

Environment

Efforts to protect the global environment are a key management issue for Fuji Electric, and with the establishment of our Basic Environmental Protection Policy, we continue to promote environmental management with the goal of contributing to global environmental protection through our business activities.

In fiscal 2012, we began the Smart Factory Initiative to optimize energy usage by coordinating electrical and thermal energy technologies with production planning. In fiscal 2014, we continued demonstrating Smart Factory Initiative benefits at four model factories (Kawasaki, Tokyo, Yamanashi and Mie), while deploying similar measures at other factories in Japan.



Fuel cells installed at a model factory (Yamanashi Factory) under Fuji Electric's Smart Factory Initiative

Basic Environmental Protection Policy

1. Offering products and technologies that contribute to global environmental protection
2. Reduction of environmental burden throughout product life cycles
3. Reduction of environmental burden in business activities
4. Compliance with laws, regulations, and standards
5. Establishment of environment management systems and continuous improvements of the systems
6. Improvement of employees' environmental awareness and social contribution
7. Promotion of communication

Fuji Electric's Material Issues for Environmental Management

Fuji Electric brought together staff from its management planning, technology development and business divisions to identify and prioritize material issues in promoting environmental management based on our Basic Policies on Environmental Protection, from both stakeholder and corporate viewpoints.

In 2009, we established Environmental Vision 2020 to guide our medium-term activities. The vision sets forth the three important themes below, and establishes specific measures and targets for addressing them.

Material Issues Identified

1

Stop Global Warming

- Reduce CO₂ emissions through products
- Reduce CO₂ emissions during production

2

Create a Recycling-Oriented Society

- Promote the 3Rs [reuse, reduce, recycle] in our products.
- Reduce waste, use of energy and chemical substances

3

Meet Our Corporate Social Responsibilities

- Enhance environmental awareness

Viewpoints Incorporated in Identifying Material Issues

Stakeholder Viewpoint

Global issues

International consensus, laws and regulations, industry agreements

Impact of Fuji Electric's activities

Corporate Viewpoint

Contribution to corporate management
 Connection to management philosophies and policies
 Core technologies
 Increased demand for products and services that contribute to global environmental protection

Management risks

Environmental Vision 2020

This vision is centered on three specified material issues of 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, we also seek to achieve a sustainable society by providing products and technologies that leverage our strengths in energy technologies.

Our main initiatives under the issue of stopping global warming are to reduce CO₂ emissions during production by 20% in fiscal 2020 compared with the fiscal 2006 level of 381,000 tons, while reducing society's CO₂ emissions by 17 million tons by expanding sales of energy-saving and energy-creating products.

Under the issue of creating a recycling-oriented society, our key measures with respect to production resources are to lower final disposal rates by reducing waste and recycling resources. For water resources, we are endeavoring to cut the use of water resource inputs per unit of production. We are particularly stepping up efforts to increase water reuse rates at production facilities that consume a lot of water and at overseas facilities where there are significant water supply risks.

In this report, we present our main initiatives to stop global warming and to create a recycling-oriented society*.

* Unless otherwise specified, environmental activity targets and results in this report encompass domestic consolidated subsidiaries and overseas consolidated production subsidiaries.

1. Stop Global Warming

- Reduce CO₂ emissions during production 20% [compared with fiscal 2006 levels]
- Raise the energy efficiency of products, reducing CO₂ emissions by 17 million tons through energy-conserving and energy-creating products.

2. Create a Recycling-Oriented Society

- Increase our number of eco-products by promoting the 3Rs [reuse, reduce, recycle] in our products.
- Achieve zero emissions at operational sites by reducing waste and the use of energy and chemical substances.

Environmental Vision 2020

Fuji Electric will contribute to a sustainable society through energy-related businesses.

