidential Award for their exemplary part in energy saving.

Major examples of energy saving

Energy-efficient buildings

The Information & Telecommunication Research Institute building in the Suwon Factory of Samsung Electronics is an energy-saving type building equipped with an automatic electricity-saving system comprised of inverters, high-efficiency motors, absorbing-type freezers and high-efficiency recovery facilities. The building saves more than 700 million won a year through optimal management of utility facilities that can automatically control air-handling and dimmer-control units based on whether there are people inside each office by means of a special bio-tech transmitting /receiving antenna chip.

Energy-saving through improvement of waste heat recovery system in incinerator

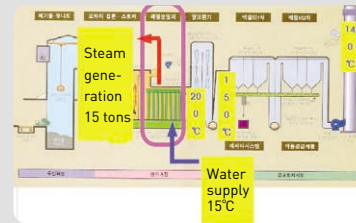
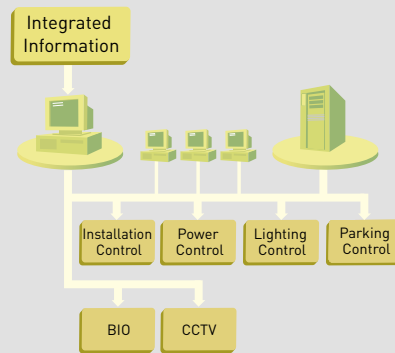
The Company has used waste heat boilers to save energy (worth 1.9 billion won a year) with waste heat obtained from the operation of incinerators.

Energy-saving by application of wireless control system of package air conditioners

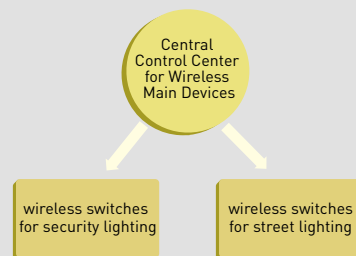
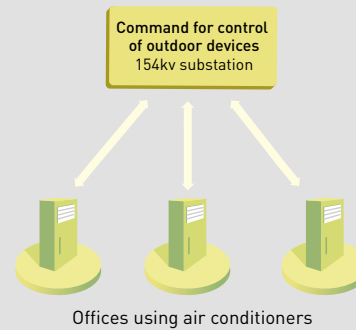
The Company has established a web-based wireless power control system for higher efficiency in the use of package-type air conditioners.

Street lighting wireless remote control system

The Company has adopted a wireless remote control system for automatically controlling street lights within its factories at sunset/sunrise.



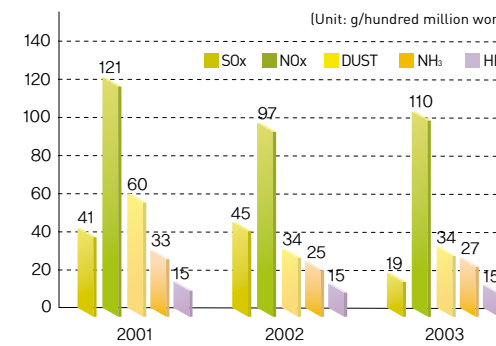
Wireless control system



Activities for minimization of environmental impacts

For the well being of humankind, Samsung Electronics does its best for cleaner air, proper water resource management, recycling of waste resources and control of harmful chemical materials, in addition to making efforts for the minimization of environmental contaminants in the process of goods production

Status of air pollution emissions



Burn Wet Scrubber



In-house waste incinerator

Samsung Electronics is positively engaged in the conservation of resources and nature under an environment management program designed for minimization of environmental contaminants occurring in the production process. To that end, the Company carries out a thorough management of environmental contaminant sources and makes continued efforts for supplementation of recycling and contaminant treatment facilities.

Making air cleaner and fresher

Samsung Electronics exerts the utmost effort to minimize air pollutants through fundamental management of their sources and the development of Green Technologies. To this end, the Company replaced the boiler fuel with LNG and installed the network of optimal air pollution prevention facilities and automatic measurement of pollutants as well as adopted in-house standards for air pollutants emissions which are more rigorous than relevant laws.

Major Examples of Improvements

Reduction of pollutants with adoption of burn-wet scrubber

In an effort to reduce contaminants occurring in its semiconductor factories, Samsung Electronics adopted a burn-wet scrubber whose efficiency in treatment is excellent, thus succeeding in reducing the emission density to one-tenth of the previous level. In the case of stench-causing nitrogen trifluoride, the Company reduced it to the level of 1 ppm from 70 ppm. A burn-wet scrubber is a device designed to reduce emission density by decomposing combustion gas at a temperature of 1,200°C. The device goes a long way toward making the Company's factories more pleasant workplaces and maximizing the by-line productivity.

Improvement of pollution prevention facility for incinerator

Samsung Electronics replaced the existing dust collection facility with a dry-type two-tier filtering dust collection facility for minimization of pollution at the incinerator.

Management of precious water-resources

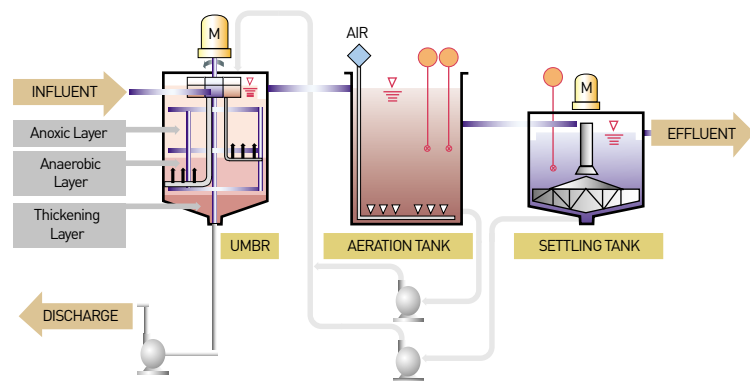
Samsung Electronics is committed to the reduction of water used at its factories via improvement in the production process and recycling technology. The Giheung Factory, for example, succeeded in saving 55,000 tons of water per month by making semiconductor production without using water possible and enhancing the recovery rate of the treated water at the LCD production section.

Major Examples of Improvements

Establishment of T-N (Total Nitrogen) Removal

Each Samsung Electronics factory makes it a point to treat the waste/sewage water to the extent that it is clean enough for fish to live in, in addition to the installation of T-N (total nitrogen) and T-P (total phosphorus) treatment facilities. In the case of the Onyang Factory, the UMBR tank installed at the front end of the aeration tank is used as an oxygen-free tank, recovering activated sludge that passed the aeration tank to the UMBR tank to remove T-N and T-P. This way, the emission density of T-P and T-N has been improved to the level of 1 ppm (from 4 ppm) and 13 ppm (from 23 ppm), respectively. (The statutory standards are 6 ppm for T-P and 50 ppm for T-N.) The investment cost, architectural cost and operation cost have also been reduced.

System Diagram for T-N Removal Facility

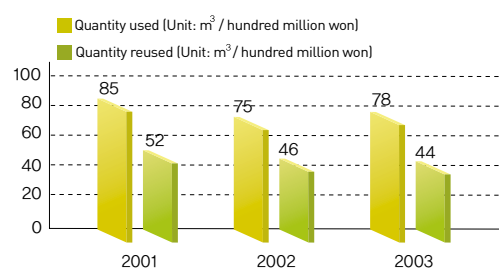


Installation of Sewage Water Vacuum Channel for prevention of water pollution

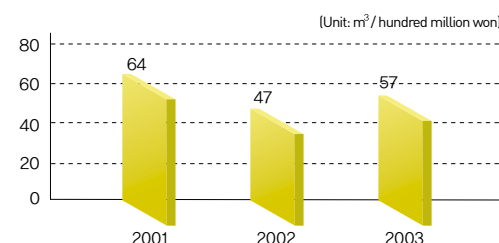
Samsung Electronics' Suwon Factory operates a vacuum-type sewage water treatment system after a two-stage work of installation of ducts in 1995 and 2001.

The duct, the first of its kind in Korea, is a favorite course for inspection by environmental organizations. The sewage water vacuum channel has the advantage of preventing soil contamination caused by leakage in the duct.

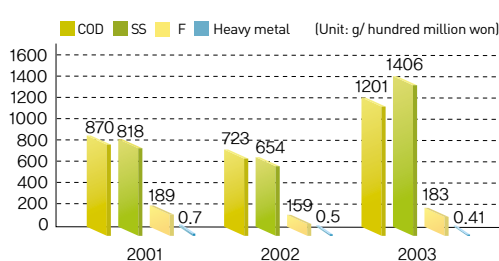
Status of water use



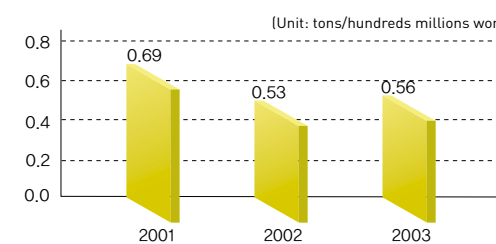
Status of occurrence of waste water



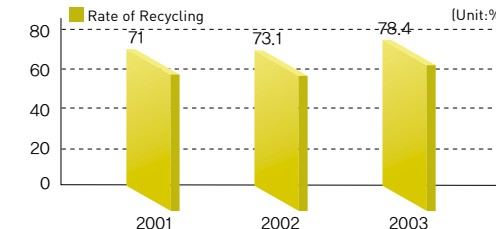
Status of water pollutants emissions



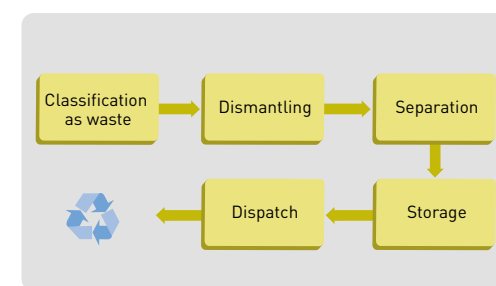
Status of Waste Generated



Status of Recycled Waste



Programs for Recycling of Idle Equipment



Process for Recycling of Idle Equipment

Making waste a useful resource

Samsung Electronics does its best to reduce wastes and makes wastes useful resources in the entire process of business operation.

