

Environmental Management

We at Fuji Electric are united in tackling environmental issues based on our policy of contributing to society by developing our energy-related business globally.

Message from the Environmental Officer

Looking at Our Business Activities from a Global Perspective and Promoting Environmental Management to Reduce our Environmental Impact

The main pillars of Fuji Electric's Environmental Vision 2020 are to stop global warming, create a recycling-oriented society, and meet our corporate social responsibilities. To achieve these aims, we will promote environmental management, and contribute to the protection of the global environment by providing energy-conserving and energy-creating products and technologies. We will also undertake proactive measures to reduce environmental impact through our own production activities.

In fiscal 2012, in response to soaring energy costs and changes in electric power, we continued to carry out energy-conserving initiatives already in place, such as introducing high-efficiency equipment and raising the awareness of energy-conservation. We also started new activities aimed at developing smart factories.

The development of smart factories aims to maximize energy efficiency by increasing the energy self-sufficiency ratio, curbing peak electric power, and supplying energy for production activities just in time (JIT).

From fiscal 2013, using four factories with differing energy usage ratios for electricity and heat as models, we will test an energy management system based on the concepts of visualizing, analyzing, and optimizing energy usage. We will also prepare monitoring systems so that customers will be able to check the effects of this energy management directly on site.

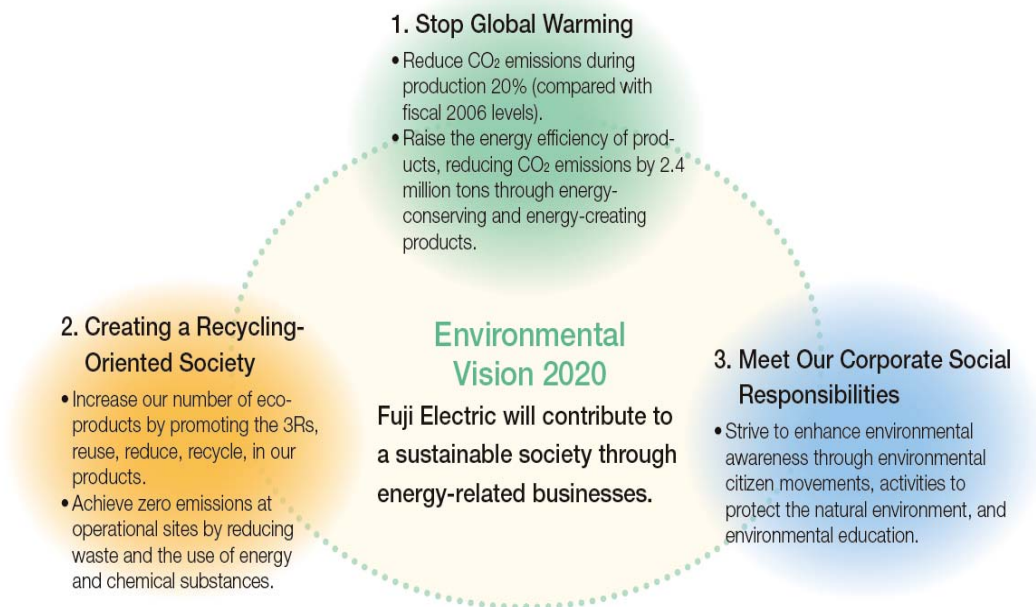
Going forward, we will draw upon our electricity and heat energy technologies to create energy-conserving equipment and promote them globally, as well as contribute to the realization of a sustainable society.



Michio Abe
Corporate General Manager of
Production and Procurement Group
Director and Senior Managing
Executive Officer
Fuji Electric Co., Ltd.

