

Fujitsu Group's Environmental Management: Outline of Environmental Protection Program (Stage IV)

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Environmental activities are an important element of corporate management, and corporations engage in environmental management under which environmental activities are carried out within the framework of their business activities. The Fujitsu Group has been conducting environmental activities in all of its business divisions under the slogan "We make every activity green." We have achieved excellent results in the basic structural elements of environmental management such as the building of environmental management systems, introduction of environmental accounting, publication of sustainability reports, development of Green Products, and fulfillment of our mission to achieve zero waste emission. In this paper, we focus on the Fujitsu Group Environmental Protection Program (Stage IV), which covers the fiscal period 2004 to 2006, and outlines our environmental management activities in response to regulations whose scope continues to expand both in Japan and other countries.

1. Introduction

Since its founding, the Fujitsu Group has made environmental issues an important theme in its operations and is now promoting environmental activities under the slogan "We make every activity green.¹⁾" In this paper, we describe our efforts in environmental management under which such environmental activities are systematically incorporated into the framework of corporate management and the current situation of our environmental protection program, which is an important element of our environmental management.²⁾

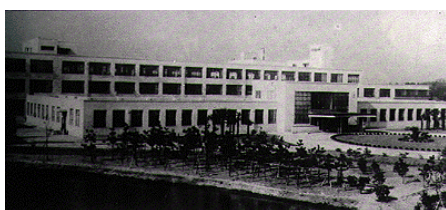
2. Basis of Fujitsu Group's environmental management

The basis of Fujitsu's environmental management is "Manufacturing in harmony with nature", and the environmental activities in it have been a vital part of our corporate culture ever since the founding of the Fujitsu Group. To illustrate this,

Fujitsu's first president applied the following principles in building our Kawasaki Facility — "the factory should not look like a factory", "the grounds should be like a park" and "they should be clean" — and in keeping with these principles, a pond was made in the front grounds. This was a highly novel factory design at the time (**Figure 1**). These principles are being adopted in the present day industrial park concept and have also been applied in the construction of the Numazu Plant, which is surrounded by a large area of greenery. They have been passed down as part of corporate culture by successive generations of management and employees, and have become an extremely valuable asset for Fujitsu.

3. Fujitsu Group's environmental management

The philosophy of Fujitsu's environmental activities was drawn up in 1992 as "Fujitsu's Commitment to the Environment", and the revised



(a) Kawasaki Facility (on completion)



(b) Kawasaki Research & Manufacturing Facilities (present view)



(c) Numazu Plant (present view)

Figure 1
Kawasaki Facility (at time of construction, currently) and Numazu Plant.

version of this was issued in 2002 as the “Fujitsu Group Environmental Policy” (**Figure 2**). In order to realize this philosophy, concrete goals were set forth in the Fujitsu Environmental Protection Program, and now the various divisions of the company are working together in carrying out activities towards these goals. Also, in our environmental management, we adopted environmental accounting in 1998 and the introduction of an environmental accounting system in recent years has improved efficiency in all Fujitsu Group companies.

Further, we have been actively informing our stakeholders about our environmental activities through an environmental report that we have been publishing since 1996. The organization for accomplishing Fujitsu’s environmental activities consists of the Environmental Committee, which discusses policy for environmental activities as a committee for the whole company, and the various committees established under the Environmental Committee for responding to individual issues in the line organization and environment protection programs.

Principles and rules governing how environmental activities should be conducted by Fujitsu Group companies and their employees are set forth in “The FUJITSU Way”. In “The FUJITSU Way”, “Environment” is defined as one of the 5 values important to the Fujitsu Group, and this has been developed into the Fujitsu Group Environmental Policy, our philosophy for environmental activities, and the Fujitsu Group Environmental Protection Program, our concrete plan for such activities. The environmental policy and action plans embody the desire of Fujitsu’s top management for the environment to be an essential element of our operations, that this is to be a common perception shared by all of our employees, and that they should work towards realizing the goals they set forth in them (**Figure 3**).

4. Fujitsu Group Environmental Protection Program (Stage IV)

In recent years, the circumstances surrounding the environmental activities of corporations have been changing greatly and many new regu-

Fujitsu Group Environmental Policy

Philosophy
 The Fujitsu Group recognizes that environmental protection is a vitally important business issue. By utilizing our technological expertise in the IT industry and our creative talents, we seek to contribute to the promotion of sustainable development. In addition, while observing all environmental regulations in our business operations, we are actively pursuing environmental protection activities on our own initiative. Through our individual and collective actions, we will continuously strive to safeguard a rich natural environment for future generations.

