

A Bold New Vision for Sustainable Growth

Epson seeks to slash CO₂ emissions during the entire lifecycle of its products to just a tenth of current levels by 2050.



In emerging as a world-class manufacturer of leading-edge electronic products and precision instruments, Epson has on countless occasions overcome seemingly insurmountable challenges to achieve landmark breakthroughs that have taken the world by storm.

This proud tradition of unending innovation extends to protecting the Earth's environment as well, an issue to which Epson has attached overriding importance through the years. Its latest bold step was the June 2008 announcement of a long-term environmental direction called Environmental Vision 2050, the centerpiece of which is an endeavor to slash the carbon dioxide emissions of Epson activities covering the entire lifecycle of its products to just one-tenth of current levels by the middle of the century.

This is not the first time that Epson has set challenging environmental goals for itself. In 1988, for instance, when the use of chlorofluorocarbons was shown to be depleting the Earth's ozone layer, Epson made a unilateral declaration that it would completely eliminate the use of CFCs by March 1994. At the time, Epson was using 1,400 tons annually on the understanding that they were completely safe and harmless as cleaning agents.

"Now that we've been shown that CFCs are actually harmful to the environment," then President Tsuneya Nakamura stated at the time, "this is a mandate for us to stop using them altogether."

No alternative technology was available at the time, though, and many industry watchers viewed the announcement with skepticism. President Nakamura remained undaunted, however, declaring, "If we can't eliminate CFCs from a particular operation, then we'll simply halt those operations."

Epson engineers worked day and night to develop a new water-based cleaning agent—one even placed a glass plate in the tub while bathing his infant for hints on how water-based agents could be used—thanks to which the company was able to achieve its goal of CFC-free manufacturing operations 17 months ahead of

schedule in October 1992. For this, Epson was presented the Stratospheric Ozone Protection Award from the US Environmental Protection Agency in 1992.

This achievement was another manifestation of Epson's hallmark spirit of innovation, consolidated in the late 1960s as it overcame seeming insurmountable technological hurdles to develop the world's first quartz watch: the Seiko Quartz Astron 35SQ.

Under a New Flag

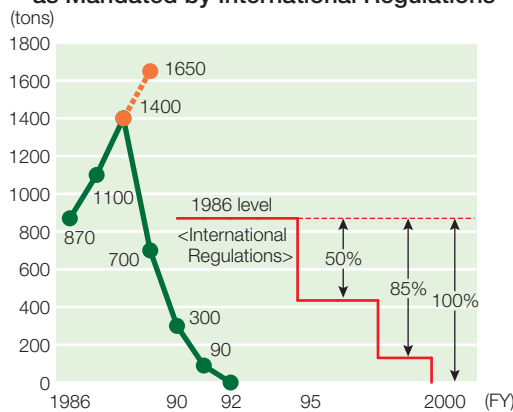
While Epson succeeded in eliminating the use of CFCs, other urgent environmental issues have come to the fore in more recent years. A decade after it announced its ambitious CFC-free goal, Epson designated 1998 its Second Environmental Benchmark Year, adopting a new General Environmental Policy. Because this was a comprehensive strategy addressing environmental issues from all angles, however, it failed to generate a distinctively Epson approach to resolving challenging problems.

A new goal to galvanize all the company's resources was thus sought, and in 2007 Epson's top management instructed the Global Environmental Policy Department to draft a new long-term strategy that would serve as a "flag" under which all employees could pool their collective strength. The result of these efforts was the recently announced Environmental Vision 2050.