Environmental Vision 2020

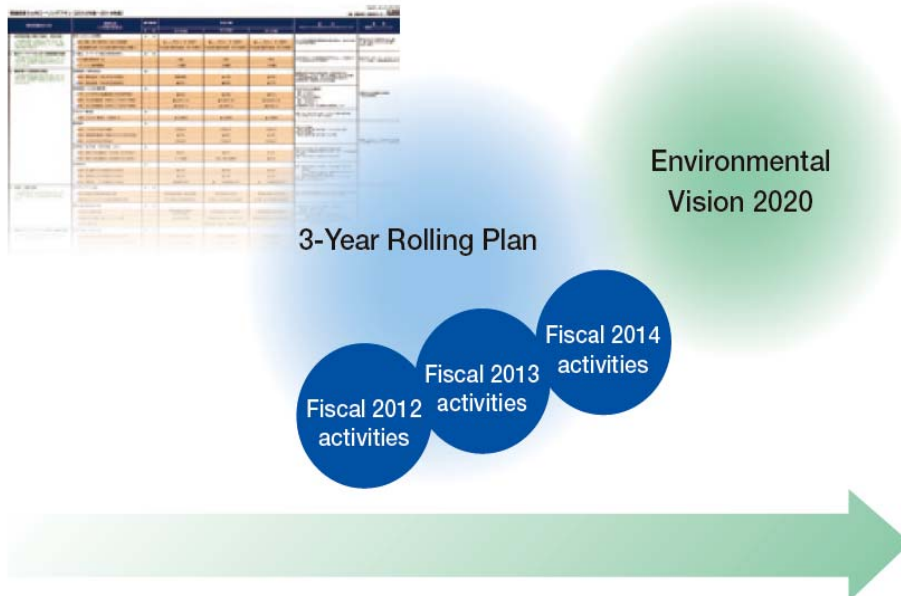
Fuji Electric's Environmental Vision 2020 was established to provide direction for our medium- to long-term environmental activities, centered around stopping global warming, creating a recycling-oriented society, and meeting our corporate social responsibilities. In addition to reducing the environmental load of our own production activities, our goal is to achieve a sustainable society by providing energy-saving, energy-creating products and technologies.



Environmental Management 3-Year Rolling Plan

To achieve the goals of the Environmental Vision 2020, Fuji Electric has formulated an Environmental Management 3-Year Rolling Plan, designed to promote ongoing efforts.

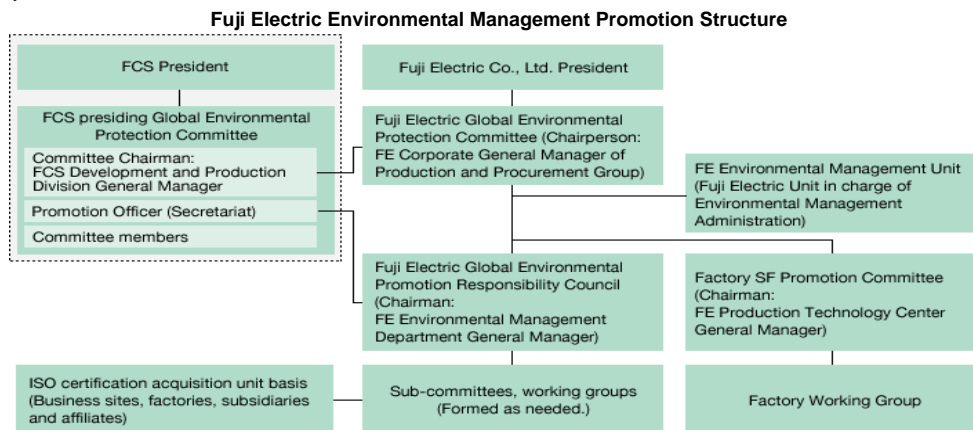
The objectives of the plan are to verify each year that the environmental management strategy is addressing societal changes, and to establish detailed targets in line with the Fuji Electric Basic Environmental Protection Policy in various areas, such as the enhancement of environmental management governance and the establishment of measures to address the use of chemical substances and prevent global warming. Fuji Electric will continually make revisions to the targets and action plans for each fiscal year up to 3 years in advance, and aim to achieve the goals of Environmental Vision 2020 with certainty.



