Fujitsu Semiconductor Limited, Aizuwakamatsu Region

Name:	Fujitsu Semiconductor Limited, Aizuwakamatsu Plant
Established:	October 1984
Employees:	368 (including affiliated companies)
Business description:	Semiconductor manufacturing (logic LSI, etc.)

Name:	Fujitsu Semiconductor Technology, Inc.
Established:	April 2007
Employees:	324
Business description:	Semiconductor manufacturing (logic LSI, flash microcomputer, etc.)

Fujitsu Semiconductor Limited, Aizuwakamatsu Region

Greeting

The facilities of Fujitsu Semiconductor Limited, in the Aizuwakamatsu region, consist of the Aizuwakamatsu Plant and its affiliated company, Fujitsu Semiconductor Technology, Inc., which is Fujitsu Semiconductor Technology, Inc.'s main plant. Both are Fujitsu Semiconductor Group's production centers, and are situated in the Fukushima Aizuwakamatsu city Monden Industrial Park. It is blessed with a rich natural environment, and abundant water source that is indispensable for semiconductor production.

Since the plant began operation, we have aimed to become a "green factory" with a lower environmental load, prevent global warming, cut generated waste, and reduce emissions of chemical substances. Every company employee works unitedly in these and related activities.

In fiscal 2013, the Fujitsu Group Environmental Action Plan Stage VII took effect, for which we are successfully obtaining results from new initiatives for the effective use of water resources, in addition to the previous activities. We are also actively expanding our participation in community contributions around the plant and local cleanup.

We currently have approximately 2,900 lavender plants in the areas surrounding the plant, and during the flowering season, we invite local businesses to take the flowers for drying and making potpourri materials. As a member of our community, we will join in with the community to pursue environmental management, based on the importance of environmental activities.

Hitoshi Hori, Plant Manager

Business Establishment Profile

Name: Fujitsu Semiconductor Limited, Aizuwakamatsu Plant
Established: October 1984
Employees: 368 (including affiliated companies)
Business description:
Semiconductor manufacturing (logic LSI, etc.)

As a semiconductor front-end processing factory, the Aizuwakamatsu Plant manufactures CMOS logic and analog devices for digital Audio/Video, game machines, digital home appliances, automotive products, and mobile phones. We are also capable of meeting customers' design specifications for multi-production in flexible quantities, along with increasing COT business demands in recent years. Advances are also made on the development of power devices using gallium nitride (GaN), which consumes less electricity.

Name: Fujitsu Semiconductor Technology, Inc.
Established: April 2007
Employees: 324
Business description:
Semiconductor manufacturing (logic LSI, flash microcomputer, etc.)

The Aizuwakamatsu Plant, a front-end processing factory, manufactures and develops semiconductor devices, especially for flash microcomputer and CMOS logic products. Our products have been used in a wide range of fields, such as communications equipment, personal computers, car navigations, and home audio systems, in addition to mobile phones.
In fiscal 2014, we began mass-producing FRAM (non-volatile memory).

Fujitsu Semiconductor Limited, Aizuwakamatsu Region

Target and Achievement in Environmental Activities

Fujitsu Semiconductor Limited Aizuwakamatsu Plant and Fujitsu Semiconductor Technology, Inc., have shared the same site since fiscal 2010, and work jointly on their environmental activities. The objectives of the activities described below are targets that are shared across the two organizations, and all the listed items were achieved in fiscal 2013. Particularly notable results are seen regarding the effective use of water resources.

Target activities in FY2013	Achievements	Status
Reduce CO_2 emissions from energy consumption to 114,752 tons-CO_2 or less.	86,755 tons-CO_2 (from improved air conditioning, etc.)	Achieved
Reduction of greenhouse Gases (PFC) other than CO_2 by 21.6% or more, compared to the results in FY1995.	46.9% (from effective usage of manufacturing devices, etc.)	Achieved
Limit the emission of chemical substances. * Reference: average values from 2009-2011 - PRTR compared to reference value, 45.6% or less. - VOC compared to reference value, 48.8% or less.	- PRTR 9.3% - VOC 27.9%	Achieved
Limit the amount of generated waste to 54.2% or less, compared to the reference value. * Reference average values FY2007-FY2011	36.2% (from fee-charging on waste sulfuric acid, etc.)	Achieved
Implement at least 3 effective uses of water resource measures a year.	6 measures.	Achieved
Carry out activities to contribute to the social environment four times or more a year.	5 activities	Achieved

Objectives of activities in FY2014

Fiscal 2014 is the second year into the Fujitsu Group Environmental Action Plan Stage VII. Continued efforts are being made on activities to prevent global warming (CO_2/PFC reduction), restriction of chemical substance generation, effective use of water resources.

