

Major Objectives and Fiscal 2003 Results

The Sharp Group divides environmental efforts into activities related to Environmental Sustainability Management and activities—Planning and Design, Manufacturing, Logistics, and Recycling—related to product lifecycle. For each of these, we set medium-term and annual objectives and measures. In fiscal 2003, we achieved 18 of our 19 main objectives.

Fiscal 2003 Achievements

In fiscal 2003, we either met or exceeded all but one of our 19 main objectives.

In Environmental Sustainability Management, we introduced the Sharp Environmental Management System (S-EMS), a standard that adds 49 of our own voluntary management items to those specified under ISO 14001 standards.

In Planning and Design, we certified 145 new products as Green Seal Products, well above our objective of 100 products. These products comply with our strict environmental criteria. We also received the Education, Culture, Sports, Science and Technology Minister's Prize in the Global Environment Award for the success of our plastic material recycling technology.

In Manufacturing, considerable public attention was drawn to the start of operations at the Kameyama Plant, the first Super Green Factory under strict new environmental performance criteria set by Sharp. Since fiscal 2001, we have been implementing efforts to reduce high-priority-control chemical substances under a 3-year plan. As of fiscal 2003, we had successfully reduced use of these substances by 79% compared to fiscal 2000.

In Social Responsibility, over 8,000 employees from 28 domestic sites participated in environmental social contribution activities. Sharp is also receiving praise from the general public around the world as overseas bases work to help out and become an integral part of local communities.

We plan to meet the one objective that we have not yet fully achieved—elimination of lead solder in in-house-designed circuit boards—sometime in fiscal 2004.

Future Efforts

In Environmental Sustainability Management, we are introducing environmental accounting throughout the Sharp Group, so that we can understand how our business activities are impacting the environment. We are also introducing S-EMS to more sites so that we can have a consistent environmental management system across the entire Group. We are also contributing to increased environmental awareness across the Sharp Group by offering environmental education programs that include e-learning courses available over the Internet to employees in Japan and around the world.

In Planning and Design, we will continue to create new Super Green Products, products that go beyond Green Seal Products by meeting stricter environmental standards. These efforts will be aided by the development of revolutionary environmental technologies.

In Manufacturing, we will convert our existing plants into Super Green Factories in Japan in continuing efforts to reduce environmental burden. We will also step up efforts to reduce the environmental burden of overseas sites.

In Logistics and Recycling, we will continue to do our utmost to reduce environmental burden.

Main Objectives and Achievements in Fiscal 2003

Stages	Themes	Main objectives
Environmental Sustainability Management	Improve environmental management system	Implement the Sharp Environmental Management System (S-EMS)
		Acquire ISO 14001 certification
	Promote environmental sustainability management	Maximize environmental/economic value in terms of environmental sustainability management indexes
	Hold environmental education programs	Hold environmental seminars
Planning and Design	Develop Green Products	Increase Green Seal products' share of total net sales
		Formulate and implement new certification system
	Establish 3R technology	Widen the scope of closed-loop plastic material recycling
		Incorporate materials (easy-release fasteners) in products that make disassembly easy
		Establish recycling process for LCD TVs
	Improve safety level of parts and materials	Use lead-free solder in all products
Reduce chemicals contained in products		
Manufacturing	Convert factories to Green Factories	Build Super Green Factories
	Reduce greenhouse gas emissions	Reduce CO ₂ emissions (per production unit)
	Reduce and recycle waste	Reduce waste
	Reduce the risk from harmful chemicals	Reduce release of chemicals under high-priority control
		Set original risk assessment criteria
Logistics	Reduce distribution-related CO ₂ emissions	Change modes of transportation
Recycling	Recycle used products	Expand the line of recyclable products
Social Responsibility	Social contribution activities	Expand and diversify environmental social contribution activities

Self evaluation ◎ Achieved more than targeted ○ Achieved as targeted
 △ Achieved more than 80% of initial target × Achieved less than 80% of initial target

