Environmental Management Policy

In all of its businesses, Casio strives to achieve solutions to global warming and other problems related to natural resources and energy. To overcome the crisis facing the earth, Casio is proposing and implementing solutions across all of its operations.

The Fight against Global Warming in and outside Japan

At the end of July 2008, following the G8 Hokkaido Toyako Summit held July 7–9, 2008, the Japanese Cabinet approved the Action Plan for Achieving a Low-Carbon Society. The plan commits Japan to take measures to combat global warming to meet targets set for the year 2050.

Referencing the long-term goal of a 50% reduction in total global greenhouse gas emissions by 2050 compared to current levels, the plan includes a long-term goal for Japan of reducing emissions by 60% to 80%. The key to achieving these long-term goals is taking steps now to ensure that the world's total emissions peak within the next 10 to 20 years. Work must therefore be done to promote the following specific measures.

I. Japan's targets
- Building agreement on a fair, equitable, and effective post-2012 framework
- Setting quantified national targets
- Support for other countries' efforts
  (1) Dissemination of technologies through the sectoral approach and support
  (2) The Cool Earth Partnership
  (3) Establishment of a multilateral fund

II. Dissemination of innovative technologies and existing advanced technologies
- Steady enforcement of the roadmap to innovative technology development
- Upgrading coal use • Huge increase in the installation of solar power generation facilities
- Introduction of next-generation vehicles • Changing from incandescent light bulbs to low-energy lamps • Accelerating the introduction of energy-efficient televisions, water heaters, air-conditioning, and refrigerators • Promoting energy-efficient housing and office buildings, and "200-year Housing" • Promotion of nuclear power

III. Framework to move the whole country toward reduced carbon
- Emissions trading
- Tax system (Making the tax system greener, global environment tax)
- Visualization (Disseminating the "carbon footprint" system, etc., creating rules for carbon offsetting and carbon accounting)

The "sectoral approach and support" listed above requires efforts made by industry across national boundaries, and total goals for each country are to be set this year. These will be developed into goals for individual industrial associations, and Casio will then establish new targets based on these goals.

When efforts to reduce carbon footprint*1 become established, companies with superior environmental technologies for saving energy and conserving resources will win the support of the markets, but companies with higher CO_2 emissions than their competitors will likely be forced out of business.

Trends in US and Worldwide Environmental Policies

US President Barack Obama, elected in 2008, has already announced the following five energy policies (New Energy For America*2) and has expressed the intent to invest the equivalent of ¥15 trillion in these policies over the next 10 years.

(1) Create five million new jobs; (2) Put one million hybrid cars on the road by 2015; (3) Ensure that 10% of electricity comes from renewable sources, such as wind power, solar power, and next-generation biofuel, by 2012, and 25% by 2025; (4) Reduce greenhouse gas emissions by 80% of 1990 levels by 2050; and (5) Reduce oil imports

It is particularly noteworthy that a specific numerical target for greenhouse gas emissions has been incorporated into this plan, suggesting that the US will demonstrate leadership on the prevention of global warming moving toward 2050.

With regard to international frameworks, efforts are being made to reach a consensus at the Conference of Parties 15 (COP15), which is scheduled to be held in December 2009, but it continues to be difficult to align the interests of the developed and developing nations.

*1. Carbon footprint: An indicator showing the amount of CO_2 needed to sustain a product from its inception to its disposal using the life-cycle assessment (LCA) method. This indicator will be included on packages so that it can be used by consumers in selecting which products they want to buy.
*2. New Energy For America: This is generally referred to as the "Green New Deal" or the "Green Jobs Policy."

Environmental Management to Build a Low-Carbon Society

Keeping step with these global trends, Casio will tackle the following environmental management issues in fiscal 2010 and beyond.