Activities in FY2014
Reduce CO_2 emissions from energy consumption to 108,099 tons or less.
Reduction of greenhouse gases (PFC) other than CO_2 by 7.4% or more, compared to the results in fiscal 1995.
Limit the emission of chemical substances (VOC) to 70.0% or less, compared to the reference value (FY2009-FY2011 results average).
Limit the amount of generated waste to 74.2% or less, compared to the reference value (FY2007-FY2011 results average).
Implement at least 3 effective uses of water resource measures a year.
Carry out activities to contribute to the social environment four times or more a year.

Green Factories

● Effective use of water resources

We successfully reduced the amount of tap water (general service water and purified water) used during the manufacturing process by 210,000 m^3 annually over the entire initiatives.

[Fujitsu Group Environmental Contribution Award]

● Energy saving activities

We have been implementing LED lights for energy saving. Regular LED lights have been installed in common areas already, it is scheduled to expand installations to clean-rooms during 2014.

[Environmental aspect: No mercury waste/CO_2 reduction]

<LED lights>

Fujitsu Semiconductor Limited, Aizuwakamatsu Region

Contribution Activities for Environmental Society

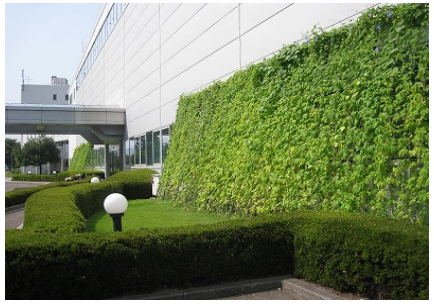
Work to strengthen awareness of community beautification efforts, including annual cleanup events held around the plant and long-time participation in Clean Fukushima Project as a company. We also participated in contests such as the city award landscaping contest and a prefecture-sponsored Hanaippai Concour. In 2013, we were awarded "Award of Excellence" and Special Prize on "Fukushima prefecture award of presidents for forests, forestry, and greenery."

<Cleaning activity>

<Lavender flower picking>

Environmental Education/Environmental Awareness Activities

We hold various events to improve the environmental awareness of each employee, especially around the time period coinciding with National Environment Month, June. During 2013, we weeded lavender flowerbeds, expanded the green curtain area for energy saving, and published an annual activity report titled "Environmental Report."



<Green curtain>

<Weeding>

Initiatives for Safe and Secure Plants

We perform periodic environmental analyses, in compliance with applicable environmental laws and ordinances, to prevent the occurrence of environmental risks. In fiscal 2013, to respond to the revised Water Pollution Control Act, we carried out the visualization of buried piping and installation of new wells, as well as high-concentration PCB contaminated waste product disposal. Other initiatives involve regular health and safety patrols of job sites, implementation of risk assessments over entire work areas, and holding safety conferences with partner companies in order to maintain and improve the safety of work environment.

<Visualization of buried piping>

<Safety conference>

Compliance with Environment-related Rules and Regulations

We periodically check changes to regulations, codes, and compliance rules, together with our compliance status with respect to each. There were no violations related to laws and regulatory rules during fiscal 2013.

Fujitsu Semiconductor Limited, Aizuwakamatsu Region

■ Environmental load data: Fujitsu Semiconductor Limited, Aizuwakamatsu Plant

INPUT

Purchased electricity: 60,328 MWh
Heavy oil: 1,465kl
Kerosene: 47.9kl
LPG: 4.7 tons
Water: 0.971 million m^3
Chemical substances: 9.8 tons

OUTPUT

CO_2 emissions: 29,768 tons
NOx emissions: 4.1 tons
SOx emissions: 0.9 tons
Waste product generation: 229 tons
Waste water: 0.930 million m^3
Chemical substances: 0.12 tons

(Main factors for increase/decrease)
Water usage: Slight increase in purified water quality response
Chemical substances: Slight increase in changes in chemicals used.

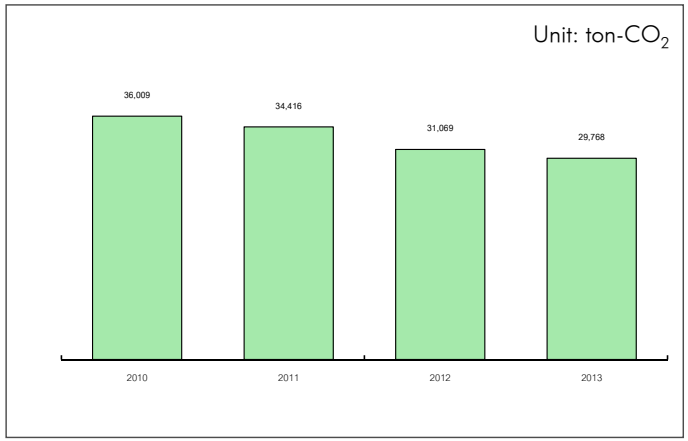
(Supplementary) How to calculate the chemical substances

INPUT: usage amount of PRTR applicable chemical substances during manufacturing.

