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FUJITSU SEMICONDUCTOR GROUP

Environmental Report 2012

FUJITSU

shaping tomorrow with you

FUJITSU SEMICONDUCTOR GROUP

Environmental Report 2012

CONTENTS

Editorial Policy

The Fujitsu Semiconductor Group Environmental Report 2012 presents the environmental understanding, environmental initiatives and environmental results of the Fujitsu Semiconductor Group, which is responsible for the Fujitsu Group's semiconductor business.

We also report on the Fujitsu Semiconductor Group's environmental activities as clearly as possible on the company website.

- **Reporting Period**
  This report covers activities in FY 2011 (from April 1, 2011 to March 31, 2012). However, a portion of the content includes activities both prior to April 1, 2011 and after April 1, 2012.
- **Organizations Covered in the Report**
  All 19 companies in the Fujitsu Semiconductor Group (including overseas companies) are included in this report.
- **Securing the Objectivity of Disclosed Information**
  The 2012 Fujitsu Group Sustainability Report has undergone examination by a third-party organ, and includes information about the Fujitsu Semiconductor Group. Efforts have been made to ensure the objectivity of this Fujitsu Semiconductor Group Environmental Report, including the exchange of opinions concerning the report contents with third parties.

- Published: November 2012
- Head of Publishing: President Haruki Okada
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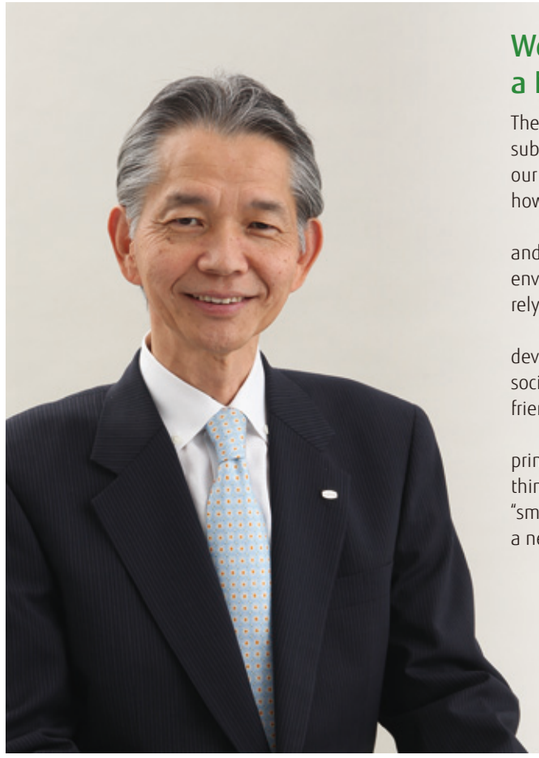
- Issuing Division:Environment Promotion Office,FUJITSU SEMICONDUCTOR LIMITED
- Reference guidelines: Ministry of the Environment "Environmental Reporting Guidelines" 2007 and 2012.

ECO is in our SEMICONDUCTORs

Toward the Realization of Smart Socioeconomic Systems



We Participate in Building a New Society through "Monozukuri"

The harsh conditions created by the March 2011 Great East Japan Earthquake and the subsequent nuclear power plant accident amply demonstrate the need for changes to our socioeconomic system. We Japanese understand that the world is watching to see how we address this challenge.

Our approach needs to embrace a "smart" society that uses energy more efficiently and relies on highly disaster-resistant energy resources that are more protective of our environment. People cherish our resources and want to be fulfilled without always relying on physical abundance.

More and more a part of our daily life, semiconductors must be constantly developed to use less energy to meet the expectations of an energy-efficient "smart" society. The products that use semiconductors must also be more environmentally friendly to bring lasting value to our society.

The Fujitsu Semiconductor Group aims to support such a society by applying the principles of Monozukuri (innovative manufacturing) as we make our LSIs smaller, thinner and more energy efficient, helping to provide eco products to satisfy tomorrow's "smart" society. We will focus all our expertise and experience toward the realization of a new socioeconomic system for society.