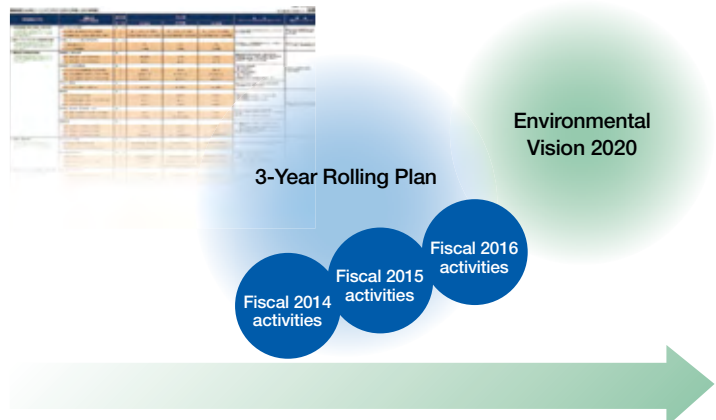
3. Meet Our Corporate Social Responsibilities

- Strive to enhance environmental awareness through environmental citizen movements, activities to protect the natural environment, and environmental education.

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.

In this initiative, we verify each year that the environmental management strategy is addressing societal changes, and establish detailed targets in various areas, such as the enhancement of environmental management governance, measures to prevent global warming, and measures to address the use of chemical substances. Fuji Electric will continually make revisions to the targets and action plans for each fiscal year up to three years in advance, and aim to achieve the goals of Environmental Vision 2020 with certainty.



Fiscal 2014 Efforts to Stop Global Warming

Reducing CO₂ During Production

In Japan, we have been moving ahead with activities to reduce CO₂ emissions since fiscal 2012 to conserve energy and curb costs.

These efforts included reducing electric power by the review and improvement of clean room ventilation and compressor systems, conserving fuel through a revision of production processes, and introducing a cogeneration system (combined heat and power) to curb peak electric power use. In fiscal 2014, these and other energy-saving activities resulted in economic benefits equaling 6.3% of fiscal 2013 energy costs.

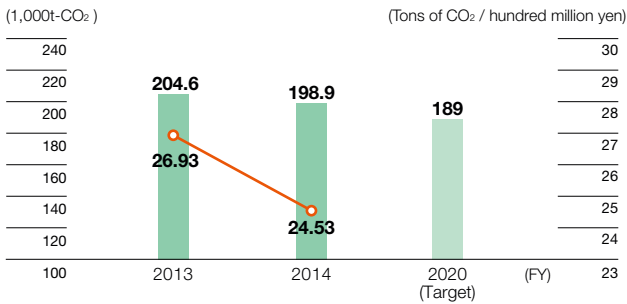
Fiscal 2014 CO₂ emissions from production were 198,900 tons (a 33.6% reduction from fiscal 2006), which surpassed the target of 209,000 tons (a 30% reduction from fiscal 2006). In fiscal 2014, energy conservation efforts enabled us to cut CO₂ emissions by around 10,300 tons,

although the overall reduction was about 6,000 tons when compared to the previous fiscal year due to higher production volumes and other factors.

Overseas, we revised our steam production systems and implemented surplus heat recycling and other energy-saving steps. Because overseas production volumes in Thailand, Shenzhen in China and elsewhere rose by a total of 23%, CO₂ emissions were 127,200 tons* (down 2.5% from fiscal 2010), which did not meet the target of 122,000 tons (down 6.4%).

While the total emissions reduction target for overseas was not met, worldwide we achieved the target in Environmental Vision 2020 of a 20% reduction over 2006 levels, equivalent to 332,000 tons, or a 12.9% reduction from the previous year, with emissions totaling 326,000 tons, for a 14.4% reduction.

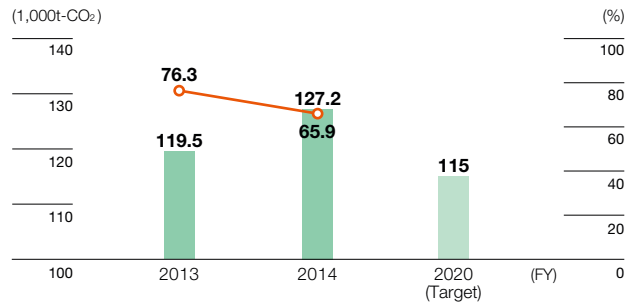
CO₂ Emissions and CO₂ Emissions per Unit of Sales in Japan



■ CO₂ Emissions (left) — CO₂ Emissions per Unit of Sales (right)

* Emissions per unit of sales is calculated by dividing the CO₂ emissions amount by consolidated net sales.