Waste management policy

- Designation of the need for saving resources and the use of environment-friendly materials in product designs.
- Application of the Green Procurement system at the time of purchasing raw materials.
- Encouragement of waste reduction through the system of reporting the waste discharger's name.
- Activities for making waste a useful resource and supplementation of in-house treatment facilities (Recyclable wastes increased to 26 kinds from 13 kinds: synthetic resins, vinyl, etc.)
- Carrying out a campaign to reduce the waste of food.

Major Examples of Waste Reduction Activities

Operation of Recycling Center

Samsung Electronics' semiconductor factory does its best to save expenses for raw materials through the process of making waste a useful resource, enhance the rate of reusing idle equipment, parts and furniture, in addition to contributing to environmental conservation. In 2002, the Company saved 1.66 billion won through full utilization of the Recycling Center opened in March 2001.

Model cases of waste reduction and recycling

- Saving expenses for treatment of a total of 1,244 tons of dimethylformamide waste through their recycling.
- Recycling of 40,000 tons organic/inorganic sludge a year as raw material for cement.
- Making 200 tons of dimethylformamide waste into fuel every year.

Management of Harmful Chemical Materials

In connection with diverse kinds of chemical substances used in the process of manufacturing electronic products, the use of certain substances are limited or prohibited to minimize harmful effects on humans and conserve environment. Samsung Electronics does what it can to prevent itself from using these harmful substances and develop alternate substances.

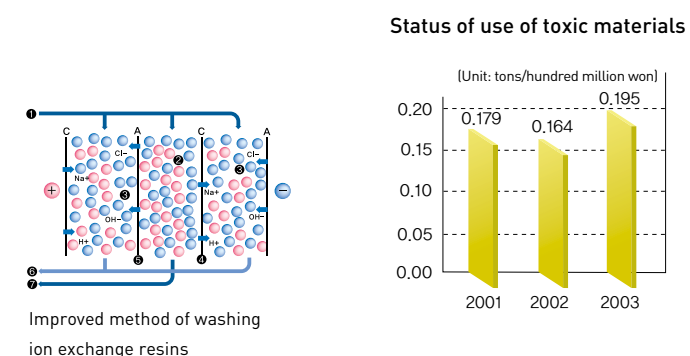
Systematic management of harmful chemical materials

Harmful chemical materials used in the production process at Samsung Electronics are thoroughly managed by a checking system from their warehousing until their scrapping. Those newly warehoused cannot be used until after being checked by departments in charge of environment, safety and health. Employees handling harmful chemical materials are required to undergo a course of education. Various pollution preventive facilities are installed to guard against the chance of leakage. The materials are monitored by a round-the-clock surveillance system.

Examples of reduction in the use of harmful chemical materials

Reduction of toxic materials through the use of an improved method of washing ion exchange resins

In the past, a method of ion separation using hydrochloric acid and sodium hydroxide was used to remove foreign materials stuck to an ion exchange



resin. The process required the use of toxic materials and great expenses for treatment of waste water. To solve such a problem, the method of CDI (continuous electric deionization), using the electric characteristics of the ion exchange resin (See the picture below) was adopted. This enables the Company to save 107 tons of toxic materials for washing ion exchange resins every year in addition to reduction of the use of water and the expense for treatment of wastewater.

Development of environment-friendly cleansing solution

Samsung Electronics' Gumi Factory developed an environment-friendly cleansing solution that can replace harmful chemical materials used at the optical fiber production process. The cleansing solution is used to remove foreign materials, such as coating liquid or ink attached to the fixing devices in the coating and coloring process for optical fibers and cables. The development of the environment-friendly cleansing solution resulted in environmental improvement in the production process, improvement in working conditions and higher efficiency in the cleansing process (reduction by half of the frequency of washing the fixing devices) as well as reduction in cost.

Effects of improvement

- Reduction of exposure of the body (through manual cleansing) to harmful factors.
- Reduction of cleansing time (from 7.5 hours to half an hour) and higher efficiency in operation.

- Reduction of liquid waste: from 30 tons a year to zero.

In the past, dimethyl formamide waste remained. However, it was converted into ordinary wastewater for treatment.

- Cost reduction -Expense for liquid waste treatment: 9 million won -Expense for installation of pollution prevention facilities: 220 million won -Labor cost saved by reduction of cleansing time: 420 million won.

Development of Environment-Friendly Technologies and Green Production Activities

Amid the EU's promotion of laws and regulations against electro-electric products containing harmful materials starting from 2000, the focus of environmental concern is made on development of the clean production technologies and the purchase of raw materials. In response to this, Samsung Electronics does its

Division		Before Improvement	After Improvement	
Carrier Frame				
Division		Before Improvement	After Improvement	Remarks
Carrier Frame	Material	FR-4	SUS-304	Semi-permanent use
	Runner	Application of Teflon to increase the release	Non-application of Teflon	

best to secure environment-friendliness concerning its products and production process, using materials with low-toxicity where required in cooperation with subcontractors.

Examples of environment-friendly materials and production process

Samsung Electronics' Semiconductor sector became the first business in the world to develop the etchant by integrating the low resistant wiring in the chrome wiring production process with a new environment-friendly material (through development of the Mo/Al/Mo structure). Thus, the Company was able to cope with the regulation of the use of chrome-etchant in addition to enhancing product quality by means of the 6-Sigma technique using well-arranged statistics and systematic approaches.

The development of the environment-friendly new material enables the Company to save more than 10 billion won a year through reduction of the cost by half, enhanced productivity and reduction of waste materials (i.e. 70 tons of 6 chrome every year). It is expected that it will bring about tens of billions of won worth of cost reduction every year with its application to the mass production lines in 2004. The Company is applying for patents concerning its technology in the U.S., Taiwan and Japan.

Examples of waste reduction through improvement in the semiconductor production process

Under the previous CSP (chip size package) production process, a PI tape is attached to the carrier frame (as shown in "Before Improvement" in the following table) and a chip is placed on it before cutting it horizontally and vertically. This required the carrier frame to be cut (as shown in "After Improvement"), thus making it impossible to re-use it.

The work process was improved by changing the specification of the carrier frame from FR4 to SUS and separating the chip from the frame, only cutting the frame horizontally. This way, the SUS carrier frame can be re-used permanently, leaving no waste. The newly designed 70mm PI Tape can now load 144 chips, compared to the previous 48mm tape that could load 64 chips. The Company saves 10.7 billion won through reduction of the use of PI Tapes by more than half (saving more than 30 tons of wastes) and through improvement of the production process.

Management of Environmental Impacts and Soil Contamination

Samsung Electronics' Suwon Factory does its best to minimize environmental impacts from its production activities, establishing relevant programs from the stage of building factories and carrying out follow-up management through periodical analysis of relevant data. In addition, the Company is engaged in diverse activities for ecological conservation, including analysis of the water quality of streams near its factories, measurement of air quality, analysis of soil contamination and the quality of underground water.

Monitoring of underground water quality

The factory also takes periodical measurements based on items of management to examine the degree of water contamination collected underground near the facility.

- Points of check: 4 points near the factory
- Items checked: pH and negative/positive ions (10), heavy metals (6) and TOC.
- Frequency of check: once a quarter.

Examples of analysis of soil contamination

The factory carried out an analysis of heavy metal items (i.e. Pb, Cu, Cr, As, Cd, Ni and Zn), BTEX, THP, TCE, PCE as well as soil analysis for texture, CEC and pH to check the degree of contamination of the area where it is located based on 118 samples of soil and underground water collected from 28 points.

As a result, it turned out that the ratio of sand stood at 72-93%, showing a good degree of ventilation. The soil was also found to be free of acid and base and contained enough organic matter to meet the conditions of microbes' growth. TCE, PCE and heavy metals were found to be below the accepted standards.

Analysis Result of Soil Contamination Caused by Volatile Organic Compounds

Sample No.	Depth/Benchmark Density	TCE	PCE	Location of Sampling
		40	24	
22-4	2.6~3.2	Not detected	Not detected	In front of the gas station in Sector-1
22-5	3.2~3.8	Not detected	Not detected	In front of the gas station in Sector-1
23-3	2.0~2.6	Not detected	Not detected	In front of the gas station in Sector-1
23-4	2.6~3.2	Not detected	Not detected	In front of the gas station in Sector-1
24-3	2.0~2.6	Not detected	Not detected	Beside the parking tower in Sector-1
24-4	2.6~3.2	Not detected	Not detected	Beside the parking tower in Sector-1
28-2	1.4~2.0	Not detected	Not detected	In front of the waste oil storage area
28-3	2.0~2.6	0.014	Not detected	In front of the waste oil storage area

Analysis Result of Underground Water Contamination

Location of Sampling	BTEX	TPH	TCE	PCE
On the outskirts of the Customer Service Center	Not detected	Not detected	Not detected	Not detected
The open storage area in Sector-2	Not detected	Not detected	0.013	0.014
Beside the parking tower in Sector-1	Not detected	Not detected	Not detected	0.0071
In front of the waste oil storage area	Not detected	Not detected	Not detected	Not detected