	Fiscal 2003 objectives	Fiscal 2003 achievements	Self-evaluation	Fiscal 2004 objectives	Fiscal 2006 objectives	See page
	Introduce S-EMS into domestic production sites	Implemented at 9 production sites	○	Introduce S-EMS into 28 domestic non-production sites	Implement S-EMS at all domestic and overseas production sites Introduce S-EMS into 90 domestic non-production sites	29~30
	Acquire certification at 3 overseas sites	Acquired certification at 4 overseas sites	◎	Complete certification at all domestic and overseas production sites Acquire certification at 8 overseas non-production sites	Complete certification at all domestic and overseas consolidated subsidiaries	
	Formulate environmental sustainability management indexes	Added environmental strategy indexes into balanced score cards	○	Introduce pilot version of environmental accounting as a tool to promote environmental sustainability management	Apply environmental accounting across the entire Group	33~34
	Environmental education participants General: 1,500, Expert: 300	General: 6,322 participants Expert: 292 participants Compliance: 679 participants	◎	General: Start e-learning in Japan Expert: Continue Compliance: Hold programs for overseas production sites	General: Have all employees in Japan and overseas participate Expert: Improve curriculum Compliance: Hold programs for domestic and overseas sites	32
	Release 100 models and make them account for 50% of total net sales	Released 145 models, accounting for 54% of total net sales	◎	Make Green Seal products account for 55% of total net sales and Super Green products 10%	Make Super Green products account for 30% of total net sales	37~38
	Formulate new Sharp Green Seal certification system	Formulation completed, started using in products released in fiscal 2004	○			
	Develop closed-loop plastic material recycling technology and put to practical use	Used 270 t of recycled plastic in new products	◎	Use 420 t of recycled plastic in new products	Use 500 t of recycled plastic in new products	41
	Develop mass production technology for easy-release fasteners	Developed shape-memory washer parts	○	Use in communications equipment	Use in audio-visual equipment	42
	Study recycling technology for major parts	Formulated guidelines for manual disassembly of LCD TV fluorescent tubes to raise recycling efficiency	○	Develop LCD panel recycling technology	Develop closed-loop recycling technology for resin used in LCD TV cabinets	
	Completely abolish lead solder in in-house designed circuit boards	Achieved in all products except some mobile phones and copiers	△	Abolish all lead solder in purchased circuit boards and parts (in new products for main markets)	—	42
	Initiate inspection of chemicals contained in parts and materials	Carried out inspections for chemicals contained in parts and materials at all domestic and overseas production sites	○	Abolish use of the six RoHS substances (in new products for main markets)	—	39
	Strengthen efforts to fulfill Super Green Factory concept	Turned one site into a Super Green Factory and 8 into Green Factories	○	Japan: Turn 2 sites into Super Green Factories and 8 into Green Factories Overseas: Assess production sites	Japan: Turn all production sites into Super Green Factories (in 2007) Overseas: Turn all production sites into Green Factories (in 2007)	43~44
	Japan: Product sites: Reduce by 2% from previous year Device sites: Reduce by 5% from previous year Overseas: Reduce by 2% from previous year	Japan: Product sites: Reduced by 29% from previous year Device sites: Reduced by 14% from previous year Overseas: Increased by 2% from previous year	○	Japan: Product sites: Reduce by 2% from previous year Device sites: Reduce by 5% from previous year Overseas: Reduce by 2% from previous year	Japan: Product sites: Reduce by 2% from previous year Device sites: Reduce by 5% from previous year (reduce by 25% from FY1990 in FY2010) Overseas: Reduce by 2% from previous year	45~46
	Japan: Continue zero discharge to landfill, recycle waste into valuable materials Overseas: Reduce by 2% per production unit from previous year	Japan: Final landfill disposal rate 0.05% (0.06% for previous year) Overseas: Reduced by 7% from previous year	◎	Japan: Recycle 12% of waste into valuable materials Overseas: Reduce by 2% per production unit from previous year	Japan: Recycle 18% of waste into valuable materials Overseas: Reduce by 2% per production unit from previous year	47~48
	Reduce by 67% from fiscal 2000 at domestic production sites	Reduced by 79% from fiscal 2000	◎	Reduce risk of chemical discharges beyond site boundaries by 15% from fiscal 2003 at domestic production sites	Reduce risk of chemical discharges beyond site boundaries by 40% from fiscal 2003 at domestic production sites	49~50
	Set original risk assessment criteria	Formulated risk assessment criteria for chemical discharges beyond site boundaries	○			
	Railway cargo transport: 450 containers/month Reduce 172 t/month of CO ₂ emissions	577 containers/month, reduced 220 t/month of CO ₂ emissions	◎	Railway cargo transport: 625 containers/month Reduce 250 t/month of CO ₂ emissions	Railway cargo transport: 800 containers/month Reduce 320 t/month of CO ₂ emissions	51~52
	Carry out survey for building recycling system in Europe for electrical/electronic equipment	Investigated recycling status in 10 EU countries (out of the current 15, as of March 2004)	○	Build collection/recycling system in EU countries	Observe each country's recycling laws and operate collection/recycling system efficiently	53~55
	Japan: 7,800 employees (from 28 sites) participate in SGC activities Overseas: Organize system for social contribution activities at major sites	Japan: 8,209 participants (from 28 sites) in SGC activities Overseas: Established organizations in 21 major sites and carried out social contribution activities	○	Japan: 10,000 employees from 29 sites (1/3 of all employees) participate in SGC activities Overseas: Expand number of active sites to 30	Japan: 30,000 employees (almost all employees) participate in SGC activities Overseas: Expand and root SGC activities at major sites	68~70