Overseas CO₂ Emissions and CO₂ Emissions per Unit of Production



■ CO₂ Emissions (left) — CO₂ Emissions per Unit of Production (right)

* The amount of CO₂ emitted by production volume (presented taking the value for FY2006 to be 100).

Case Example

Smart Factory Initiative at the Yamanashi Factory

Saving Energy by Optimized Electrical and Thermal Energy Use Linked with Production Planning

Because the Yamanashi Factory produces semiconductors 365 days a year, stable power supplies and energy conservation are essential. The Smart Factory Initiative is thus being promoted both as a way to avoid energy risk and to reduce energy consumption.



Generator

As part of energy risk avoidance, in fiscal 2013 we installed four of our fuel cell units, and in fiscal 2014 added a gas-engine driven generator, bringing the factory's energy self-reliance rate to 100%. With the additional introduction of low-voltage uninterruptible power systems (UPS) units, the factory is also protected against instantaneous voltage drops.

In terms of reducing energy consumption, inverters were applied to fans and pumps or motors were replaced with high-efficiency motors, while the factory also makes effective use of fuel cells and generator exhaust heat as part of a cogeneration system. The factory works to optimize electrical and thermal energy use through an energy management system, resulting in a cut in energy consumption of about 30% in fiscal 2014 compared to fiscal 2010.



Fuji Electric high-efficiency inverter.

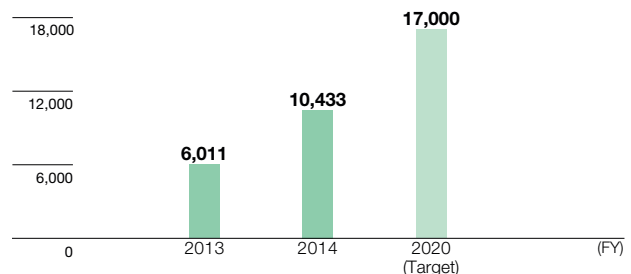


Energy monitor displays the energy being used

Reducing Society's CO₂ Emissions through Products

In fiscal 2014, the contribution to CO₂ emission reductions from products was up 4,422,000 tons from fiscal 2013 to 10,433,000 tons, clearing our target of 7,190,000 tons. This reflected, among other factors, expanded sales of inverters, mega solar power conditioners, solar power generation systems and electronic devices.

Reduced CO₂ Emissions through Products
(1,000t-CO₂)



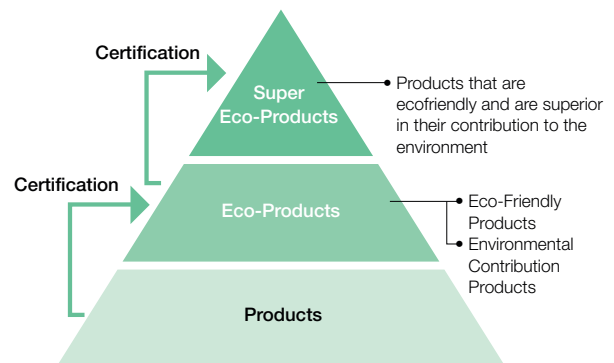
* Amount of CO₂ reduction based on one year of operation of products shipped for each fiscal year after fiscal 2009.
(Calculated making reference to the quantification method of GHG emission reductions stipulated in the Electrical and Electronics Industries' "Action Plan for Commitment to a Low-Carbon Society.")

Eco-Product Certification System

Fuji Electric is developing eco-friendly products, which enhance energy efficiency and reduce the use of chemical substances, and environmental contribution products, which help reduce society's overall impact on the environment. We are continuing to promote the spread of these products.