Collecting underground water for the measurement of water quality

Transportation Management

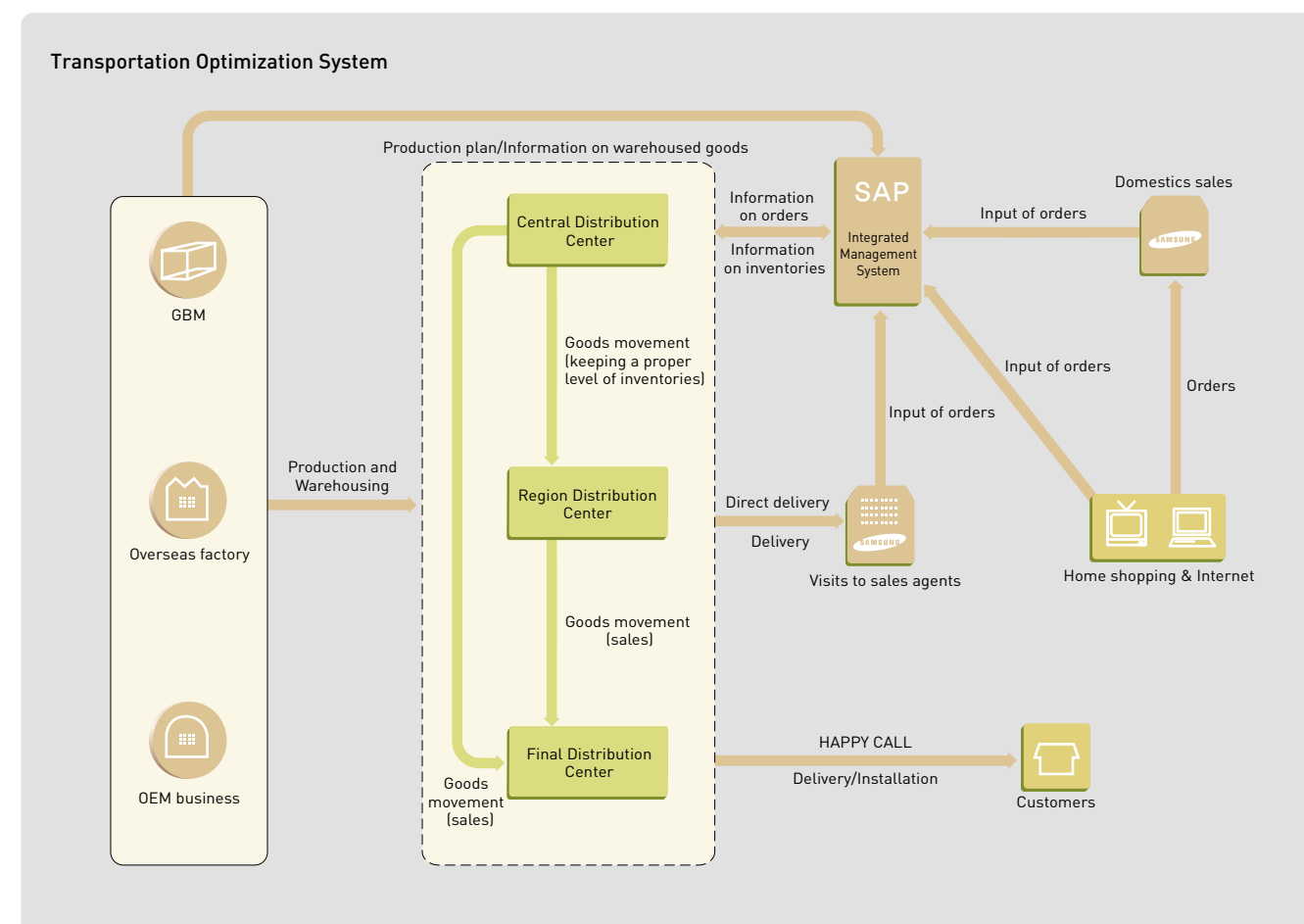
Improvement in the Transportation System

Samsung Electronics helps reduce air pollutant emissions by making the distance of transportation as short as possible through improvement in the logistical system, in addition to the adoption of the digital map and software for optimization of transportation routes under the retail logistical distance measurement system,

DTPS (delivery time promise system), TMS (transportation management system) and WMS (warehouse management system).

Adoption of LNG buses, the first attempt made by a domestic non-transportation business

Samsung Electronics became the first non-transportation business in Korea to adopt LNG buses for the employees' commuting. An LNG bus emits 84% less hydrocarbon, 63% less nitroxide, 59% less carbon dioxide and 50% less noise than a diesel-fuel bus. The Company plans to replace all of its buses with LNG-buses, starting with the Semiconductor Business.



Communications with Interested Parties

Samsung Electronics is engaged in multi-faceted activities aimed to contribute to environmental conservation and satisfy customers and other interested parties based on a policy of openness and fairness and co-existence with subcontractors

(Unit: Millions of Won)

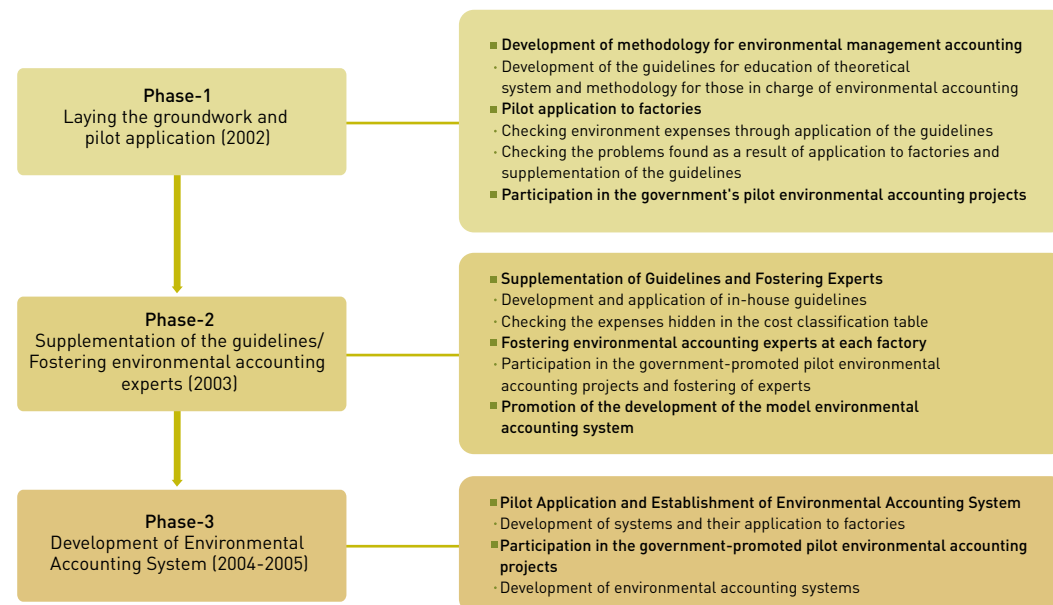
Environmental Expenses		Environment Expenses			
		Suwon	Gumi	Gwangju	Total
Contamination Treatment Activities	Expenses for Operation of Contamination Treatment Facilities	5,927	2,722	3,725	12,374
Contamination Prevention Activities	Expenses for Environment/Safety/Health-related Activities	6,053	718	7,742	14,513
	Expenses for Activities related to Resource Conservation and Recycling(Activities for fundamental reduction of contaminants)				
	R&D-related Expenses				
	Expenses related to Other Preventive Activities				
Interested Parties' Activities	Expenses for Cooperation with Outside Organizations	167	26	69	262
	Expenses for Other Related Activities				
Activities for Rehabilitation and Compliance with Laws and Regulations	Expenses for Compliance with Laws and Regulations	688	0	0	688
	Expenses for Rehabilitation of Contaminated Subjects				
Environment Expenses		12,835	3,467	11,536	27,838
Investments		8,673	1,200	137	10,010
Environmental Effects and Benefits		7,794	3,823	2,819	14,436

Environmental Accounting

Samsung Electronics adopted the environmental accounting system, expanding the scope of application by stages, for more efficient management of environment-related expenses. For a year from October 2001, the Company promoted adoption of the environmental accounting system.

The Company has so far completed Phase-2 (January through September 2003) of the National Policy Measures for Environmental Accounting, making efforts to improve the accounting guidelines and participating in research on environmental effects and benefits. Currently, it is participating in Phase-3 (October 2003 through September 2004) for computerization of the environmental accounting system.

Environmental Accounting Phased Promotion Schedule



Publication of report on Green Management

By simply clicking on the Green Management menu on Samsung Electronics' homepage (www.sec.com), you can read the updated news and reports on the Company's Green Management. The Company has provided both electronic documents and their hard-copy versions since 1999 in recognition of the fact that smooth communications among interested parties can play an important role in putting the environment/safety-related transparent management into practice.

Activities for restoration of ecological system and environmental conservation in cooperation with other interested parties

Samsung Electronics is engaged in diverse and positive activities for restoration of the ecological system in the nearby streams and other kinds of environmental conservation in cooperation with the residents of the local community, environmental organizations, government institutions, universities and sister schools. (See more details on p.71.)

Cooperation with other parties concerned at home and abroad for environment/safety-related activities

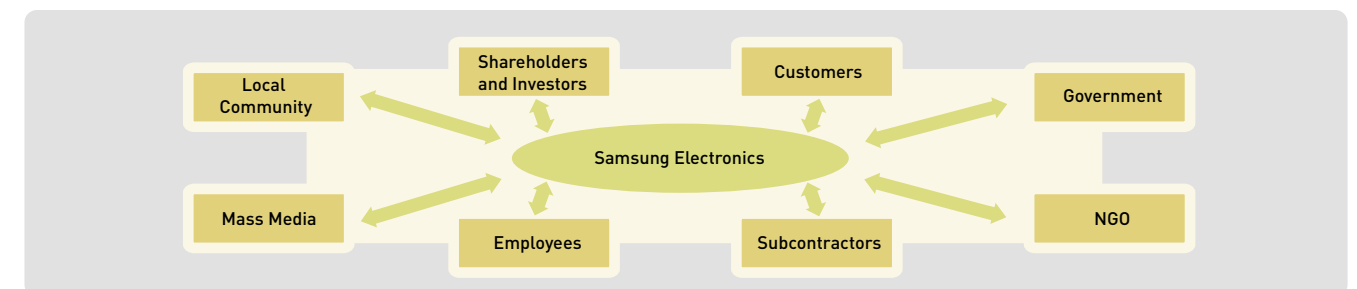
Samsung Electronics is setting examples for other businesses to follow by participating in environment/safety-related activities, such as environmental accounting, environmental performance evaluation and voluntary environmental agreements, having all its factories designated as environment-friendly workplaces.