Principles

- We strive to reduce the environmental burden of our products throughout the product lifecycle.
- We are committed to conserving energy and natural resources, and practice a 3R approach (reduce, reuse, recycle) to create best-of-breed eco-friendly products.
- We seek to reduce risks to human health and the environment from the use of harmful chemical substances or waste.
- Through our IT products and solutions, we help customers reduce the environmental burden of their activities and improve environmental efficiency.
- We disclose environment-related information on our business activities, products, and services, and we utilize the resulting feedback to critique ourselves in order to further improve our environmental programs.
- We encourage our employees to work to improve the environment, bearing in mind the impact of their business activities and their civic responsibilities.

Figure 2
Fujitsu Group Environmental Policy.

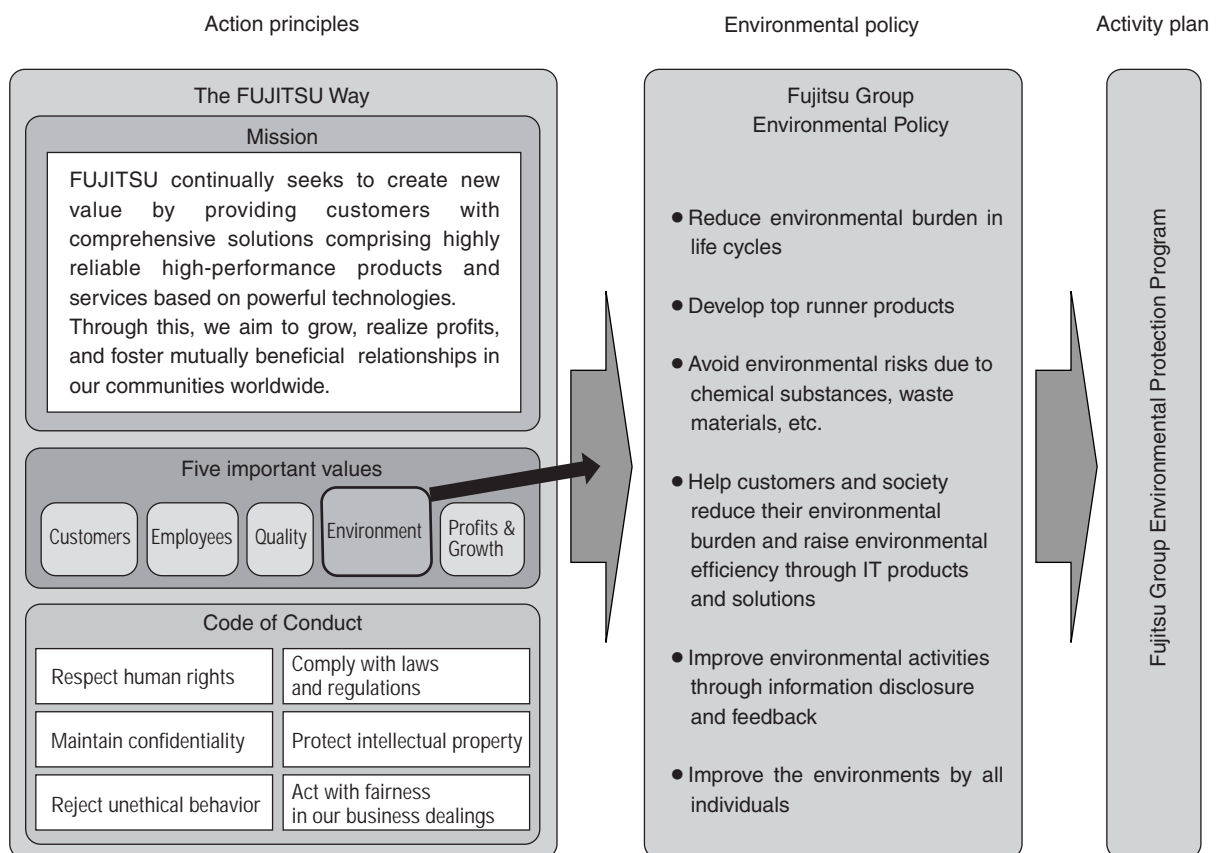


Figure 3
Position of the environment in "The FUJITSU Way"

lations affecting their business have been coming into force both in Japan and abroad. Some well-known ones are the Kyoto Protocol (reduction of greenhouse gas emissions in Japan by 6% on 1990 level by 2008 to 2012) and the following two in the EU: the RoHS (restrictions on the sale in the EU of electrical and electronic equipment containing lead, cadmium, mercury, hexavalent chromium, PBB, and PBDE [brominated flame retardants] from 1 July 2006 onwards) and the WEEE (obligation of manufacturers of electrical and electronic equipment to bear the cost of disposal for their goods sold in EU markets from August 2005 onwards) directives, which are scheduled to go into force in the near future.

