

Benefitting the Environment with Cutting-Edge Technology



Executive Vice President Kashio

Since its foundation, Casio has always striven to “benefit society through creative products.” Now that the environment is considered paramount, engineers working on technologies in areas such as timepieces, digital cameras, and recycling got together with Executive Vice President Yukio Kashio, one of the company’s founders, and Managing Director Osamu Shimizu for an enthusiastic discussion on what Casio technology can do for the environment.

• Designing the environment into products

To keep making environmentally compatible products that deeply impress customers is one’s social responsibility as a manufacturer, and it also helps grow one’s business.

The fundamental thinking behind Casio’s product creation — “lightweight, compactness, and power saving” — performs double duty for the environment by leading to resource- and energy-saving technologies.

Customers of course expect quality, function, and reasonable pricing from manufacturers, but eco-compatibility is also an important consideration. **(Kashio)**

Through Green Product development, the Casio Group tries to mitigate the environmental burden throughout a product’s total life cycle (from planning, development, design, procurement, production, and sale, to the customers’ product use, disposal and recycling). **(Yamada)**



Yamada

• More green products needed

In 2001 the Casio Group established its “Casio Guidelines for Green Product Development” to facilitate the making of environmentally conscious products.

When developing a new product, we try to make it environmental conscious from the two perspectives of its “environmental design” and



Ozawa

“environmental compliance.” New products are rigorously assessed, and only those which meet the Casio’s Standards are approved as Casio Green Products. **(Ozawa)**

The first Green Product we developed was a USB electronic calculator. It obtained the Eco Mark, and what’s more the calculator and cable do not contain vinyl chloride and lead-free solders are used. **(Deguchi)**



Deguchi

The life cycle assessment (LCA) concept is important in making environmental conscious products. At Casio we especially work on minimizing the environmental burden of a product during customer use. **(Yamada)**

And that resulted in our solar-powered and radio-controlled watch. The solar power technology developed for the watch eliminated the environmental burden of spent batteries. For its microprocessor, the most important part, we used a newly developed LSI (SOI) that consumes 50% less power than previous processors. At a glance it looks like an ordinary wristwatch, but it incorporates several innovative technologies. **(Kasuo)**



Kasuo

Liquid crystal panels in digital watches and cellular phones have until now been the most energy-consuming component, but recently the idea of using sunlight as backlight assumed tangible form, and we developed a liquid crystal panel that saves energy and is also easy to see. We’ll build it into many products from now on. **(Sawatsubashi)**



Sawatsubashi

We are now putting all our efforts into developing fuel cells, which are indispensable as a next-



Engineers from many fields push the envelope: “How can Casio help the environment?”

generation energy supply. In the near future many Casio products will use them. Our work is directed at making them endure long-term use, as well as reducing size and improving function. **(Managing Director Shimizu)**

Our digital photo developer digital photo vending machine is helping reduce pollutant emissions because it can make just the number of prints one wants when they're needed, and without using developing fluid or film. Sometime I'd like to perform an LCA to show that its environmental burden is smaller than that of film photographs. **(Mizushina)**



Mizushina

• Eco-compatibility is now a business requirement

Since the Green Purchasing Law became effective in April 2000, more and more customers, especially corporations, are saying they'll buy only environmental conscious products. In recent years there's been a jump in the use of the general stationery supply catalog for corporate users, but these days we can't have our products listed in the catalog unless they're environmentally compatible. We mustn't hesitate to incorporate environmental concerns when developing products. Since we're all here, I'm taking this opportunity to ask this of everyone, from sales to development and manufacturing. The “Eco-Tape” consumable used in the Name Land resulted from just such a requirement. We're also working on its recovery and recycling. **(Ono)**



Ono

Pursuant to the Law for the Promotion of Utilisation of Recycled Resources, we received authorization from METI and MOE, and have begun recycling used PCs and information and communications equipment

from corporate users. In collaboration with a parcel delivery service, we got the jump on other companies by starting the recovery service, accepting even single units, and at the same price nationwide. Casio recycles 96.7% of the PCs it recovers. **(Nakazawa)**



Nakazawa

• Profit through environmental management

I'd like to dig into Casio's “lightweight, compactness, and power saving,” develop high-added-value products like solar-powered and radio-controlled watches, credit-card-sized LCD digital camera, and fuel cells, and profit through environmentally conscious business.



Managing Director Shimizu

• In-house communication about environmental technology

Today's topic led to much useful discussion, and I'd like to see these ideas used in green product development meetings for sharing environmental technologies. Sales personnel too should perceive the environment as basic to their jobs, and make it part of their work. **(Yamada)**



The Participants

Department	Name	Area of responsibility
Executive Vice President	Yukio Kashio	
Managing Director	Osamu Shimizu	
General Manager Quality & Environment Center	Yoshinobu Yamada	
Assistant Manager Planning Section, Development Dept.-1 Consumer Unit-1, Development HQ	Koji Deguchi	Electronic stationery
Leader Product Development Group PV project Development Center	Takahiro Mizushina	Credit-card-sized LCD digital camera
Manager, CES Marketing Section Consumer & Educational Products Department Global Marketing Headquarters	Takuya Ono	Sales
Design Section Manager TFT Department, Electronic Device Division	Takeshi Sawatsubashi	LCD devices
Leader Development Dept. Timepiece Division	Tomoo Kasuo	Timepieces
Leader Information Technology System HQ.	Yoneo Nakazawa	Recovery system
Environmental Management Section, Quality & Environment Center	Naofumi Ozawa	Environmental management