In addition, the Company has played a leading role in the introduction of paradigms for sustainable management since its participation in KBCSD (Korea Business Council for Sustainable Development), which was established in March 2002. The Company has also carried out activities for environmental conservation and development of green production technology, including agreeing to voluntary reduce PFCs in 1999 and participation in ESH (environment-safety-health) of WSC (World Semiconductor Council) task force activities.

Bolstering the win-win partnership with subcontractors

Samsung Electronics is in close cooperation with related companies, including subcontractors to form a win-win situation in environmental matters based on the philosophy of co-existence. The Company encourages them to be engaged in Green Purchasing, providing them with relevant information and technological support concerning checking and education on environment/safety-related matters, assisting them in obtaining ISO certifications, and carrying out a system of assessment designed to enhance their capability in environment/safety-related matters. The Company also plans to invest a total of one trillion won over the next five years in relevant facilities, education concerning production technologies and management techniques, operation of a support team, and the provision of financial experts for subcontractors.

Environmental Communications Map

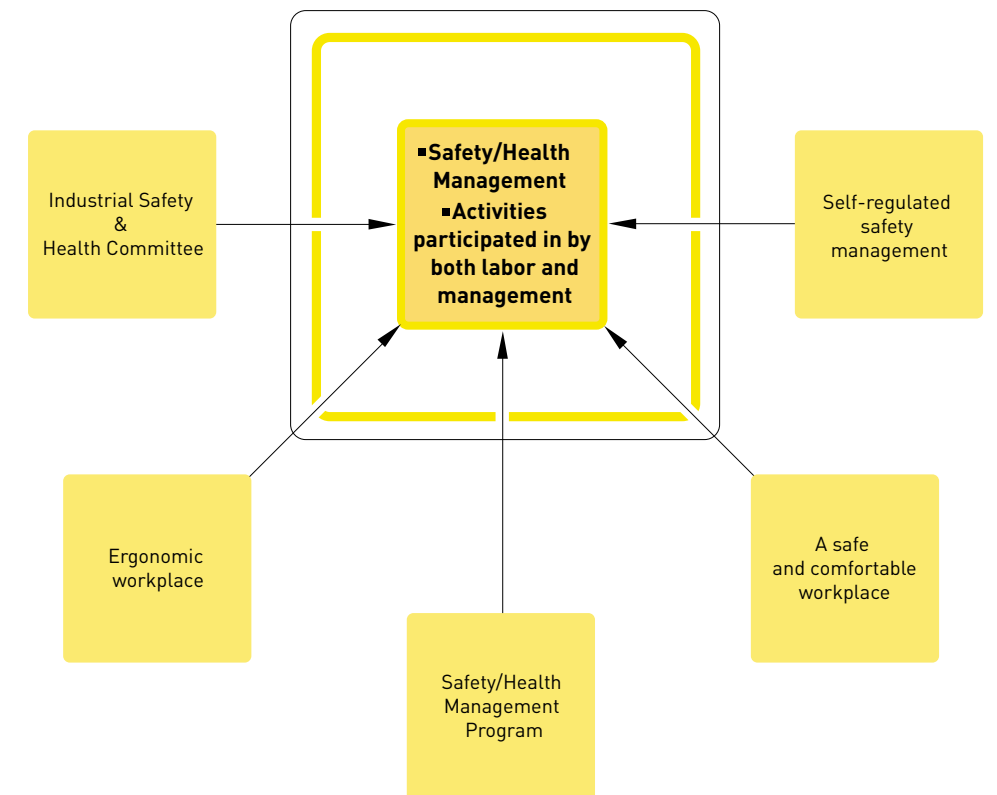




Safety/Health-Related Activities

Samsung Electronics fully recognizes the importance of safety in business activities, regarding it as the first and foremost thing for enhancement of its employees' quality of life. The Company does its best to keep its safety/health-related system updated in order to make its factories safe and pleasant workplaces.

56 Safety/Health-Promotion Activities and Health Campaigns



Safety/Health-Promotion Activities and Health Campaigns

Samsung Electronics is engaged in diverse activities to make it a safe workplace. The Company also plays a leading role in the establishment of global standards of safety/health-related matters at its factories located in Korea and worldwide, as well as in maintaining compliance with domestic laws and regulations

Operation of Green Management Activities for Environment-friendly products
Environmental Improvement Activities
Safety/Health-Related Activities
Social Contributions

Operation of Safety/Health Management System

Samsung Electronics strives to make the safest and the most comfortable workplaces, based on the management philosophy of humanity, carrying out various activities to enhance productivity under the management system participated in by both labor and management, and doing what it can to remove fundamental causes of accidents. To that end, the Company has been playing a leading role in the establishment of global standards of safety/health-related matters, such as hazard assessment, setting safety/health-related objectives, management of hazardous machinery and devices, handling of accidents and compensation related to them and provision of a proper working environment at its factories worldwide.

Enhancement of a sense of safety/health through periodical education

Samsung Electronics has its employees undergo production facility-centered educational courses (30 courses) designed to enhance their sense of safety/health. Cyber-versions of the educational courses are also provided so that employees may attend them at their convenience. There are also courses to encourage safety/health experts.

Additionally, the Company operates the Environment and Safety Experience Center which is comprised of 22 corners in four sectors. The center is also open to the Company's subcontractors, universities and other relevant organization.

Ensuring fundamental safety of facilities

Samsung Electronics makes it a rule to check matters related to gas leakage, radioactivity, hazardous chemicals, noise and vibration of facilities to be supplied at the stage of their design to ensure their fundamental safety.

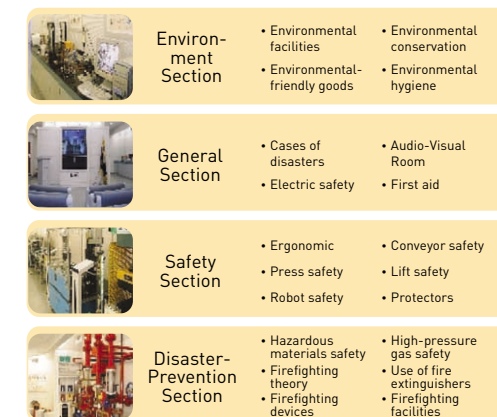
Health/Safety Management Activities and Operation System



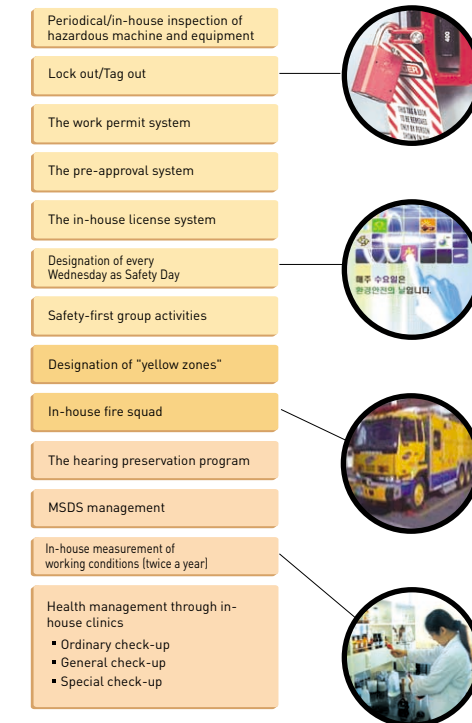
Safety/Health-Related Educational System



Contents Provided by the Center for Safety/Health-Related First-Hand Experience



Example of Safety/Health-Related Operations



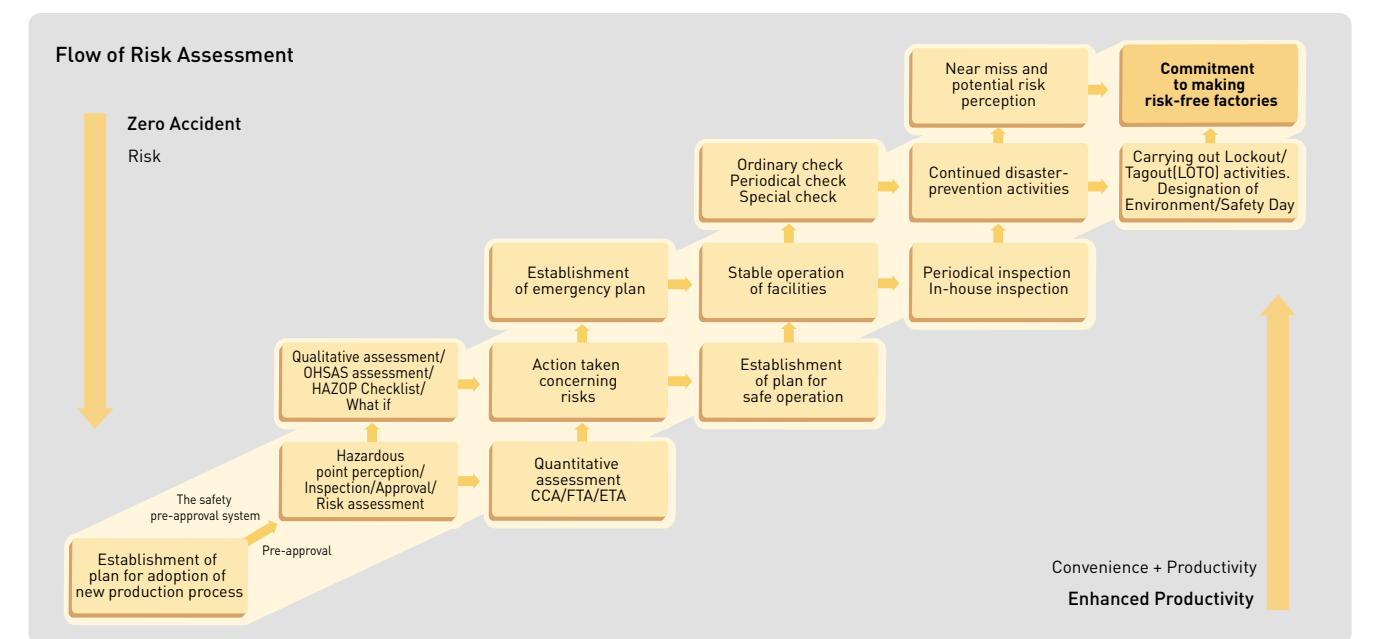
Observance of Laws and Regulations

Samsung Electronics observes safety/health-related rules, including ILO conventions, NFPA, the Industrial Safety & Health Act, the Fire Services Act, the High-Pressure Gas Management Act, etc, in addition to operation of the 16-item procedures pertaining to safety/health-related risks.