Environmental Management Organizational Framework

Fuji Electric has positioned efforts aimed at protecting the environment as an important component of its CSR activities. At the same time, the Company adopts a global approach toward environmental management and addressing the needs of an ever-changing society. Fuji Electric established the Global Environmental Protection Committee, which reports directly to the president. This committee is charged with deliberating and determining the basic, comprehensive environmental management measures for the Company. Comprised of the officers responsible for environmental management at Fuji Electric's principal factories and affiliated companies, we also hold sessions of the Fuji Electric Global Environmental Promotion Responsibility Council when necessary to look into the development of major policies and solutions with respect to new issues and as forum through which to exchange information. Moreover, we have set up sub-committees and working groups (WGs) to resolve specific issues by theme. In fiscal 2012 we established the SF Promotion Committee to promote adoption of Smart Factory technologies in response to changes in power supply conditions following the Great East Japan Earthquake. This effort is built around the concept of reducing energy use, and better visualizing, analyzing, and optimizing our consumption of power.

*SF: Smart Factory



Environmental Management in accordance with ISO 14001

Fuji Electric has put in place environmental management systems at all of its production operations and sales bases in Japan as well as all of its overseas production operations and is pursuing third-party certification.

The Status of ISO 14001 Certification (As of March 31, 2013)

Consolidated businesses and operational sites	Japan	Overseas
Number of sites	33	11
Acquired	32	9
Not acquired	1	2

Internal Environmental Audits

Since fiscal 2003, the internal divisions responsible for promoting environmental management have continued to conduct annual environmental site inspections of ISO 14001-certified sites.

As a result of continuing these activities for 10 years, we have enhanced our initiatives for realizing the Environmental Vision 2020 and the platforms for promoting each aspect of environmental management. We have also established consistent communication within the environmental management promotion structure. As a result, we changed the patrolling frequency, and in fiscal 2012 we conducted patrol inspections at 15 sites in Japan and 4 overseas sites which had been selected. These patrol inspections placed particular emphasis on checking that sites had put in place measures in response to the amendments to the Water Pollution Control Act.

By using environmental audit checklists and other tools to check the status of operations and provide guidance to those sites not subject to patrol inspections in fiscal 2012, we are confirming compliance with environmental laws and regulations, and reducing environmental risks.

Environmental Risk Management

In promoting environmental management, we believe that in addition to the environmental contribution of our products, we must reinforce environmental risk management at each of our business sites in order to maintain stable production systems.

In fiscal 2012, during the internal audit we used the environmental risk maps*, which were drawn up in the previous fiscal year at all domestic production sites, to raise the effectiveness of local checks related to amendments of the Water Pollution Control Act.

Going forward, we will continue to conduct local confirmations based on these risk maps as part of ongoing efforts to enhance risk management.

*Environmental Risk Map: A map which contains historical data for each production site (such as their history of chemical substance use, history as legally specified facilities, and history of building extensions or reconstruction).

Bolstering Environmental Activities (Operating the Green Factory / Green Office Evaluation Systems)

Activities based on an environmental management system (EMS) are the focus of Fuji Electric's environmental efforts at each of its operating locations.

In order to increase the effectiveness of EMS activities for realizing the Environmental Vision 2020, we evaluate each Fuji Electric operating site under the Green Factory/Green Office Evaluation System*. In fiscal 2012, assessments were conducted at 27 sites in Japan. Of the evaluated sites, 19 achieved a gold rating, 4 received silver, and 4 received bronze. Going forward, we will continue to strive for all sites to achieve a gold rating.

*Green Factory / Green Office Evaluation System: The Green Factory / Green Office Evaluation System evaluates ongoing improvements to environmental activities. These include elements of our business activities that relate directly to our Environmental Vision 2020, which is a guidepost to our medium- to long-term environmental activities. Specifically, the system evaluates the number of environmental products developed, the percentage of sales derived from environmental businesses, and the contribution to a reduction in society's CO₂ emissions resulting from our products. A site that has made improvements in all set targets received a gold rating, a site that has made improvements to at least half of the targets received a silver rating, while a bronze rating is given if the site has made improvements to less than half of the targets. A site is certified as a Green Factory / Green Office when it achieves a gold rating three consecutive years.

