

Top Management's Commitment and Highlights

Highlights



Highlight 2 Resource Depletion
Resource Depletion Has
No National Boundaries

In December 2004, Fuji Xerox started operating an international integrated recycling system to collect its own products from nine countries and territories in the Asia-Pacific region and to disassemble and separate all of them for recycling at a Fuji Xerox plant in Thailand. The aim is to achieve nearly 100 percent recycling at its own overseas plants. How was such an unparalleled, large-scale system created?

No double standards are allowed

In the winter of 2000, Tomio Watanabe, general manager of the Asset Recovery Management Unit, visited all of Fuji Xerox's sites in nine countries and territories in the Asia-Pacific region to obtain a clear understanding of the status of recycling there. The aim was to prepare for the realization of "zero landfill" in the region.

The objective of "zero landfill" at Fuji Xerox is for its own products to generate no waste. The company intends to take responsibility for the collection of end-of-life products from customers. In addition, it aims to utilize reusable parts in new products and recycle other parts to be used as materials, so that no waste is generated from end-of-life products.

Fuji Xerox began to tackle this task in 1995 and built a 100 percent recycling system in Japan in 2000.

"The depletion of natural resources is a global issue, and it is meaningless for Japan to cope with it alone," says Watanabe, referring to the inevitability of establishing a integrated recycling system. "Fuji Xerox's policy was to address the issue in Asia after addressing it in Japan. It would have been strange for Fuji Xerox to grapple with this issue in Japan but not to do so in Asia. Such a double standard would not be acceptable. It is only natural to provide the same system and the same level of performance."

What he discovered when he visited the sites, however, was a large discrepancy among the countries and regions in terms of awareness of the need for recycling and the response by recyclers. Watanabe, who had been responsible for product development for many years, said that tears had welled up in his eyes when he saw products he had developed himself being buried as landfill. Achieving "zero landfill" requires an all-out effort to disassemble and separate products as well as recyclers who are capable of recycling separated materials, but the fact was that only in certain areas could Fuji Xerox implement the level of recycling it demanded. From this fact emerged the concept of a resource recycling network that transcends national boundaries. The objective of the network is to realize a high-quality, consistent recycling system of collecting end-of-life products and gathering them in one place in the Asia-Pacific region.

In April 2001, Watanabe, Hideo Sakagami, and other members of the ARM Unit began investigations in ASEAN countries. They decided to locate a recycling center in Thailand because the country had a large number of well-equipped recyclers, enabling nearly 100 percent recycling. In January 2002, a companywide project was launched, and the plan seemed to be advancing smoothly, but...

- [Outline of Fuji Xerox Eco-Manufacturing Co., Ltd. \(FXEM\)](#)



Long path to achieving the goal



"Although problems had accumulated, I never thought of giving up," Watanabe said

In July 2002, at the official negotiations with the Thai government attended by Watanabe and Sakagami, a high-ranking official said "no" to the network. The reason given was that the Thai government would not allow Fuji Xerox to bring waste from other countries into Thailand for treatment.

Underlying this negative answer was an incident in which used personal computers, which were declared to be intended for reuse when they were imported, were in fact illegally dumped. The Thai government was so distrustful of importing used goods for recycling that at one time it even considered banning the import of all used electronic devices. The key issue was how to establish a relationship of trust with the government.

An opportunity came in August 2002. A Thai government official responsible for the project was planning to visit Japan. Watanabe moved to seize this opportunity. He organized a tour of the Ebina Plant, which has reuse and recycling lines, and explained to the official product development that takes reuse and recycling into consideration, starting at the design phase. President Toshio Arima and Executive Vice President Tadahito Yamamoto, who is in charge of production, continued to earnestly emphasize Fuji Xerox's past efforts in Japan and the enthusiasm with which the company planned to establish a

recycling system of a similar level in Asia.

In August 2003, this appeal bore fruit. Permission was granted for Fuji Xerox's recycling project in Thailand. Uncompromising efforts toward a resource integrated system in Japan led to the Thai government's understanding of, and trust in, Fuji Xerox.

Project members began preparations for the construction of a plant in Thailand. The project started to move with the team members engaged in the establishment of a local subsidiary, plant planning, negotiations with a local general contractor for construction, procurement of equipment and fixtures, and recruitment of personnel.

The procurement of equipment and fixtures got off to a good start through coordination with a Thai subsidiary of Mitsui & Co., which approved of the purpose of the project and offered to provide full support. But it took six months to obtain final permission for use of land as the plant site because of a delay in establishing a law approving and authorizing recycling plants by the Thai government. For this and other reasons, it was not until January 2004 that Fuji Xerox obtained final approval from a local partner, to which it had planned to consign plant operations, and started to train a manager hired by its local subsidiary and two managers sent by the partner.