(1) Some environmentally advanced companies have already developed their environmental management policies with a 2050 target date. The global warming prevention policies adopted by such companies always include largely reduced numerical targets aimed at cutting their environmental impact by 1/8 to 1/10 of current levels. Casio has also reached a point where it must launch efforts aimed at establishing ultra-long-term targets for 2050. The Environment Center is playing a key role in investigating the direction Casio must take in the future.

(2) The range of acquired environmental performance data for the entire group is divided into emissions produced by Casio itself and emissions produced by its contractors. To gain a better sense of the total framework, Casio is promoting surveys of parts for which data has yet to be acquired.

(3) At its office sites located both in Japan and abroad, Casio is working to achieve reductions in the total volume of CO_2 emissions, not just reductions per unit of production. Even at Casio's production sites, a switch will be made from per-unit reduction goals to total-volume reduction goals. The total reduction goals of Casio's production sites will be challenging, but Casio is committed to demonstrating leadership in this area.

(4) SF_6, a gas commonly used in the process of manufacturing TFT LCDs, is not used in very large quantities, but since its warming factor is extremely high—23,900 times that of CO_2—Casio is working on efforts to eliminate or reduce its use. At the laboratory level, researchers have already confirmed that it can be replaced with F_2 gas, and studies are underway to move toward the mass production of this alternative gas.

(5) Casio has been working to develop innovative products using its core competence in technologies for making products that are more compact, lightweight, slim, and energy-efficient. Going beyond this, Casio is developing its own index for measuring improvement in the environmental impact of Casio products and manufacturing processes and its environmental management, and for setting environmental action targets in the future.

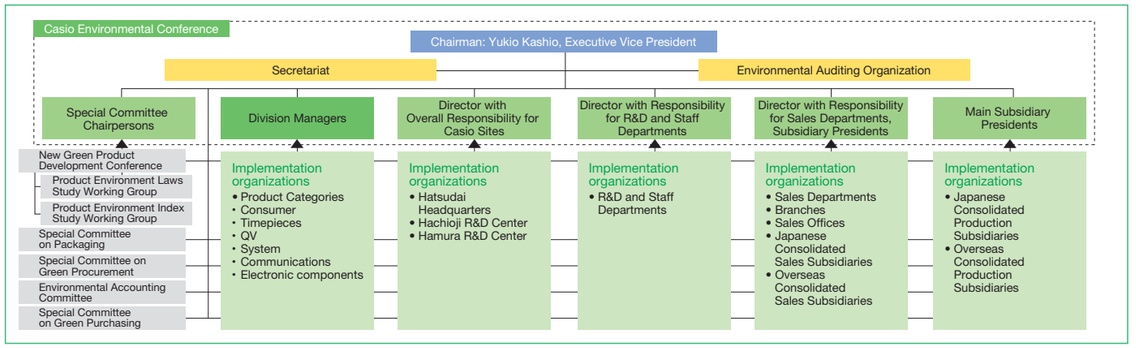
(6) Environmental technologies developed in Japan can do much to help build a low-carbon society. Casio data projectors and electronic dictionaries, for example, are accelerating the shift to paperless work styles: life-cycle assessments have confirmed that these products help reduce emissions. Going forward, Casio will continue to promote paperless lifestyles, improve administrative efficiency, and save energy and resources by creating devices that can be used in "green offices."

(7) Casio's Green Product development began eight years ago in June 2001. Starting in fiscal 2010, under its Green Star Product project, Casio will further strengthen its technologies for making products that are compact, lightweight, slim, and energy-efficient, and is considering introducing an environmental symbol or carbon footprint indicator on its packages to inform customers.

These priorities make it clear that helping to build a low-carbon society will be a key focus of Casio's environmental management strategy in fiscal 2010. Casio will make the most of its environmental management system to achieve both environmental preservation and profit growth, continuing to create success in both areas.