In addition to conspicuously reducing disasters caused by non-standard operations through adoption of the LOTO (lockout/tagout) system, the Company makes a point of keeping the level of hazardous chemicals caused from operations below one-tenth of the statutory level and operates the Yellow Zone system, designed to watch production processes likely to cause fire, at all times.

Other precautionary measures taken by the Company include the in-house forklift license system, the hazardous work permit system, the permit system for use of fire and the General Hi-Tech Disaster-Prevention Center.

The Company has also prepared various crisis scenarios and carries out exercises to escape from a high-rise building at the time of a disaster.



Everyday Exercises

Aiming to enhance employee health through everyday exercises

Samsung Electronics observes the ILO's guideline for health management of employees, adopting the principle that the Company does its best for protection of the employees' health and promoting the "Health Care 21 Project."

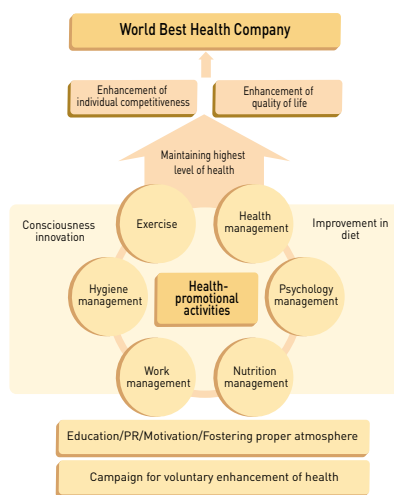
Activities carried out by the Company for the employees' enhanced health include campaigns for non-smoking (started in 2002) and developing healthy drinking/eating habits as well as utilization of the 8-item SHPI (the semiconductor health promotion indices) developed by the Company for quantitative assessment of an individual's health (i.e. the obesity index, the drinking index, the everyday habit index, the work-related stress index, the cerebral blood vessel index, the teeth index and the health index).

Ergonomic improvement of working environment

Samsung Electronics does its best to realize ergonomic management of factories, based on the employee-centered workplace design, through enactment of the Samsung Electronics Ergonomic Standards and adoption of the Ergonomic Workplace Certification Program.

The Company has garnered enhancement in productivity by 1.5 sigma with financial effects worth 4.3 billion won since 1999 when it started making efforts for improvement in workplaces under the 6-Sigma Movement. The degree of satisfaction with the workplace felt by the employees has

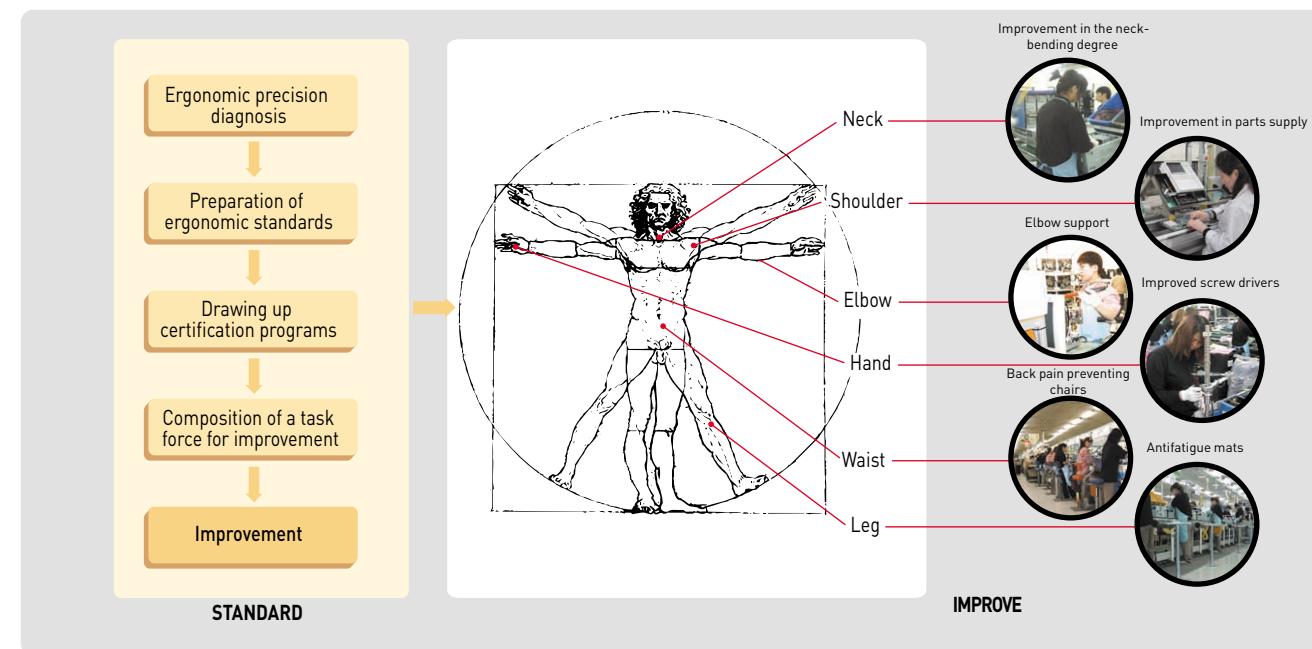
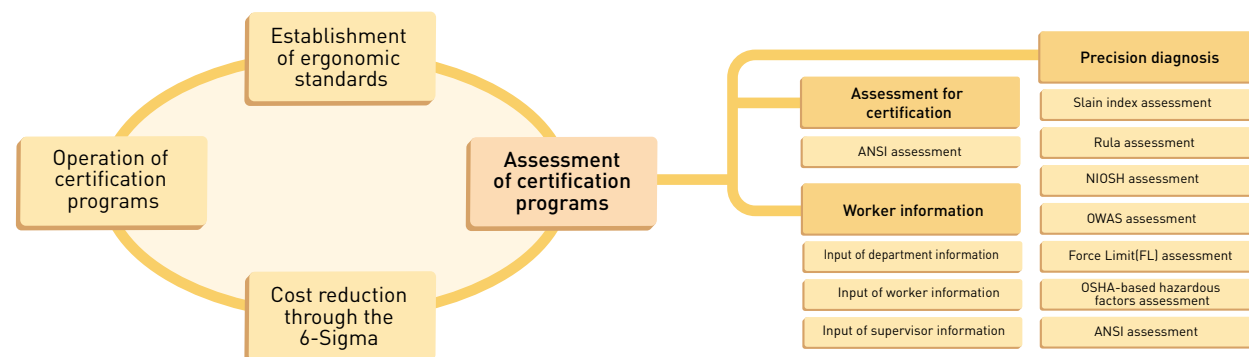
Health Management System for Employees



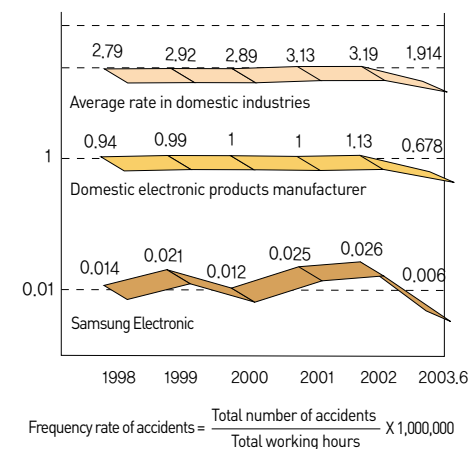
Health-promotional programs



Composition of Ergonomic Assessment Program



Frequency rate of accidents



gone up to 70% in the same period.

In May 2002, the Company received the Ergonomic Design Award Special Prize in the sector of workplaces from the Ergonomics Society of Korea. In August 2003, it was desig-

nated as a model business at the 15th Triennial Congress of the International Ergonomics Association (IEA).

Activities for enhancement of awareness of the importance of safety/health

In addition to being engaged in diverse safety/health-related activities, Samsung Electronics makes the utmost efforts to enhance the employees' awareness of the importance of safety/health through such occasions as rallies for the presentation of exemplary cases for enhancement of health/safety, the environment/health-related songs contest, the LOTO promotion rally, the rallies for introduction to environment/health-related new technologies, the firefighting contest, etc.

As a result of such diverse activities, Samsung Electronics has reduced the frequency rate of environment/health-related accidents to 0.006, an impressive level even among other world-class businesses. The Company's Giheung Factory, in particular, set a new record with no-disaster in 82 months (from November 1991 through August 1998). It was thus officially registered as the safest workplace in the world with the Guinness Book of World Records.