The Fujitsu Group is thus faced with a variety of environmental issues it must address in the medium-to-long-term. Based on an analysis of these external factors and various internal factors, we drew up the Fujitsu Group Environmental Protection Program (Stage IV) for the fiscal period 2004 to 2006 and are currently pressing ahead with the activities in it. Having "Transition from environmental management to management for a sustainable environment" as

its slogan, the Fujitsu Group Environmental Protection Program (Stage IV) extends the scope of activities to include headquarters organization, marketing, software, and service divisions in addition to the research, design and development, and production divisions which were targeted in previous programs. The activities cover the complete scope of the Fujitsu Group's business (**Figure 4**). While the Fujitsu Environmental Protection Program (Stage III) had separate benchmarks for Fujitsu itself and the Fujitsu Group, the Fujitsu Group Environmental Protection Program (Stage IV) has unified the benchmarks so that the whole Fujitsu Group is pursuing the same goals (**Table 1**).

5. Outline of the Environmental Protection Program (Stage IV)

The description of the Environmental Protection Program (Stage IV) may be broadly divided under the following three headings.

1) Reinforcement of Group Governance and Supply Chain Initiatives

At the end of fiscal 2003, the marketing and software service divisions were brought into the

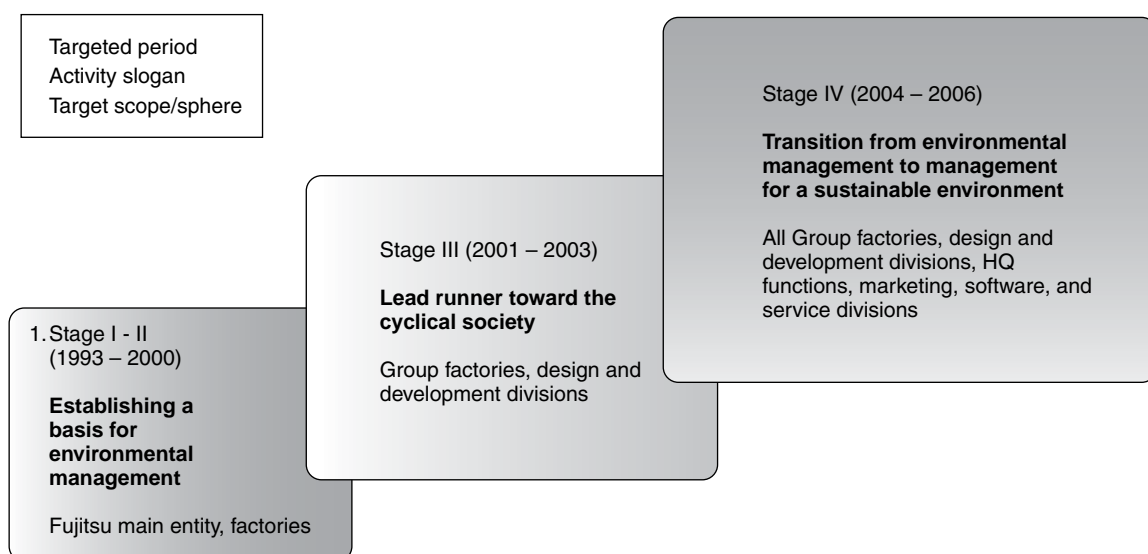


Figure 4
History of Fujitsu Environmental Protection Programs.

Table 1
Fujitsu Group Environmental Protection Program (Stage IV).

