

Environmental Action Plan and Performance

Casio establishes targets that take account of the changes in the domestic and international environments and continually promotes activities to achieve these goals.



Environmental Management Activities in Fiscal 2004 and Future Efforts

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A look at efforts on global environmental issues reveals a trend for stringent environmental laws both in Japan and abroad as observed in the European WEEE and RoHS Directives. Demand has been growing on corporations to assume extended producer responsibility. In February 2005, the Kyoto Protocol took effect. Japan is required to reduce its CO₂ emission by 6% between 2008 and 2012 from the 1990 levels.

In response to such demand of the society, Casio revised the Casio Voluntary Plan for Environment, the Environmental Action Plan "Clean & Green 21" Initiative, and the Casio Group Green Procurement Standard Manual in fiscal 2004, and took concrete steps.

Results of Activities

Environmental action through products is an important theme for manufacturers. Casio has pressed forward with its C.G.P. 50 Activity, whose goal was to raise the percentage of Green Products in total sales to 50% in fiscal 2005. The goal was met one year ahead of the plan in fiscal 2004. In addition, Casio pressed forward to replace lead-based soldering that was used at Casio Group's manufacturing sites with lead-free soldering, with target completion in fiscal 2004. This replacement has now been completed.

As for efforts related to manufacturing sites, the Casio Group and other companies cooperating with it were abolishing the use of hydrochlorofluorocarbon by the end of 2004. Although the deadline was missed by three months, full discontinuation was completed before the end of fiscal 2004.

In regard to measures concerning waste, Hamura Research and Development Center, Hachioji Research and Development Center and Casio Hitachi Mobile Communications Co., Ltd. (previously the Tokyo Office of Casio Computer Co., Ltd.) achieved zero emissions in fiscal 2004. Combined with seven other business sites that achieved the goal in fiscal 2003, a total of 10 sites have now met the goal.

As for Green Procurement, domestic sites achieved 97.4% and

overseas sites 77.4% as our efforts to respond to the RoHS Directive bore fruit. The domestic sites met their goals one year ahead of the target, which had been set for fiscal 2005.

Future Efforts

We will continue to respond to the European WEEE & RoHS Directives by staying in close touch with and exchanging information with our product departments, as well as Casio Europe GmbH and the Sales Department. We will also take steps steadily toward the construction of a recycling system in August 2005 and the ban on sale of products containing specified toxic substances (lead, mercury, cadmium, hexavalent chromium, PBB and PBDE) effective in July 2006.

With respect to CO₂-related action to prevent the global warming, a focus of the Kyoto Protocol, we set our goal in terms of a reduction per basic unit of production in line with the policies set by the four electrical and electronic industry associations.* This yardstick was chosen because an increase in production that results from a business expansion of a manufacturing company leads to an increase in CO₂ emissions. However, the Kyoto Protocol requires a reduction of the aggregate CO₂ emissions. Accordingly, Casio adopted the "Bank of Japan's Domestic Enterprise Price Index (Electrical Equipment)" in fiscal 2005 in conformity with the policies of the four electrical and electronic industry associations as a new management method of CO₂ reduction by objective to correct for the production volume. We will also consider the adoption of other supplementary techniques, including Kyoto mechanism's CDM (clean development mechanism) and emissions trading.

Please refer to the main body of the report for further information.

*Four Electric and Electronic Industry Associations:
Japan Electronics and Information Technology Industries Association (JEITA),
Communications and Information Networks Association of Japan (CIAJ),
Japan Business Machine and Information System Industries Association (JBMA),
and Japan Electrical Manufacturer's Association (JEMA).

Environmental Action Plan "Clean & Green 21" Initiative

*Rate of Achievement: The ratio of the actual results of FY2004 to the target fiscal year.
☆☆☆:100% of target achieved. ☆☆☆:80% achieved or higher. ☆:Below 80% achieved.

Product-related Initiatives

Item	FY2004 Targets	FY2004 Results	Level of Achievement*	FY2005 Targets	Page No.
Development targets for eco-products	To boost the sales of Green Products to be 50% of total sales by the end of FY2005	Green products grew to 59%. The C.G.P.50 was met one year ahead of the initial plan.	☆☆☆	To raise Green Products sales in fiscal 2007 to 70% of total sales	40-42
	To reduce the total volume of packaging materials used per unit of sales by 30% by the end of FY2007 compared to the FY2000	A 20.5% reduction was achieved. Progressing toward the goal of 30% reduction in the FY2005.	☆	Continuing.	50
Hazardous substances phaseout targets	To discontinue the use of RoHS Directive-specified toxic substances, namely, lead (lead contained in finished products), cadmium, mercury and hexavalent chromium, by the end of 2005	Product certification and use commenced in accordance with the new Casio Green Procurement Standard Manual to comply with the RoHS Directive. Progressing toward the goal of discontinued use by the end of 2005.	☆☆	Continuing.	52
	To discontinue the use of lead-based solder by FY2004	In FY2004, the Casio Group completed full phaseout of lead-based solder in manufacturing. *Some models (such as those that are to be discontinued) were excluded from the calculations.	☆☆☆		45