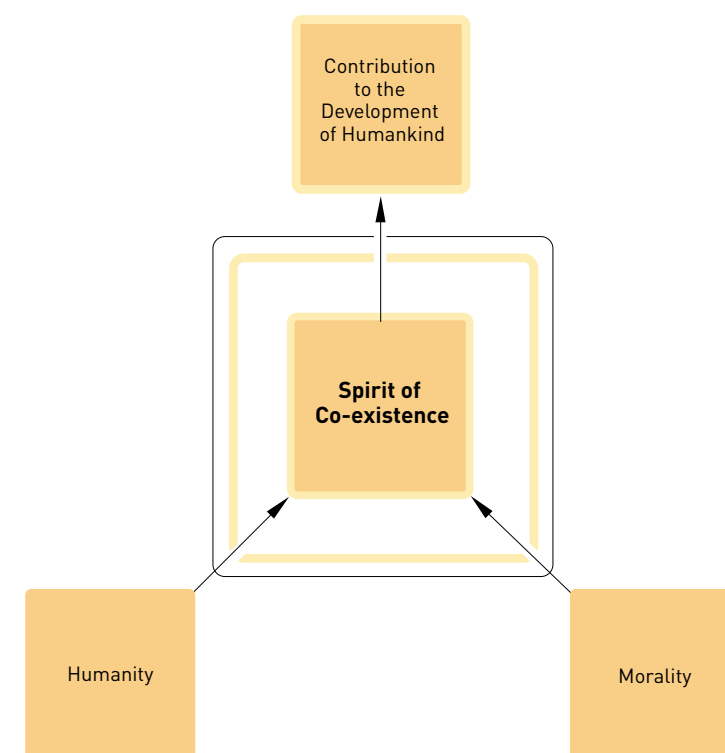
Social Contributions

At Samsung Electronics, our basic management philosophy in the area of social contributions is based on our goal of building a welfare society centered on the spirit of co-existence. Samsung Electronics is engaged in diverse activities for both the local community and other countries throughout the world with our ultimate aim being the enhancement of the quality of life for all humankind. The idea of social contribution is regarded as a crucial ethical value to Samsung Electronics' employees who are all committed to carrying out voluntary services for the local community.

62 Major social contribution activities | 68 Community service activities carried out by local corporations | 70 Environmental conservation activities carried out as part of social contribution efforts | 72 Respecting Nature, Serving Communities | 74 Light of Love, Star of Sharing

Our Resolve for Social Contribution

- We resolve to contribute to humankind by fulfilling our role as a corporate citizens who regards both humanity and morality as crucial virtues.
- We are committed to striving to help make our community more affluent and healthier by enhancing the quality of life for all people.
- We will do our best to make the global village a better place to live, by playing a leading role in environmental conservation and in exchanges with other parts of the world.
- The employees of Samsung Electronics and their families will share the pleasure of working together with other members of the community.



Major Social Contribution Activities

Employees at Samsung Electronics voluntarily participate in diverse social contribution activities, in the areas of social welfare, culture & arts, education and academics, environmental conservation, promotion of sports, international exchanges, etc

Operation of Green Management
Activities for Environment-friendly products
Environmental Improvement Activities
Safety/Health-Related Activities
Social Contributions

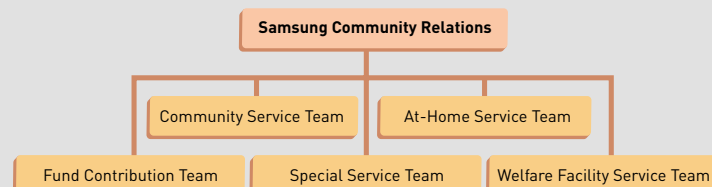
History of Social Contribution Activities

Employees at Samsung Electronics participate in a variety of voluntary community service activities under the slogan: "maximization of return of business profits to society": our employees regard social contribution as a crucial part of business operation. Since 1995, the Company has been engaged in community service activities that focus on three themes: helping the handicapped, pursuing environmental conservation and assisting in the formation of an information-based society. Other services carried out by the Company include provision of support for youths, culture & arts activities and exchanges in academic circles.

In 1995, Samsung Electronics launched the Social Contribution Corps, setting up relevant organizations that help employees proactively take part in social contribution activities. At present, the secretariats in charge of social contribution activities control relevant activities carried out both in and out of the country.

Types and Areas of Social Contribution Activities

Organization and Contents of Activities



Activities in social welfare facilities: cleaning, helping them take baths, birthday parties, communicating and helping youth do homework.

Activities that help those at home: helping the home-bound handicapped, low-income households, young household heads and senior citizens who lack a caregiver.

Special service activities: Service through hand language, house repair, haircutting, blood transfusions, etc.

Community services: helping farming households during harvests, environmental conservation, and etc.

Samsung Electronics is engaged in public welfare activities and funds contributions as well as community services, applying proper guidelines when selecting public welfare activities and in the donation of funds to relevant organizations. The Company also provides related information and funds for employees to act as volunteers in areas of social welfare, culture & arts and education, as well as in environmental conservation, the promotion of sports, international exchanges, etc.

Major Social Contribution Activities

Social Welfare Activities

Establishment of Mugunghwa Electronics, exclusively for the handicapped

Samsung Electronics has run Mugunghwa Electronics since 1994.

Mugunghwa Electronics, the first production facility in the country employing only the handicapped, was established to assist the seriously handicapped in self-reliance through the promotion and development of jobs tailored specifically around their needs. The affiliate has a dormitory for 100 employees that is equipped with special corridors, doors and ramps for the handicapped.

Free Computer Education

Samsung Electronics has run free computer education centers in large cities since 1995. The courses range from an introductory course to a

more advanced application course. Since 2001, both online and offline courses have been offered to prepare people for our increasingly cyber-based society; and by 2003, a total of 2.26 million people had attended.

Provision of free computer education for the visually impaired (1997-present)

Samsung Electronics has run free computer education for the visually impaired at the Samsung Seeing Eye Dog Training Center in Yongin to assist them with vocational rehabilitation and participation in social activities. 6 special PCs equipped with voice software, scanners and Braille point printers are provided. The Company is also running an online computer



The visually-impaired receive computer education provided by Samsung Electronics



Free medical service provided for senior citizens

-education course at anycom.samsungglvoo.co.kr for those unable to commute. A total of 18,189 people had attended the course by the end of 2003.

Employees' voluntary community service activities

Since 1995, Samsung Electronics has made it a rule to designate every October as a special month for employees' voluntary community service activities. The practice is intended to encourage employees to be more proactively engaged in such activities as community members. At present, there are more than 300 voluntary community service teams engaged in activities for the handicapped, youths, senior citizens and other less privileged people.

Providing lunch for under-privileged children

Samsung Electronics' employees (in cooperation with other relevant institutions) play a central role in helping local residents improve their living conditions; in fact, their activities have become examples for others to follow. In the post-financial crisis days, the Company's employees in Suwon, Giheung, Gumi, Onyang and Cheonan have cooperated with other voluntary worker organizations to provide lunch for children from low-income households. The Giheung Factory employees received the Presidential Citation for their part in the campaign to provide lunch for underprivileged children in cooperation with the Saemaoul Council of Yongin-city.

Employees' families engaged in community service

Samsung Electronics has encouraged the family members of its employees, particularly students on vacation, to form teams to participate in various voluntary community service programs. These firsthand experiences are valuable in molding the volunteers into active, caring members of their communities.

Operation of Blood Banks

Under the Blood Bank system, Samsung Electronics' employees periodically (ranging from twice a month to once a quarter, as they choose) donate their blood for those suffering from leukemia, etc.

Social Contribution Activities through Promotion of Sports

Samsung Electronics Equestrian Team contributes through a rehabilitation horseback riding program

Samsung Electronics has done its best to enhance the prestige of Korea in the international community by fostering horsemen/women through its Equestrian Team. The Company also tries to do its part as a member of the community by providing the handicapped with opportunities to learn to ride horses as part of a rehabilitation horseback riding program.

In 2003, the Company offered free sessions to teach 23 handicapped children how to ride horses, (i.e. 10-week courses and 6-month courses on 6 occasions). These sessions improved their body motions by an average of 9%, and one child, who was suffering from tactile hypersensitivity, showed much improvement in symptoms. Samsung Medical Center's Department of Physical Medicine and Rehabilitation is preparing a thesis based on these encouraging results to be presented to the FRDI's (the Federation of Riding for the Disabled International) meeting and for other relevant academic circles.

In 2002, a total of 404 employees participated as volunteer workers in horseback riding events that were provided for 36 handicapped people on three occasions; they also assisted in relevant explanatory sessions and in the distribution of rehabilitation horseback riding programs to four equestrian clubs.



Samsung employees' family members engaged in community service



Employees' donation of blood



A rehabilitation horseback riding program



The Chorok Children's Singing Contest



The National Students' Creativity Olympiad Festival



The Young Scientists' Festival

Cultural & Academic Activities

The Chorok Nursery Rhyme Contest

The 18th annual Chorok Nursery Rhyme Contest was held at KBS Hall on May 31, 2003. Samsung Electronics along with the YMCA, have made efforts to distribute nursery rhymes to more people, children and adults alike, to encourage children to nourish their dreams and to allow adults to revisit their childhood memories.

The festival has come a long way toward fostering the environment for nursery rhymes to be loved by all, both at home and at school.

Since 2001, the contest has stood as an event that nourishes sound family ties and is fun for all family members. Samsung Electronics will continue to pour efforts into developing the event.

National Students' Creativity Olympiad

Samsung Electronics has sponsored the National Students' Creativity Olympiad since 1987. The annual event provides a solid base that fosters talented, creative youths. Participating teams consist of 5 to 7 students (from elementary school pupils to junior/senior high school students), who have passed a preliminary test at Samsung Electronics' homepage (www.sec.com). The students choose one of the five subjects including sophisticated transportation technology, exploration of foreign cultures, escape from crisis and a space exploration rocket, and the winner of the event is given an opportunity to participate in the annual world DINI contest held in the U.S.