Items	Targets
Strengthening the environmental management	All the Group's affiliates and subsidiaries to establish their own frameworks of environmental management, which are based on the environmental management system (EMS), by the end of fiscal 2005.
Green procurement	To increase the rate of procurement from the suppliers who establish the environmental management system (EMS) up to 100% by the end of fiscal 2006.
Environmental measures of products	All the departments to produce their own Super Green Products furnished with top environmental elements by the end of fiscal 2006.
	All Fujitsu-brand products to be made free of specified hazardous substances by the Group by the end of fiscal 2005.
Products recycling	To establish the recycling system in Europe by the end of fiscal 2004, and in North America, Asia by the end of fiscal 2006.
	To increase the reuse and recycling rate of collected end-of life products in Japan up to 90% by the end of fiscal 2006.
	To increase the utilizing rate in the Fujitsu Group in Japan of collected waste plastics up to 20% by the end of fiscal 2006.
Environmentally Conscious Solutions	To provide "Environmentally Conscious Solutions" which reduce customers' environmental burden from all areas of software and service businesses by the end of fiscal 2006.
Global warming countermeasures	<p>Aim at increasing the environmental efficiency throughout lifecycles.</p> <ul style="list-style-type: none"> ● To reduce the carbon dioxide emission resulted from energy consumption down to or below its actual emission of fiscal 1990 by the end of fiscal 2010. (To reduce the actual emission of fiscal 2000 by 15% by the end of fiscal 2006.) ● To reduce greenhouse gases other than carbon dioxide by 10% from their actual emission of fiscal 1995 by the end of fiscal 2010. ● To contribute to the reduction of greenhouse gases by efficient physical distribution, product recycling, development of energy saving products, etc.
Promotion of Green Factory	To reduce the discharge of chemical substances those are subject to the Pollutant Release and Transfer Register (PRTR) by 15% from their actual discharge of fiscal 2001 by the end of fiscal 2006.
	To reduce the amount of waste generation by 3% from its actual amount of fiscal 2003 by the end of fiscal 2006.

application scope of environmental systems and ISO14001 certification, which had been obtained for individual business units, was unified as certification for the main Fujitsu entity as a whole. In the future, in addition to strengthening Group governance, we will install a unified environmental management system conforming to ISO14001 in all Group companies, including overseas ones, by the end of fiscal 2005 in order to conduct activities towards the achievement of a company-wide environmental protection program in a more systematic and transparent fashion. We will expand supply chain initiatives to include our partners, under which they will be also be requested to practice green procurement.

2) Reduction of Environmental Burden due to Fujitsu Customers and Society as a Whole

Fujitsu will have all of its divisions provide "Super Green Products" among their mainstay products, which are highly superior as regards environmental performance in terms of such aspects as energy saving, 3R, and complete absence of harmful substances. We will also expand our efforts to reduce environmental burden due to customers' use of our products by further developing our "Environmentally Conscious Solutions", whose purpose is to help our customers reduce environmental burden.

Fujitsu will also promote the building of recycling systems in other countries where stricter regulations on recycling are already in place

and develop a framework for achieving a recycling society on a global scale. In Japan, through the installation of the Fujitsu Recycling System (FRS), we are already engaging in the recovery and recycling of business and home use personal computers.

3) Individual Efforts to Reduce Environmental Impact

As a measure against global warming, we will aim to raise environmental efficiency in the overall life cycle. In the area of direct emissions — those from factories and business offices in the Fujitsu Group — we will make efforts to reduce absolute amounts of electricity and fuels used. In concrete terms, we will aim to reduce CO₂ emissions to below the fiscal 1990 level by the end of fiscal 2010.

Fujitsu will also endeavor to reduce indirect emissions — those stemming from transactions with our partners and outsourcing companies — for instance, in distribution through the introduction of modal shifts and improving transportation efficiency, and increase green procurement for materials. In the area of recycling, we will make efforts to reduce amounts of materials generated overall and raise reuse rates.

Regarding the use of Fujitsu products by our customers, we will strengthen measures to combat global warming by having all divisions make efforts to reduce product energy consumption through greater energy efficiency and customer solutions (Figure 5). In this regard, we will also engage in “Green Factory” activities, which involve reducing quantities of chemical substances (PRTR substances) and the amount of waste material produced.

Up till now, the Fujitsu Group has been actively pursuing energy savings and reductions in waste and amounts of chemical substances discharged in order to reduce the environmental impact of its business operations. For the future, in addition to continuing these activities, we will give priority to raising the environmental efficiency of our customers and that of the community as a whole in our role as an IT company (Figure 6).