In this initiative, Fuji Electric has established a common Fuji Electric Eco-Product Certification System. We evaluate the degree of product eco-friendliness on a Company-wide platform. Products meeting fixed criteria are certified as "eco-products," while those that are at the top of the industry for environmental benefit and contribution, and which are recognized outside the Company at the national level for environmental superiority are labeled "super eco-products."

In fiscal 2014, 21 offerings were certified as eco-products, and another 8 as super eco-products. As a result, we now have 178 eco-products and 24 super eco-products.



Eco-Friendly Products: Products that have a reduced environmental impact over the entire product lifecycle. These products are superior to traditional products in at least four of six standard areas, including energy conservation, resource conservation, and recyclability.

Environmental Contribution Products: Products that contribute to environmental preservation during use. Products that contribute to the environment by utilizing natural energy or information and communication technology.

Fiscal 2014 Super Eco-Products

Awarded the Japan Machinery Federation's President Award for Superior Energy-Saving Machines

"F-COOL NEO" Indirect Outside Air Conditioning Unit

- Responding to changes in outside air temperature, the F-COOL NEO switches automatically between three modes of operation (a hybrid operation of indirect outside air cooling and refrigeration cooling), enabling optimal control over system operation and selecting the mode that provides the maximum energy savings.
- Utilizing the energy of outside air throughout the year can result in power consumption that is one-third that of conventional air conditioners.
- The equipment requires only a power supply, needing no cold water or cooling equipment, making energy-saving operation possible.
- Because outside air is not conducted directly through the air propulsion unit, contamination by outside moisture and dust is avoided, making the system ideal for data centers, precision machining, food and pharmaceutical production areas, and other places where clean cooling systems are required.



Fiscal 2014 Initiatives to Create a Recycling-Oriented Society

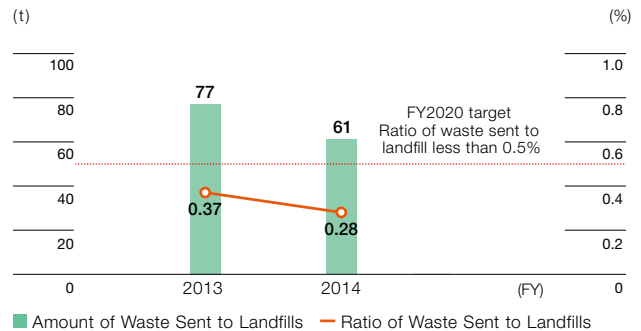
Waste Reduction

In addition to efforts to curb waste, Fuji Electric works to promote resource recycling, and has established a goal of zero waste emissions—a ratio of waste sent to landfills to total waste of no more than 1%.

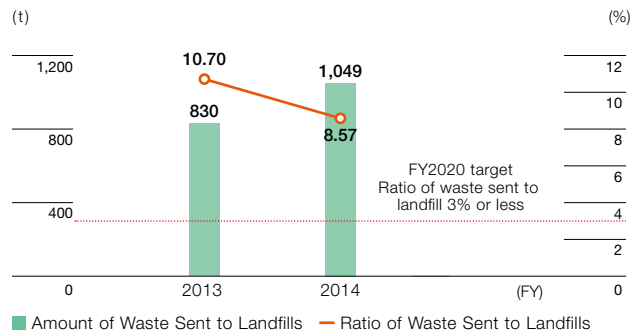
In Japan, efficient use of resources (reduce, reuse, recycle) has enabled Fuji Electric to achieve its goal of zero waste every year since fiscal 2004. In fiscal 2014, we achieved our goal of reducing the ratio of waste sent to landfills to below 0.5%, with a ratio of 0.28%.

Meanwhile, we have also begun promoting zero emission efforts at our factories overseas. Since fiscal 2008, we have been collecting data based on waste categories used in Japan (volume generated, volume recycled, volume sent to landfills). In fiscal 2014, we clarified the types of waste generated by each operation based on their respective waste classifications to assist our efforts to encourage more effective use of resources. Looking ahead, we will continue to monitor how waste is processed, consider further methods for recycling resources, and aim for even greater improvement in the ratio of waste sent to landfills.