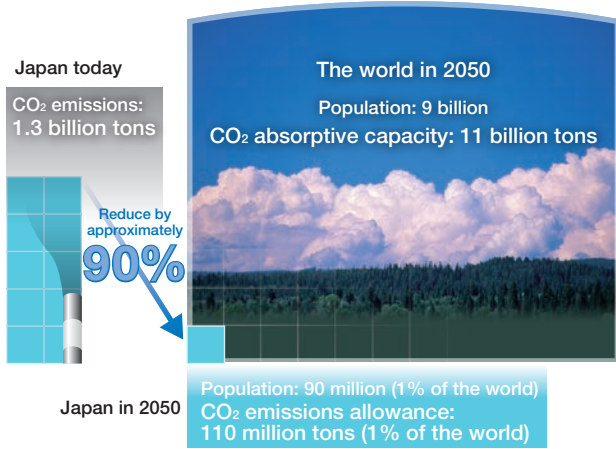
There is no telling, of course, what Epson will be doing in 2050, as a number of operations will have been phased out by then and many new ones launched. Even with such constraints, the new vision seeks to slash carbon dioxide emissions to one-tenth of current levels. This means that operations that result in higher greenhouse gas emissions will not be pursued, no matter how profitable.

Epson has not been alone in announcing emission reduction goals, as other manufacturers have declared their own targets. "Our aim, though, isn't to outdo other companies," an Epson manager points out. "It's more of an in-house tool—a 'flag,' if you

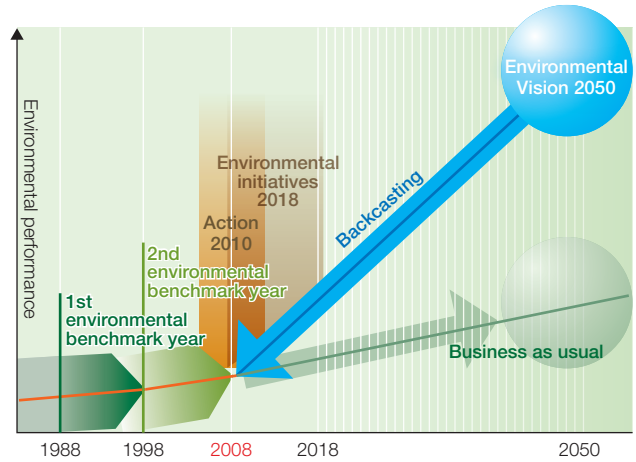
CFC Reduction Levels at Seiko Epson and as Mandated by International Regulations



CO₂ Emissions and Absorptive Capacity



Environmental Vision 2050 and Midterm Initiatives



will—to prompt our employees around the world to think more seriously about the need to save our planet.”

Environmental Vision 2050 seeks to minimize the environmental burden of Epson products and services throughout a product’s lifecycle and thus covers CO₂ emissions during not only production but also product packaging, transport, and after-sales use. Measures are also included to promote recycling, especially of rare metals used in various products.

Initiatives for the Coming Decade

During the next 10 years, Epson will pursue four actions geared toward achieving the goals of Environmental Vision 2050. Those actions include (1) a reduction of CO₂ emissions at the component manufacturing stage through energy-saving designs, (2) a new business model based on the creation of longer-lasting products, (3) a halving of energy use by clean rooms, and (4) support for employee participation in reforestation programs and other eco-friendly projects.

Prospects for cutting clean-room energy use by half are promising, as the company can apply its propriety Micro Piezo printing technology in the production of semiconductors. Broader industrial applications of this

marking technology will also help conserve valuable resources; commercial production of LCD color filters using Epson’s Micro Piezo technology by other manufacturers has already begun, and it is also being used to print textiles and produce commercial photo lab prints.

Epson, moreover, has for many years been engaged in reforestation projects in Indonesia and other countries that consider the importance of maintaining biodiversity. In July 2008, for instance, a reforestation project will be launched in Portugal to restore the cover of the Gardunha Mountain, destroyed in a large-scale forest fire in 2003, creating an ecosystem hospitable for birds and other wildlife.

In drafting Environmental Vision 2050, Epson sought the advice of specialists and experts from outside the company. It intends to continue incorporating the views of experts around the world, not only in the implementation of the vision but also in the formulation of the company’s management strategies and policies.

With its new environmental vision, Epson is now better positioned to become a company that not only is emulated by other manufacturers but also makes a valuable contribution to enabling sustainable growth for the planet as a whole.



Before planting trees, top left (Kalimantan, Indonesia, 2000), and a recovered tropical rainforest, below (2006). Workers inspect the growth of planted trees, right (Kalimantan, Indonesia).