6. Conclusion

In environmental activities, it is important to consider many aspects such as the system for these activities, concrete policies, and raising peoples’ environmental awareness. At Fujitsu, in order to realize our environmental management

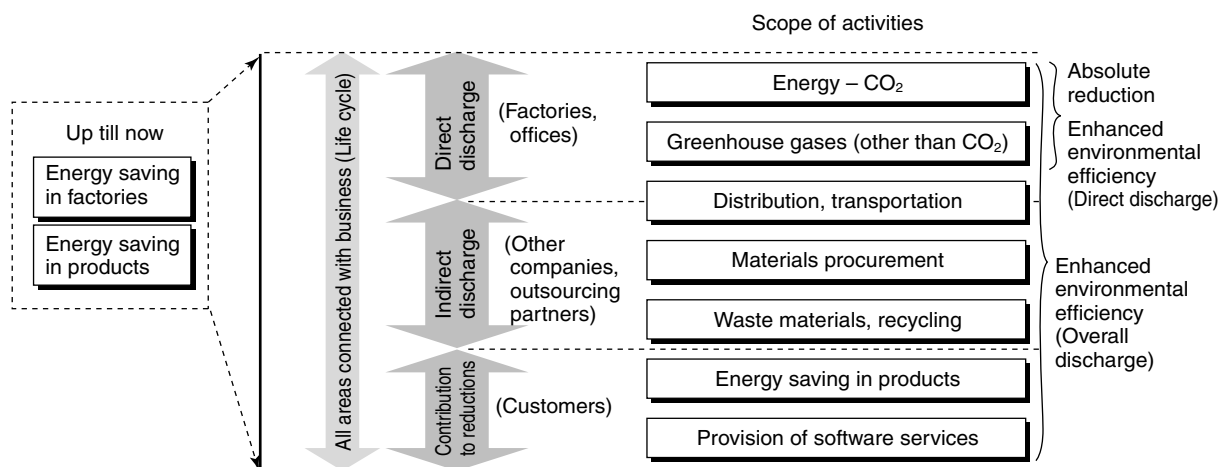


Figure 5 Raising environmental efficiency in overall life cycle.

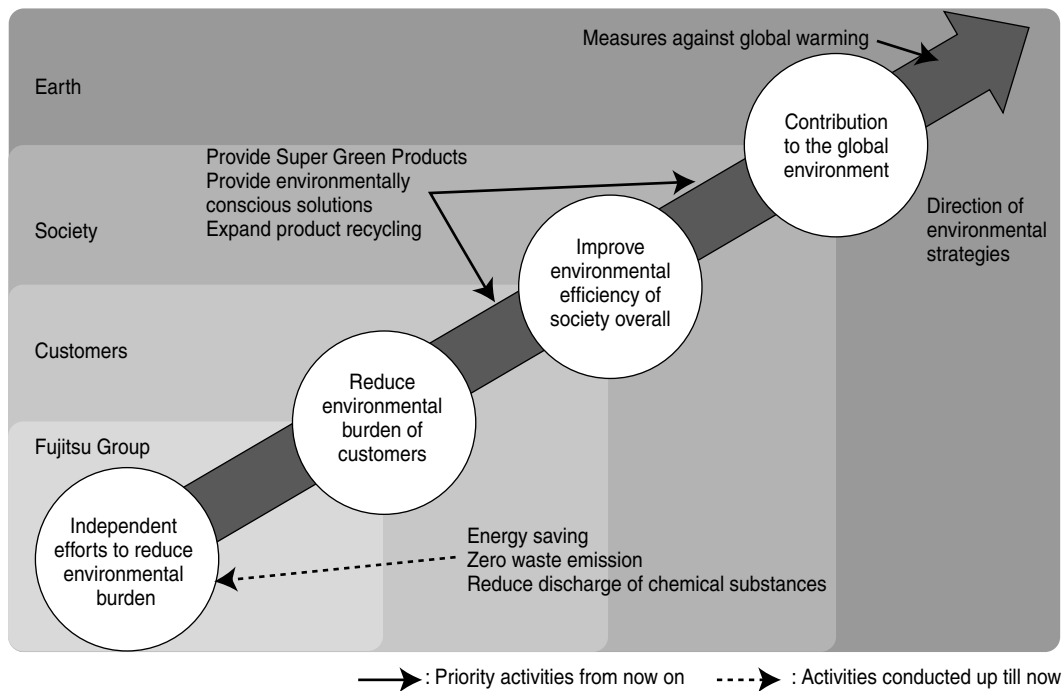


Figure 6
Environmental goals of Fujitsu Group.

goals, environmental activities will be promoted within the business plans of Group companies with the aim of having employees spontaneously engage in such activities. Also, by continuously creating value through our activities, products, and services and further developing our business, we aim to maintain our contribution to customers and help in creating a better world for everyone.



Hideru Yamaguchi received the B.A. degree in Commercial Science from Keio University in 1974. He joined Fujitsu Ltd. in 1974, where he has been mainly engaged in human resources and general affairs. Since June 2004, he has been President of the Corporate Environmental Affairs Unit.

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