Amount and Ratio of Waste Sent to Landfills in Japan



Amount and Ratio of Waste Sent to Landfills Overseas



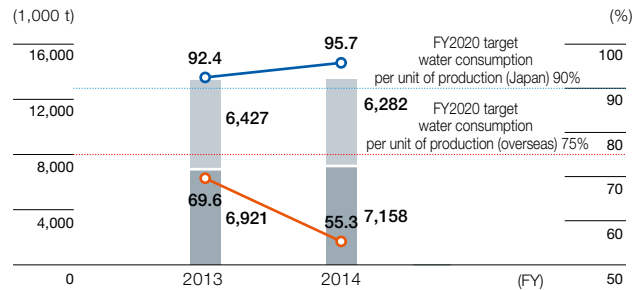
Efficient Use of Water Resources

In view of the problem of global water resource depletion, in addition to its efforts to comply with wastewater quality requirements and reduce wastewater, Fuji Electric launched an initiative aimed at more efficient use of water resources.

Using fiscal 2010 levels as a standard, this initiative aims to reduce both total water intake and water consumption per unit of production at our domestic manufacturing sites by 1% each, with the goal of reducing those levels by 10% in fiscal 2020.

Using fiscal 2011 levels as a standard, since fiscal 2013 we have established a goal for our overseas production sites of reducing water consumption per unit of production by 25% in fiscal 2020, and are conducting activities to reach that target.

Water Consumption and Water Consumption per Unit of Production



Water consumption: ■ Japan ■ Overseas

Water Consumption per Unit of Production: — Japan — Overseas

* Water consumption per unit of production (For Japan, presenting FY2010 level as 100; for overseas, presenting FY2011 level as 100).

Case Example

Shikoku Division Environmental Management System

Involving Everyone in Environmental Activities

At the Shikoku Division, practice committee members are selected for industrial waste reduction, energy conservation and other individual environmental programs across four regions—Takamatsu, Matsuyama, Kochi and Tokushima. Together, they promote the division's environmental management system.

Given the importance of improving awareness of environmental issues and maintaining ongoing activities, the division issues every employee an Environmental Management Card printed with the Company's environmental policies. On the back, employees fill in their own list of things they could or should be doing and display them at their desks. Every-

one gets involved.

The division has been recognized for these efforts, which have been effective in reducing and recycling business-related waste and curbing greenhouse gas emissions, and was given the 3rd Annual Eco City Takamatsu Excellent Business Award by Takamatsu City.