Students' Olympiad for Scientific Exploration

Samsung Electronics has sponsored the Students' Olympiad for Scientific Exploration since 1993 in an effort to help junior/senior high school students develop a stronger interest in science and build their curiosity for exploration. The contest is divided into the following categories: Natural Environment Exploration, Scientific Exploration and Experiment, Scientific Exploration for Fun and Young Scientists' Festival. Prize winners are endowed with scholarships. In 2003, the contest was carried out at Haneul Plaza at Olympic Park in Seoul for two days from October 18. The first/second-place prize winners were given an opportunity to experience scientific exploration activities held by students in Japan.

International Exchanges

Formation of fund for UNESCO-sponsored international exchanges

Samsung Electronics contributed 600 million won to UNESCO Korea on October 31, 2000 to help form an education fund for underprivileged children all over the world, including those in North Korea.

The Samsung-UNESCO International Educational Fund amounts to one billion won, including the 400 million won collected by UNESCO and the International Red Cross. It will be spent to help underprivileged children aged 6 to 12, from underdeveloped or developing countries, buy stationery and educational materials.

In 2002, Samsung Electronics provided support for educational materials for underprivileged people in 11 countries, including papers used to make English textbooks, and also assisted in the publication of manuals for training teachers of young children and parents in Vietnam and Korea, through the UNESCO Headquarters Trust Fund. These activities have contributed to the nation's international cooperation and have bolstered ties with the UN organization. In 2003, the Company provided support for educational materials and programs in 20-plus countries.

Samsung-Vietnam Academic Exchanges

Under the "Samsung-Vietnam Academic Exchanges" project that began in 1995, Samsung Electronics has provided scholarship funds, invited next-generation leaders of Vietnam and sponsored academic meetings, in addition to contributing one million dollars in funding for the project to the Korea Foundation in November 1995.

The scholarship fund provided by Samsung Electronics is granted to a total of 100 students (i.e. 10 students majoring in Koreanology, electric or electronic engineering in each of 10 universities). The next-generation leaders (those aged 18-45) visiting Korea are selected every August by the advisory committee on the Vietnamese side; these students are then provided with the opportunity to learn about Korean history, society and culture.



Formation of the "Samsung-UNESCO International Educational Fund"



Commencement of the "Samsung-Vietnam Academic Exchanges" Project

Support for Crufts Dog Show

Samsung Electronics has acted as a leading sponsor for the Crufts Dog Show, providing technical support, including 2 hundred million won worth of video & communications system equipment each year. The annual event is the largest international event of its kind held at the NEC (National Exhibition Center) in Birmingham, the U.K. Held in early March, winners are selected for each breed, and the BIS (Best in Show) is also awarded.

Samsung Electronics registered the Jindo dog of Korea with the Kennel Club of the U.K. and displayed the Jindo at its pavilion at the Crufts Dog Show, thus introducing the world to one of Korea's most impressive breeds of dog. This was spoken of highly as an important act of

social contribution.

During the Crufts Dog Show in 2003, the Company ran a booth displaying the slogan: "Samsung, Best Friend in Community." The booth engaged in positive PR about the Company's activities in relation to the protection of animals, including dogs, and also displayed the Company's hi-tech products.

Engaged in "Korea-China Green Great Wall" project

In April 2003, Samsung Electronics participated in the aforementioned activities in China as part of an effort to prevent sand originating from the desert areas in China from affecting the Korean Peninsula; it also served as an opportunity to build a solid friendship with the Chinese. The Company provided support for the "Korea-China Future Forest Formation" event hosted by the Korea-China Youths Future Forest Center and sponsored by the Capital City Spiritual Civilization Coordination Council of the Beijing City Government.



The Korea-China Future Forest Formation event supported by Samsung Electronics

Participating in the event which was carried out in Mentougou, Beijing, were 66 Korean students majoring in Chinese and forestry, and 60 Chinese students from Beijing University, Qinghua University and Beijing Forestry University. The event also served as an occasion for students from each country to form friendships with each other.

Through these activities, Samsung Electronics firmed up its image as a business contributing to the social development of China. A rigorous standard was applied to the selection of the participating students based on their leadership skills, knowledge about China and Chinese-speaking ability. The participating students were engaged in environmental conservation activities in addition to the aforementioned work between April 4 and 10, 2003.

"Samsung DigitAll Hope" for young Asians

In August 2003, Samsung Electronics provided a total of \$600,000 to 15 youth institutions in 8 countries: India, Malaysia, the Philippines, Singapore, Thailand, Vietnam, Indonesia and Australia, through a program called "Samsung DigitAll Hope". The program is designed to narrow the gap between those who have access to technology and those who do not by providing an information-related educational environment through which the young can experience digital technology.

Providing relief aids to earthquake-stricken Algeria

Samsung Electronics' branch in Algeria (in cooperation with local businesses) provided four super-sized water tanks for potable water to the local victims of the earthquake that took place on June 21, 2003. The Company also provided financial assistance to help victims reconstruct their houses.

In addition, the Company provided 200 TV sets to government offices and schools where the victims set up temporary residence to help them receive relevant information more conveniently, thus enhancing its image as a business that cares about its community, especially in times of crisis. The Company also dispatched a service team to Algeria for free repair of household appliances that were damaged as a result of the earthquake.

Community service activities carried out by local corporations

In step with activities carried out by Seoul headquarters, Samsung Electronics' local corporations are also participating in community services, as part of the Company's efforts to maintain partnerships with the local community through co-prosperity

Operation of Green Management
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Environmental Improvement Activities
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Social Contributions

SAS (Samsung Austin Semiconductor)-Rosedale Ride

SAS (Samsung Electronics' local corporation in Austin, Texas) is engaged in diverse activities for the local community. Rosedale Ride, for which Samsung Electronics has provided support, is a large-scale fund-raising campaign launched by 50 cyclists in 1995 to benefit the Rosedale School, Austin Independent School District's only school for children with multiple disabilities.

The event continues to grow larger in the number of participants (more than 1,200 people participated in 2002); SAS has sponsored the event since 1999. The funds raised are used to help the school purchase computers.

Local corporation in Vietnam holds "love-thy-neighbor" events

SAVINA, Samsung Electronics' local production corporation in Vietnam, has carried out various community service activities since 1999. In 2002, the local corporation ran a total of 13 community service programs, including provision of scholarships and educational materials for students, financial support for underprivileged youths and senior citizens, and providing courses that teach computer skills.

It also holds a "love-thy-neighbor running festival" twice a year. The event in June 2002 was held to help children suffering from defoliants used during the Vietnam War. The event in November 2002, held in Ho Chi Minh City to raise funds for the flood-victims near the Mekong River, attracted a record breaking 24,000 participants, including 1,200 Duc Tri Elementary School pupils.

Local Corporation in Mexico

Samsung Electronics' local production corporation in Mexico, SAMEX, has consistently engaged in voluntary community service activities (on average: once every two months since April 1996) under the Company's slogan: "Co-prosperity with Local Community" .

The local corporation's voluntary activities, such as cleaning the public places of Tijuana and provision of support for schools, orphanages and institutions for the elderly, set an example for other businesses in Machiladora (the bonded area of foreign business-owned production facilities) to follow.



A "love-thy-neighbor running festival"



Indonesians participating in an aerobic session sponsored by Samsung Electronics



TSE (Thai Samsung Electronics) employees and local residents

The Company's community activities were a first for any company in Tijuana, and were discussed in El Mexicano, a leading Tijuana newspaper.

Environmental conservation activities carried out as part of social contribution efforts

Samsung Electronics' factories are carrying out nationwide environmental conservation activities as part of the effort to put Green Management into practice and fulfill their responsibility as corporate citizens of the community

Operation of Green Management
Activities for Environment-friendly products
Environmental Improvement Activities
Safety/Health-Related Activities
Social Contributions

Samsung Electronics has led others in the campaign for greening of the community through various events, such as establishing cooperative relationships with sister schools and with local residents in environmental conservation activities, providing opportunities for youths to have first-hand experience of environmental matters, using its influence to encourage other businesses to join in efforts to keep mountains and streams clean, and carrying out Green events on World Environment Day.

Session for youths' first-hand experience of environmental matters

Samsung Electronics, jointly with Green Family Green Scouts, has provided programs designed to help children appreciate the importance of the environment since 2001. The two-day program consists of a classroom session on the first day, and visits to a tidal land in Ganghwa Island and to Cheolwon to feed birds on the second day.

Cooperation with sister schools in environmental conservation activities

Samsung Electronics has cooperated with local schools to set up sister-ship relationships with an aim to share in activities that highlight the importance of the environment, fire prevention and traffic safety. The activities include an essay-writing contest on environmental conservation, collection of relevant slogans and posters, exhibitions of exemplary cases of recycling, provision of scholarships for model students in environment-related matters, an environment /traffic safety-related quiz contest, first-hand experience of ecological matters, and etc.

Environmental conservation activities carried out in cooperation with sister schools

Environment-related event

- Golden Bell Quiz Contest related to environment and traffic safety
- Environment-related experiments
- Environment-related Golden Bell Quiz contest among two-person teams

First-hand fire-fighting experience

- A session at a fire-fighters' school
- A fire drill
- A visit to an "environmental conservation and traffic safety" house

First-hand learning about the environment

- A visit to ecological parks
- A visit to the gathering places of migratory birds
- A visit to tidal lands on the West Coast

Educational session on traffic safety

- A visit to the traffic safety museum
- Participation in a traffic safety session

Activities for protection of migratory birds

An area of marshland in Haepyeong-ri on the estuary of the Nakdong River, well known worldwide as a gathering place for migratory birds, has been designated as a bird protection area. Migratory birds, including thousands of wild geese and wild ducks, arrive here in around mid-October and leave in the following spring. This is also a favorite place for ducks, herons, egrets, magpies and pigeons. World environmental organizations pay close attention to the white-naped cranes (National Treasure No.203 in Korea) and hooded cranes (No.228) that have come to visit here since the fall of 2000.