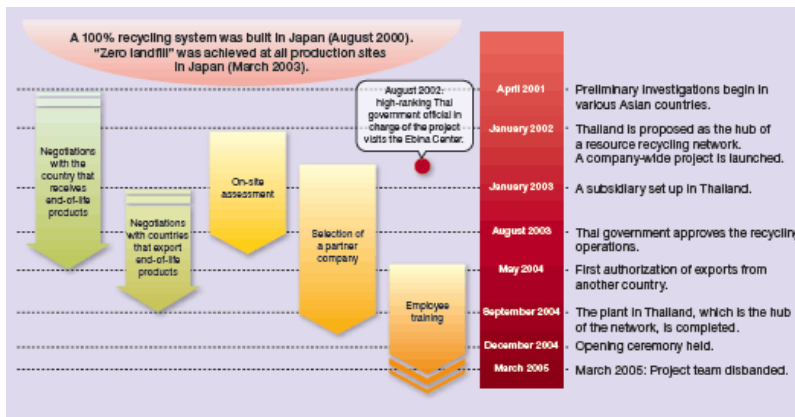
"We had the managers learn about all aspects of Fuji Xerox's recycling system, from its concept to actual operation and practical management, over a period of one month in Thailand and two months at the Ebina Plant", noted Yasuhiro Okutsu, who was responsible for personal training at the ARM Unit. "They would not have been able to manage the system properly without understanding why Fuji Xerox aims for 'zero landfill.'"

Fuji Xerox believes that working based on the full understanding of its philosophy and values will bring the best results for both the managers and the company.

Meanwhile, steps were being taken to export end-of-life products from the countries and regions where they originated. In most of the countries, export permits were obtained by meeting the requirements of the Basel Convention¹. An Australian law stipulates, however, that in principle, waste material shall not be exported to non-OECD countries. To send waste material to Thailand, exporters must undergo examinations by an advisory committee and obtain permission from the Minister of the Environment. The project team submitted a 420-page report to the committee that would examine the whole project in detail.

In the summer of 2004, a year and a half after consideration began, the committee was still continuing discussions, with export permits pending. Watanabe determined that if this stalemate continued, it would be impossible to operate a recycling system in the Asia-Pacific region. He himself attended a meeting of the committee and urged it to make a decision, stressing: "We have done everything we can, so please grant permission to Fuji Xerox." This appeal moved the committee, which finally granted export permits to Fuji Xerox.

- Processes up to the completion of the international integrated recycling system



* The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.

There is no end to taking on challenges

In December 2004, the international integrated recycling system began operating, with Fuji Xerox Eco-Manufacturing Co., Ltd. in Thailand as its hub. Three years had passed since the project was launched, and four years had elapsed since Watanabe first visited the Asia-Pacific region to conduct an inspection. "I never thought of giving up on the project. How to accomplish it was my only concern. Local affiliates had a long wait, but they all believed in the concept of the project," said Watanabe, looking back.

The project team was dissolved in March 2005. Watanabe's enthusiasm for recycling knows no bounds. "I would like to further automate disassembly and separation for recycling, as well as decide whether or not parts can be reused," Watanabe noted. "The volume of waste material collected from the Asia-Pacific region, Japan, and other countries outside the region would be very large. I am thinking about what we can achieve if all these efforts are combined."

Looking to the future, when the depletion of natural resources will become a serious problem, Fuji Xerox strives to recycle resources and minimize new resource input on an ongoing basis when it manufactures products. Efforts to cope with global resource depletion know no national boundaries. Fuji Xerox will continue to take on challenges to make society a sustainable one.

I am proud of my recycling job

Suwatit Rakkit
Production and Control Manager at a Thai partner company (HRA)

I previously worked for a manufacturer of automotive parts, but I took interest in a recycling project that was unprecedented in Thailand and have worked for HRA since April 2003. My current job involves operations and management based on production plans.

I received training before starting my job, but had a hard time because I did not understand the significance of recycling. Recycling is a job I have never done before, but it is wonderful because it helps utilize resources effectively and also contributes to the environment. My awareness of the environment in daily life has also changed. For example, I have stopped throwing away end-of-life products unnecessarily.

I felt that Japanese people have a strong sense of responsibility and that many of them will work hard to complete a job. I also would like to concentrate on the training of operators, so they can work responsibly toward the achievement of goals.