Environmental Management System

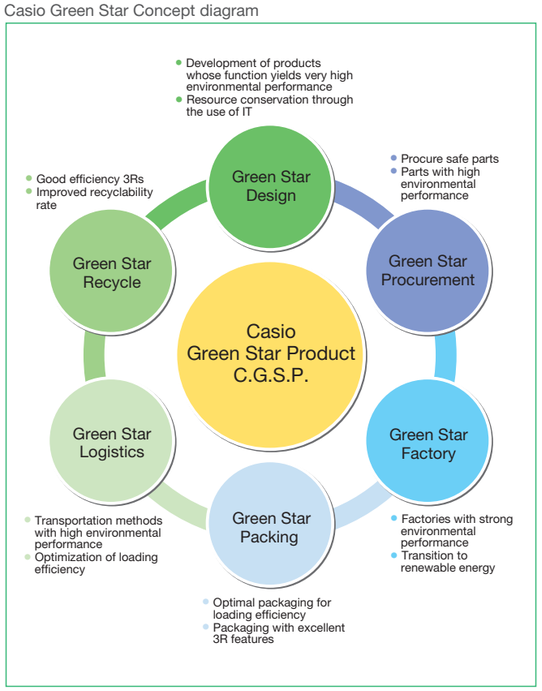
Structure of the Casio Environmental Conservation Committee



Casio Green Star Concept

Recognizing its social responsibility as a product manufacturer, Casio is stepping up efforts to ensure that its products contribute to sustainability. Looking at every stage of the product life cycle, in fiscal 2010, the company began certifying products with particularly low environmental impact across the life cycle as Casio Green Star Products.

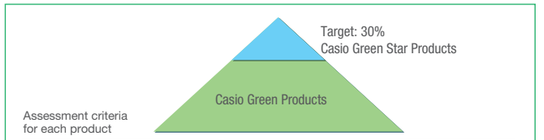
Casio Green Star Concept diagram



Casio Green Star Products (Eco-Products)

Under the Casio Green Product (CGP) project, Casio conducts preliminary assessments of the environmental impact of new products at several stages: planning, design, and component configuration. The goal is to minimize environmental impact across the entire life cycle of the product. This effort is guided by the Casio Voluntary Plan for the Environment. Based on the results, products and services that meet Casio's environmental criteria are certified as "Casio Green Products." Given how effective this process has been, in fiscal 2010, Casio began certifying the best of its Casio Green Products as Casio Green Star Products. These products meet even more rigorous assessment criteria, and Casio hopes they will inspire people to choose more sustainable lifestyles.

Assessment categories



Assessment criteria for each product

Green Product Assessment	Casio Green Star Product Assessment
1. Promotes recycling (labeling of materials contained)	1. Power consumption during use reduced by 20%
2. Designed for recycling	2. Solar batteries used and Eco Mark acquired
3. Components of products can be separated, disassembled	3. Use of solar batteries and long-life structure
4. Improved recyclability	4. Comes with a 10-year battery and long-life structure
5. Reduced resource volume	5. Body volume reduced by 20% or more
6. Reduced resource weight	6. Weight reduced by 20% or more
7. Improved energy efficiency	7. Load ratio reduced by 20% or more due to more compact packaging
8. Regulated use of chemical substances	8. Uses 30% or greater recycled plastic
9. Recyclability of batteries	9. Uses 25% or greater bioplastics
10. Recycling label on batteries	10. Contains no specific hazardous chemical substances (polyvinyl chloride)
11. Regulatory compliance	11. Improvement of 10% or more over the conventional ratio based on an LCA environmental assessment
12. Components of packaging can be separated, disassembled	12. Improvement of 10% or more over the conventional ratio based on product environmental efficiency
13. Regulated use of packaging materials	13. Has functions that make considerable contributions to environmental performance
14. Preserves the natural environment	14. Has functions that contribute to the reduction in resource use through IT
• 90 points or more, out of a total 100 points possible	• When products meet the Green Product standards and also fulfill a criterion above.

*Casio Green Star Product certification standards may vary for some products.
*These standards will be periodically revised to keep pace with environmental advances.