Business Sites-related Initiatives

Item	FY2004 Targets	FY2004 Results	Level of Achievement*	FY2005 Targets	Page No.
Energy Conservation Targets	To reduce the CO ₂ emissions per unit manufactured by 10% by the end of FY 2005 compared to the FY1990 To reduce by 25% by the end of FY2010 compared to the FY1990	The actual FY2004 results on a per unit basis was a 14% increase over the FY1990, due to a rise in energy use that resulted from an increase in the production volume.	☆	Actual production* A 10% reduction in CO ₂ emissions per unit in FY2005, a 20% reduction by the end of FY2010 compared to the FY2003	43
Resource Saving Targets	To reduce usage per unit of production at domestic manufacturing sites by 5% by FY2005 compared to the FY2000	The actual FY2004 results on a per unit basis was a 18.3% increase over the FY2000, due to a strong impact of water usage by increased production of Casio Micronics in spite of reduction efforts with the installation of a circulation system.	☆	Continuing.	46
Waste Reduction Targets	To achieve zero emissions by FY2005 (the volume of landfill waste to be 1% or less of the total waste)	In FY2004, three additional business sites, consisting of Hamura Research and Development Center, Hachioji Research and Development Center and Casio Hitachi Mobile Communications Co., Ltd., newly met the zero emission goal. As a consequence, total of ten business and manufacturing sites have achieved the goal.	☆☆	Continuing.	47
	To reduce the waste generation per unit by 30% by the end of FY2005 compared to the FY2000	The actual FY2004 results on a per unit basis was an approximately 10% reduction over the FY2000, thanks to significant impact of various waste reduction efforts.	☆	Continuing.	
Hazardous Substance Phaseout Targets	To discontinue the use of hydrochlorofluorocarbon at all manufacturing sites, including other corporations cooperating with Casio, by the end of 2004	In FY2004, the 1-1-dichloro-1-fluoroethane use at a contractor's plant ended, completing the discontinuation of hydrochlorofluorocarbon use by the Casio Group.	☆☆		45
	To detoxify PCB-containing equipment currently in storage by the end of FY2005	Regarding the PCB contents stored at Hachioji Research and Development Center and Hamura Research and Development Center, agreements have been signed with a waste treatment contractor. Disposal is awaiting a treatment facility to start up. The PCB stored at Kofu Casio is awaiting the completion of a facility.	☆	Continuing.	
Green Procurement Implementation Targets	To raise green Procurement to 95% of total procurement at domestic sites by the end of FY2005	Green Procurement reached 97.4% at domestic sites in FY2004, achieving the target one year earlier than originally planned.	☆☆☆	Green Parts response rate (the rate of recovery of surveyed parts) in FY2005: 100% at domestic sites	39
	To raise Green Procurement to 85% of total procurement at overseas sites by the end of FY2005	Green Procurement reached 77.4% at overseas sites in FY2004.	☆☆	Green Parts response rate (the rate of recovery of surveyed parts) in FY2005: 100% at overseas sites	
Green Purchasing Implementation Targets	To raise Green Purchasing to 60% of total stationery product, office supply and OA equipment purchases at domestic sites by the end of FY2007 (based on the number of purchases) *At sites that have adopted the CATS e-P system	Achieved 41.2%. Still progressing toward the 60% goal by the end of FY2007.	☆	Continuing.	39
Targets against Global Warming in Distribution	To reduce the CO ₂ per unit of sales by the end of FY2007 by 50% by improving the efficiency of domestic distribution compared to the FY2000	Achieved a 32% reduction. Still progressing toward the goal of a 50% reduction by the end of FY2007.	☆	The target is unchanged for domestic distribution A 5% reduction in CO ₂ emissions per unit of sales by the end of FY2007 compared to the FY2004 by improving the efficiency of overseas distribution	49

*Actual production output: CO₂ emissions per unit of production were used for reduction targets up to the reporting of the actual FY2004 results. However, this basic unit does not properly reflect the realities, such as changes in business modes. Accordingly, Casio began to compute reductions by correcting the basic unit denominator (production value: in units of ¥1 million) with the Bank of Japan's domestic enterprise price index (electrical equipment) in accordance with the policies of the four electrical and electronic industry associations, starting in FY2005. Actual production output value is this corrected amount.

Actual production output = $\frac{\text{Nominal Production output}}{\text{Bank of Japan's Domestic Enterprise Price Index (Electrical Equipment)}}$. Yearly ratios in comparison with the base year of FY1990.

Fiscal Year	1990	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2010
Price Index Corrected Values	1	0.77	0.77	0.74	0.72	0.69	0.62	0.58	0.54	0.54	0.54	0.57

*2005 figures are Casio projections. 2010 figures are projections by the Japan Center for Economic Research.