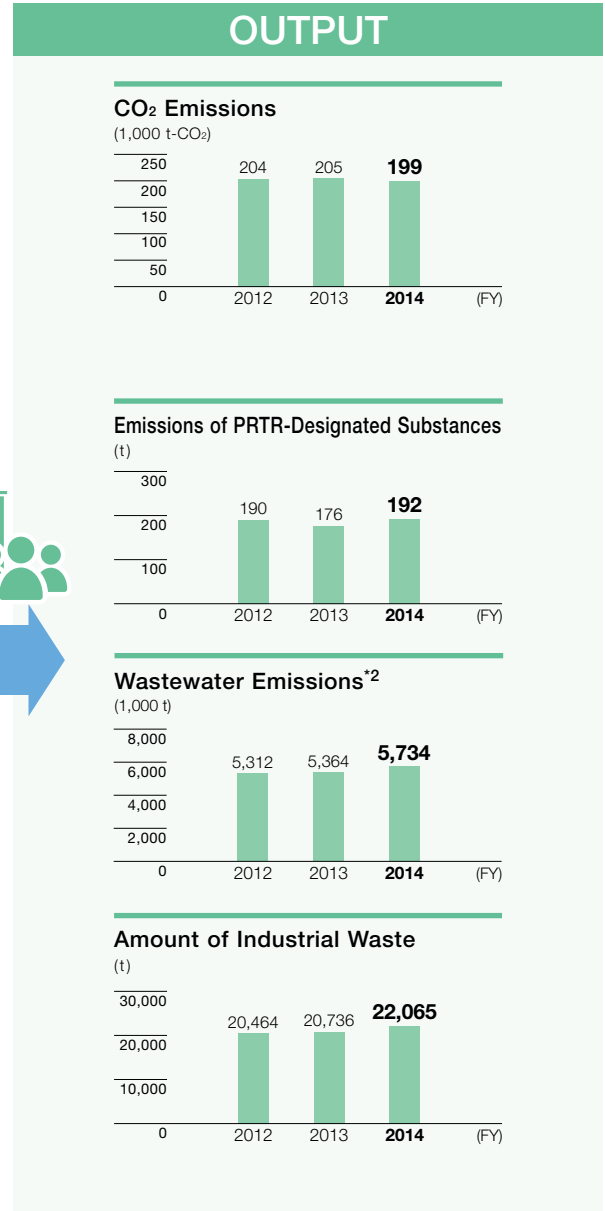
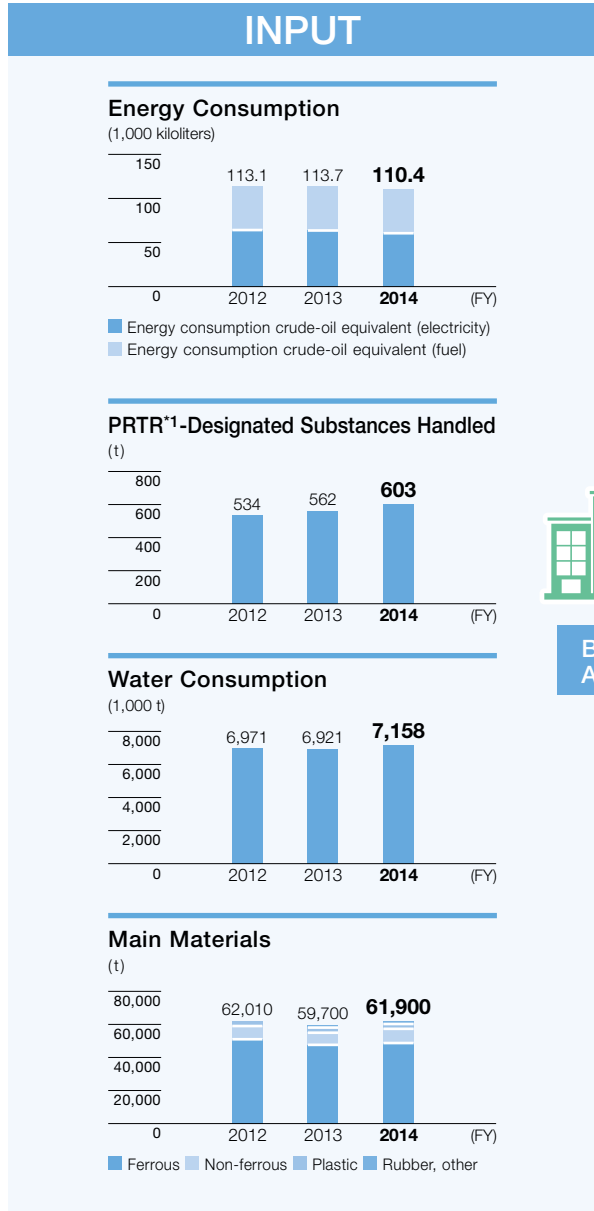


Environmental Management Cards distributed to every employee

Mapping the Interplay between Business Activities and Environmental Impact

Fuji Electric is constantly working toward more efficient use of resources and energy and the reduction of waste throughout all of its business activities. We are also proactive in our efforts to be more environmentally conscious across the entire product and service lifecycle.

Scope: Domestic production base



*1 Pollutant Release and Transfer Register Law
 *2 Wastewater emissions refer to volume of water discharged into rivers and other natural environments.
 *3 The amount of waste sent to landfills and the amount of waste recycled are internal figures from the amount of waste generated.