Samsung Electronics has led events to feed the migratory birds and clean the area (i.e. removing chemical bottles and plastic wastes) in cooperation with sister schools, the Ministry of Environment, Gumi-City Government and NGOs. The events serve as occasions to have pupils of the sister elementary schools recognize the importance of environmental protection.



A Samsung Electronics employee fixes a bird nest as part of an environmental conservation campaign



Samsung Electronics' employees engaged in activities to clean the Woncheon Stream



The ceremony for formation of the "Save the Woncheon Stream" citizens' network



The congratulations ceremony for the completion of work for diverting treated waste water to the Woncheon Stream



The Woncheon Stream is now a good resting place for Suwon citizens

"Keep your streams clean" campaigns

A small number of Samsung Electronics employees gathered together on weekends to pick up garbage thrown on the bank of the Woncheon Stream in Suwon. That small-scale activity led to a company-wide community-greening campaign. Eventually, 100-plus employees of Samsung Electronics and other affiliates in the same complex (i.e. Samsung Electro Mechanics, Samsung SDI and Samsung Corning) formed a volunteer service corps in an effort to improve the water quality of the stream.

Seeing the employees voluntarily participating in such an activity, the Company's management decided to provide support by launching a research project for rehabilitation of the stream's ecological system with an aim at improving water quality. In September 1995 Samsung Electronics, in partnership with the Environmental Research Institute of Ajou University and the Institute for Green Environment of the Suwon Center for Environmental Movement, conducted a survey of the natural surroundings near the stream as part of the first round of research: the parties checked the degree of contamination by region and the sources of contaminants. In the second round of research carried out in December 1996, the parties checked the ecological system surrounding the stream, made suggestions on how to cope with the contaminated water quality of the Sindae Reservoir and the Woncheon Reservoir located in the upstream, and began research on the impact of the contaminants from the reservoirs on the Woncheon Stream.

In November 2001, a network to 'Save the Woncheon Stream' was established with local residents, members of the Suwon Center for Environmental Movement, public officials of Suwon City and four Samsung affiliates. Three rounds of research projects were carried out until 2003.

In joint efforts for improvement of the stream's water quality, Suwon City began overhauling relevant intercepting sewers, while local residents formed the citizens' council to keep close watch on the stream, taking various steps for purification of the water.

Samsung Electronics did its part through various activities including those to purify the area near its complex (within a 1km radius), as well as providing a round-the-clock watch on the status of the water quality via CCTVs, checking the intercepting sewer into which household sewage flows, and planting reeds.

In the past, the Woncheon Stream dried up and produced unpleasant odors due to the water stay still during the dry season. In order to solve the problem of water pollution, Samsung Electronics, joint with Suwon City, carried out construction work to divert the treated waste water (3,000 tons a day) from its factory to the upstream, thus keeping the stream flowing at all times; spent 300 million won for the work.

In step with similar efforts on the part of private organizations, Suwon City formed an ecological friendly park called Meonae Park beside the Woncheon Stream. A greater number of birds came to visit the area thanks to the improved water quality, and many local residents enjoy jogging along the stream. Presently, the stream serves as a good resting place for local residents, where children gather together to play in the water.

Respecting Nature, Serving Communities

Samsung Electronics focuses on the enhancement of customers' well being, and always regards environmental factors as a priority throughout its operations. The Company will always be on the side of the customer and work in their interests

Operation of Green Management
Activities for Environment-
friendly products
Environmental Improvement
Activities
Safety/Health-Related Activities
Social Contributions

The Company that places priority on customers, shareholders and the safety of products

The top management at Samsung Electronics sincerely recognizes the importance of the corporate governance structure and strives to keep abreast of global standards in its everyday operations. The Company aims to be identified as a business that puts priority on shareholder value, reflecting this goal in efforts to improve its corporate governance structure: particularly the Company's management guidelines and criteria for judging of employee performance.

Samsung Electronics launched a team exclusively in charge of IR-related matters in an effort to enhance management transparency and satisfy shareholders' right to know. It also went a long way in making brisk interactive communication between management and employees, as well as making it a rule to disclose performance results for each quarter; it has also made webcasting a routine procedure.

In 2001, Samsung Electronics announced its code of ethics, making clear its desire for ethical management. As a result of such efforts, in March 2001 the Company received a prize as a model business in improved corporate governance from ISS of the U.S., an authority in the sector of corporate governance, and in November 2002 was awarded four prizes at the Asia Awards 2002 hosted by IR Magazine: Best Communication of Shareholder Value, Best Roadshow, Best Investor Relations by an Asian Company in International Markets, and Best IR by a Korean Company.

Samsung Electronics puts top priority on stability in quality at the product development stage to ensure customer satisfaction. Under its system of certification of customer satisfaction, the Company makes it a rule that no new product can be developed without passing an 18-item process that includes tests for compatibility, usefulness and parts reliability, as well as thorough safety checks.

Such a rigorous process of quality control and our thorough after-sales service system has enabled Samsung Electronics to grow as a world-class business. At home, 7,000-plus qualified service technicians are providing prompt first-rate service through a network of 700 service points con-

trolled by 100 service centers. The Company strives to provide differentiated after-sales service, adopting the Home Doctor, the Voluntary Service, the One More Service and Cyber Service systems. As a result, it became the first business in Korea to obtain the excellent after-service certification in 1977. As well, a total of 8,500 businesses assume the role of providing after-sales service for the Company's products overseas.



The Industrial Safety Management Grand Prize



The Ergonomic Design Award Special Prize



The Green Management Grand Prize



The Green-Friendliness Prize

Prizes won by Samsung Electronics for its excellence in environmental conservation or industrial safety

The Industrial Safety Management Grand Prize (awarded to the Cheonan Factory)

In December 2001, Samsung Electronics Cheonan Factory received the Industrial Safety Management Grand Prize. The production facility specializing in TFT-LCD puts top priority on keeping employees safe and healthy based on a corporate philosophy that places high importance on the welfare of people both inside and outside the Company.

The Ergonomic Design Award Special Prize (awarded to the Suwon Factory)

In April 2002, Samsung Electronics Suwon Factory received the Special Prize at the 4th Ergonomic Design Awards hosted by the Ergonomics Society of Korea and sponsored by the Ministry of Commerce, Industry and Energy and the Korea Industrial Safety Corp. The Company became the first business to receive the Special Prize.

The Green Marketing Grand Prize

In June 2003, Samsung Electronics received the Green Marketing Grand Prize in the sector of large-sized corporations for its VCR (SV-K811); the company was awarded the prize at a ceremony hosted by the Ministry of Environment and the Maeil Business Newspaper. The winner is selected by judges (70%) and through internet polling (30%). The prize-winning VCR SV-K811 has also obtained Korea Eco Label for its environmental considerations which include lead-free soldering, non-halogen flame retardants energy saving, the use of paper packaging materials and its recyclability.

The Green Management Grand Prize

In August 2003, Samsung Electronics received the 2003 Korea Green Management Grand Prize hosted by the Korea Management Association. The prize is awarded to a model business or a local autonomous body participating in environmentally friendly activities through verification processes, such as consumer surveys, business surveys and KGMI-based appraisals of environmental friendliness.

The Green-Friendliness Prize

In September 2003, Samsung Electronics Suwon Factory received the Green-Friendliness Prize on the Day of River for its part in efforts to restore the ecological system in the Woncheon Stream. It has so far spearheaded several research projects to improve the water quality of the stream, formed the "Save-the-Woncheon Stream" citizens' network, and promoted the work required to supply clean water to the stream [jointly with Suwon City].

**Light of Love,
Star of Sharing**

Samsung Electronics is committed to co-existence and sharing with other members of the community, and to environmental preservation and sustainable development. Its employees are voluntarily engaged in various social contribution activities



Offering lunches for underprivileged people



Helping Vietnamese children suffering from cardiac diseases

**Working toward a welfare society for all
and sustainable development**

The Samsung Electronics Volunteer Service Corps has been engaged in various voluntary activities under the slogan: "You Have a Better Future," including providing support for welfare facilities, providing meals for children from low-income household, helping young people who head their households, assisting the elderly who lack caregivers, and helping children who suffer from pediatric cancer, designating each October (since 1995) as the Month for Community Service. The Company's local corporations are also engaged in several impressive social contribution activities, such as provision of support to underprivileged households and operations for the removal of landmines in Southeast Asian countries.

Samsung Electronics aims to lead the digital convergence revolution with management that takes economic, environmental and social factors into consideration, and recognizes the importance of sustainable development. The Company will also strive to put a win-win strategy in place in cooperation with sub-suppliers and subcontractors, and adopt policies that satisfy various interests and help establish a welfare society for all, where economic and environmental considerations play an equal role in decision making. The Company set up a five-year, one-trillion won plan for its sub-suppliers and subcontractors based on the spirit of co-existence



Donation for those suffering from the after-effects of defoliants used during the Vietnam War

and sharing, providing assistance in facility investment, and in educating them on the latest manufacturing technologies and management techniques, as well as making provisions for financial experts and the training of professional managers.

As of end january 2004

Company Name	Samsung Electronics Co., Ltd.
Location of Headquarters	416, Maetan 3-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Korea
Establishment	January 13, 1969
Representative	Yun Jong-yong, CEO & Vice Chairman
Capital Amount	881.7 billion won
Sales	43 trillion 580 billion won
Number of Employees	81,000(58,000 in korea/23,000 overseas)
Line of Business	Production, sales and after-sales service of Digital Media, Telecommunication, Semiconductor, LCD and Digital Appliances
e-mail	esh.sec@samsung.com
Tel	82-31-200-1114