Green Factory/Green Office Evaluation Factors

- Environmentally friendly products and services
- CO₂ reduction
- Reduced waste and efficient use of resources
- Chemical substance management and reduction of toxic atmospheric emissions
- Reduction of environmental risk and compliance
- Communication with local communities



On-site inspection of Green Factory /
Green Office evaluation at Fukiage factory in Japan

Environmental Accounting

Fuji Electric introduced environmental accounting in fiscal 2000 as a key means of assessing environmental management performance. Using the 2005 guidelines released by Japan's Ministry of the Environment, we established in-house calculation methods for environmental preservation costs and benefits. Each year, we ascertain and analyze these costs and benefits and disclose this information to the public.

Stance toward Environmental Accounting Calculations

We calculate "direct benefits," such as revenue from sales of valuable items and energy conservation, as well as "estimated benefits," which is a conversion to monetary value of the energy-savings benefit from the use by customers of existing environmentally friendly products (such as vending machines and some inverters) and energy-creating products (such as solar cells and geothermal systems).

Fiscal 2012 Achievements

Environmental conservation costs totaled ¥19.02 billion, with investment at ¥2.78 billion and expenses at ¥16.24 billion. The environmental conservation benefit totaled ¥33.81 billion, including revenue from sales of valuable items at ¥1.23 billion, savings from energy conservation of ¥0.73 billion, and estimated benefits of ¥31.86 billion.

In fiscal 2012, production site-related investment totaled ¥2.34 billion, with environmental investment largely directed toward projects aimed at developing smart factories (introduction of solar batteries and fuel cells in the Yamanashi area) and introducing energy-conserving equipment (inverters in Malaysia,

production facilities upgrades in the Chiba area). Moving forward, Fuji Electric will continue to engage in systematic investment and increase energy conservation products.

Environmental Conservation Costs and Benefits (Fiscal 2012)

Period covered: April 1, 2012 to March 31, 2013

Scope: 14 business sites + 17 consolidated subsidiaries (eight subsidiaries in Japan and nine overseas subsidiaries)

Environmental Conservation Costs (Fiscal 2012)

(Millions of yen)

Categories corresponding to business operations	Main Content	Total (Compared to the previous term) Compared to the previous term)	Breakdown	
			Amount invested	Expenses
	Costs within the business area	3,159 (+1,624)	2,337	822
1	Pollution prevention costs	548 (-22)	327	221
	Global environmental conservation costs	2,144 (+1,568)	1,963	181
	Materials recycling costs	467 (+78)	47	420
2	Upstream/downstream costs	23 (+2)	0	23
3	Management costs	463 (-381)	15	448
4	R&D costs	15,344 (+1,736)	431	14,913
5	Social activity costs	9 (-1)	1	8
6	Environmental damage costs	27 (-34)	0	27
Total		19,025 (+2,946)	2,784	16,241

Economic Benefit of Environmental Conservation Measures (Fiscal 2012)

(Millions of yen)

Categories	Main details	Total (Compared to the previous term)
Revenue	Amount received from sale of valuable items for recycling	1,229 (+180)
Savings	Reduction of expenses through energy conservation, reduction of landfill waste, reduction of water bill through water conservation	728 (+611)
Estimated benefit	Energy reduction through the use of environmentally friendly products by customers	31,856 (+13,026)
Total		33,813 (+13,817)

Note 1: The "estimated benefit" is calculated as the economic benefit of energy savings when products with improved energy efficiency are used by customers, and is converted using the following formula:

Benefit (¥) = Σ [(annual amount of electrical power consumed by former equipment - annual amount of electrical power consumed by new equipment) × Volume shipped annually in Japan × Electrical power standard cost](electrical power standard cost: ¥10/kWh)

Note 2: The "estimated benefit" includes environmentally friendly products such as solar cells, vending machines, cash counters, gas alarm equipment and LED lighting.