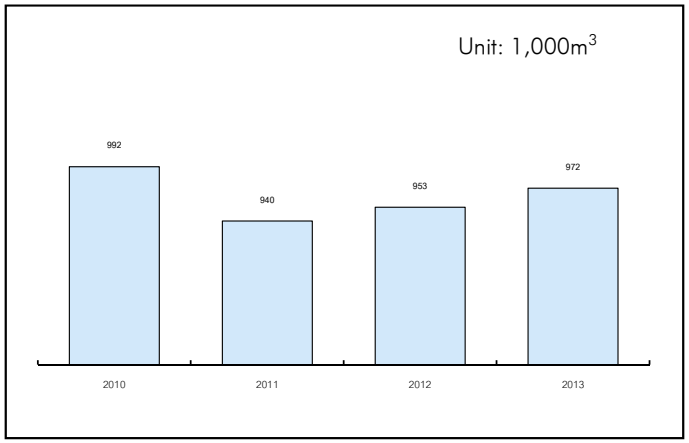
OUTPUT: calculated by measuring concentrations of PRTR-applicable chemical substances at water drainage ports or exhaust ports of factories, and multiplying the measured value by total emissions or total exhausts.

■ Change of Environmental Load Data over Years

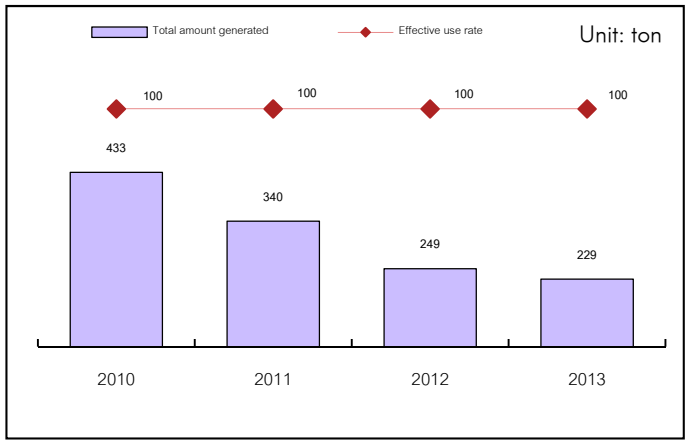
■ CO_2 Emissions from Energy Consumption*



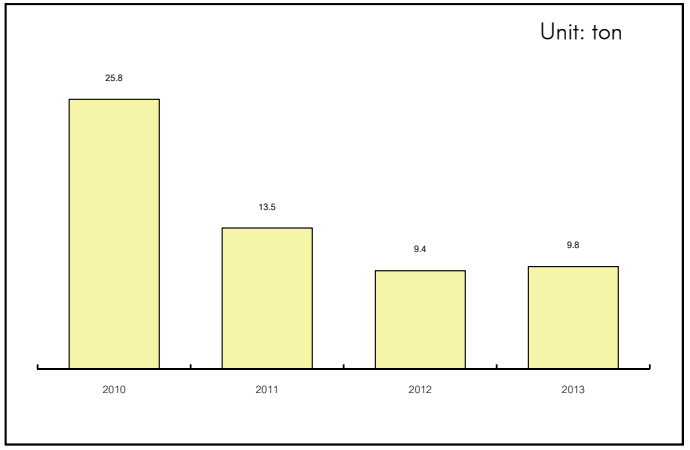
■ Water usage amount



■ Industrial waste product generation



■ Amount of chemical substances used



* For calculation, the power consumption CO_2 conversion factor is maintained from that of the reference year.

Fujitsu Semiconductor Limited, Aizuwakamatsu Region

■ Environmental load data: Fujitsu Semiconductor Technology, Inc.

