Environmental Action Plan "Clean & Green 21" Initiative

Casio Environmental Charter

To conserve the global environment, Casio recognizes the importance of its corporate environmental responsibility across the operations of its entire group. Casio establishes basic policies and specific measures for contributing to world prosperity and human happiness from the broad perspective of international society, and endeavors to implement them.

Fundamental Environmental Policies

- Casio Group members shall comply with all environmental laws, agreements, and standards in Japan and overseas.
- 2. The Group shall establish voluntary "Casio Environmental Conservation Rules"*1 based on consideration for the environment at all product stages of development, design, manufacture, distribution, repair services, and recovery/disposal. All Casio business divisions shall assume responsibility for their implementation, additionally auditing the degree of compliance and making continual improvements.
- From the standpoint of corporate social responsibility, and as good corporate citizens, all Casio Group members shall apprehend the importance of global environmental conservation and try to heighten their awareness.
- 4. These Policies shall apply to all Casio Group business divisions in Japan and overseas.

From the Casio Environmental Charter and Fundamental Environmental Policies to Environmental Action Plan



Casio Voluntary Plan for the Environment (CVPE)

Environmental action guidelines for the Casio Group that set forth specific themes and measures to be implemented at each stage: development, design, manufacture, distribution, repair services, and recovery/disposal.



The Casio Group's Environmental Action Plan "Clean & Green 21" Initiative

Policies of the quantitative targets or deadlines among the items stipulated by the CVPE.

Casio Group Environmental Action Plan

The Casio Group formulated the Voluntary Plan for the Environment (CVPE) in January 1993 to implement the Casio Environmental Charter and the four Fundamental Environmental Policies, and began pursuing environmental conservation activities as a group-wide effort. In November 2000 the CVPE was revised for the sixth time in response to changing social circumstances and progress in our activities.

The CVPE stipulates "Casio Environmental Conservation Rules," as specific action programs for environmental conservation at each stage: development, design, manufacture, distribution, repair services, and recovery/disposal.

Based on these rules Casio established the Casio Group's Environmental Action Plan "Clean & Green 21" Initiative in June 1996. The Initiative explicitly sets forth specific quantitative targets and implementation deadlines for energy conservation, waste reduction, and other environmental activities, and clarifies the medium-term action plan for the entire Casio Group. Efforts are underway to implement the plan.

The facing page presents the June 2002 revisions to the Environmental Action Plan.

^{*1} The Casio Environmental Conservation Rules are specific action programs for environmental conservation, set forth in the "Casio Voluntary Plan for the Environment (CVPE)."

FY2001 Progress on the Casio Group's Environmental Action Plan "Clean & Green 21" Initiative

Product-related initiatives

| Items | FY2001 Targets | FY2001 results | Newly added targets for FY2002 |
|---|---|---|---|
| Eco-friendly product development target | FY2003 Green products account for 30% of sales | Green products account for 3% of sales | Continuing 20% reduction in packaging material use by FY2003 (compared to FY2000) |
| Hazardous substance phaseout target | From FY2001, gradually increase products using lead-free solder | Already began using lead-free sol- der in products during FY2001 | Removed from FY2002 targets |
| | Totally phase out leaded solder by FY2004 | Calculator: Eco-friendly calculators Watch: G-SHOCK | Continuing Discontinue by 2005 the use of the |
| | | Three product types added this year Total of 10 product types | substances lead, cadmium, mercury, and hexavalent chromium specified in the RoHS Directive* |

Facility-related initiatives

| Items | FY2001 Targets | FY2001 results | Newly added targets for FY2002 |
|--|--|---|--|
| Energy conservation targets | Carbon dioxide (CO ₂) emissions per unit manufactured compared to FY1990 FY2005 10% cut FY2010 25% cut | Increased 19.2% over previous year largely owing to increased energy use in the pre-production operation and adjustment in conjunction with enlargement of Casio Micronics (Yamanashi) and Kochi Casio. FY2005 target attainment appears likely because of smooth production start. | Continuing |
| Waste reduction targets | Achieve zero emissions (no landfilled wastes) by FY2005. | Thanks to sorting, recycling, and other efforts, wastes landfilled in FY2001 were 269 t, down 75% from the 1,087 t of FY2000. Target attainment on schedule because of intensified efforts. | Continuing |
| | FY2005 Reduce waste generation per unit manufactured by 30% (compared to FY2000). | Thanks to sorting, recycling, and other efforts, 5,581 t of wastes were generated in FY2001, down 1,033 t (15.6%) from the 6,614 t of FY2000. Although partly attributable to decreased production, a 6% drop in waste generation per unit manufactured over the previous year indicates steady progress. | Continuing |
| Hazardous substance phaseout targets | Phase out use of CFC substitutes* in the group by the end of FY2001. | By the end of FY2001, the Casio Group had met its goal of completely phasing out CFC substitutes. | Removed from FY2002 targets |
| | Phase out use of CFC substitutes at all production sites including subcontractors by end of FY2002. | Currently used by some suppliers (2 domestic companies, 1 overseas), but total phaseout scheduled for the end of September 2002. | The phrase "phaseout by end of 2002" expanded to include new subcontractors and changed to "be sure of phaseout by end of 2002." |
| | By FY2005 detoxify PCB-containing equipment in storage. | The Casio Group has 19 capacitors (4 still in use) and 258 small ballasts fluorescent lamp that contain PCBs. Best detoxification method under consideration. | Continuing |
| Gain certification under ISO 14001 (environmental management system) | All Casio Group overseas production sites acquire certification by end of FY2001. | All major domestic and overseas sites initially planned to do so had certification by the end of FY2001. | Removed from FY2002 targets |
| Green procurement implementation targets | FY2003 Green procurement rate of 80% from domestic suppliers | Domestic site suppliers had 61% green procurement rate (as of end of May 2002). | Continuing |

Glossary

Substances designated by the RoHS Directive

Hazardous substances designated by the Restriction of Hazardous Substances (RoHS) Directive, which will likely take effect throughout the EU in 2006. The substances are lead, mercury, cadmium, hexavalent chromium, PBBs (polybrominated biphenyls), and PBDEs (polybrominated diphenyl ethers).

CFC Substitutes

Substances used in the semiconductor manufacturing process for cleaning and as refrigerants in refrigerators and other appliances in place of CFCs, which deplete the ozone layer. They include hydrofluorocarbons (HFCs).

Emission / Waste generation per unit manufactured

CO $_2$ emission per unit manufactured (t CO $_2$ /¥1 million), obtained by dividing CO $_2$ emissions (t CO $_2$) by production (¥1 million), and waste landfilling per unit manufactured (t/¥1 million), obtained by dividing wastes generation (t) by production (¥1 million).