INPUT

Purchased electricity: 128,923 MWh
Heavy oil: 1,613kl
LPG: 0 tons
Water: 1.398 million m^3
Chemical substances: 47.3 tons

OUTPUT

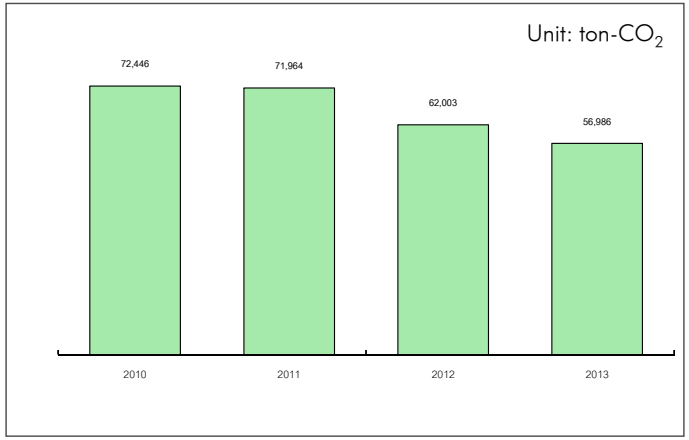
CO_2 emissions: 56,986 tons
NOx emissions: 4.1 tons (*1)
SOx emissions: 0.9 tons (*1)
Waste product generation: 1,021 tons
Waste water: 1.34 million m^3
Chemical substances: 0.14 ton

(Main factors for increase/decrease)
Waste product: Efficient use of waste acid
Water usage amount: reduced by optimized production process

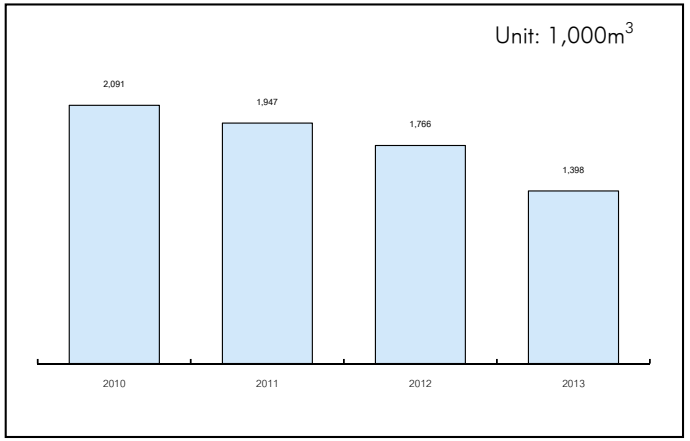
(Supplementary) How to calculate chemical substances
INPUT: usage amount of PRTR applicable chemical substances during manufacturing.
OUTPUT: calculated by measuring concentrations of PRTR-applicable chemical substances at water drainage ports or exhaust ports of factories, and multiplying the measured value by total emissions or total exhausts.

■ Change of Environmental Load Data over Years

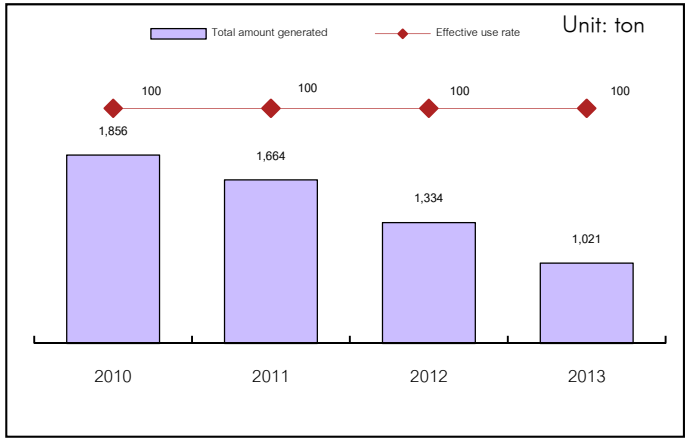
■ CO_2 Emissions from Energy Consumption*



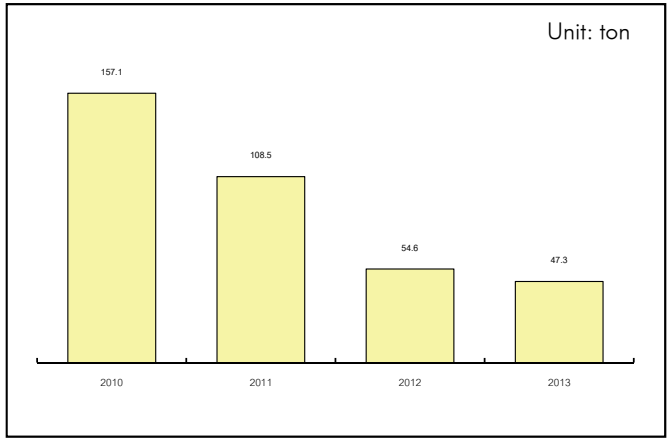
■ Water usage amount



■ Industrial waste product generation



■ Amount of chemical substances used



* 1 boiler combustion exhaust gas. The same exhaust amount as that of the facility is shared with the Aizuwakamatsu Plant.

* For calculation, the power consumption CO_2 conversion factor is maintained from that of the reference year .