President
FUJITSU SEMICONDUCTOR LIMITED

Haruki Okada

Contributing to a Safe and Secure Society

Today, LSIs are incorporated into all types of devices used in everyday life. It is no exaggeration to say that LSIs support society. We feel responsible to society as an LSI supplier, and we have felt this responsibility even more keenly since the March 2011 earthquake and nuclear power plant accident. In particular, we are increasing and strengthening emergency electricity supply equipment to reinforce the business continuity of our manufacturing plants, and upgrading our emergency response systems.

From now on, however, we must change to a social system that can secure not merely the continuity of individual businesses but the stable continuity of society. Toward those ends, the Fujitsu Semiconductor Group is participating in a project to bring about a smart community in the Aizuwakamatsu region of Fukushima Prefecture. This project aims at disaster-resistant urban development, the creation of clean energy sources, and economic activities that circulate more funds within the region. The spread of such smart communities is expected to revitalize Japan.

FY2012 is the final year of the Fujitsu Group Environmental Protection Program Stage VI. The Fujitsu Semiconductor Group will devote our efforts toward achieving this plan with the understanding that the first step toward social contribution is to solidify our own foundations.

Member of the Board and Corporate Senior Vice President (Environment Director)
FUJITSU SEMICONDUCTOR LIMITED

Kiyoshi Watanabe

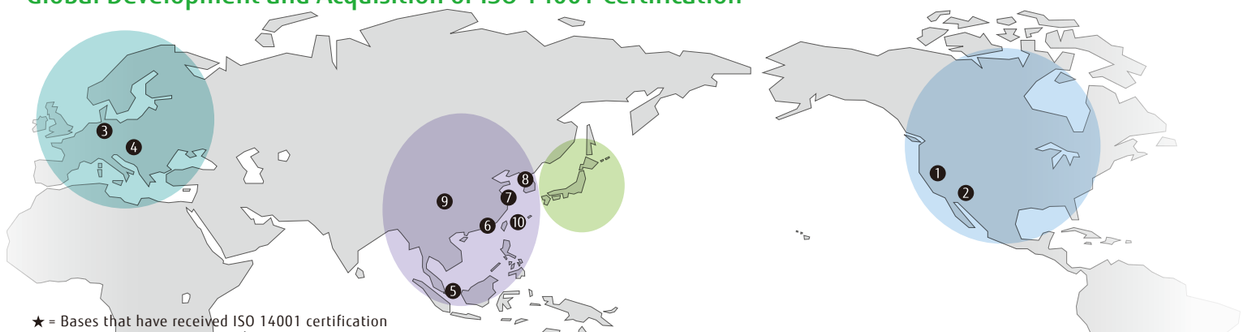
Business Activities and Environmental Management

To realize a prosperous, low-carbon society, the Fujitsu Semiconductor Group strives to provide semiconductor devices with superior environmental performance, to help reduce the environmental load of business activities, and to advance environmental management.

Outline of the Fujitsu Semiconductor Group

Corporate name	FUJITSU SEMICONDUCTOR LIMITED
Location of head office	Nomura Fudosan Shin-yokohama Bldg. 10-23, Shin-yokohama 2-Chome, Kohoku-ku Yokohama Kanagawa 222-0033, Japan
President	Haruki Okada
Date of establishment	March 21, 2008
Business description	Design, development, manufacturing, and sale of LSI products
Capital	60 billion yen

Global Development and Acquisition of ISO 14001 Certification



★ = Bases that have received ISO 14001 certification

Company Name	Sales/ Marketing	Development & Design	front-end processes	back-end processes	IT/Facilities Management
★ FUJITSU SEMICONDUCTOR LTD. Headquarters	●	●			
★ Akiruno Technology Center		●			
★ Mie Plant			●		
★ Aizuwakamatsu Plant			●		
★ Iwate Plant*			●		
★ FUJITSU ELECTRONICS INC.	●	●			
★ FUJITSU VLSI LTD.		●			
★ FUJITSU MICROELECTRONICS SOLUTIONS LTD.		●			
★ FUJITSU SEMICONDUCTOR TECHNOLOGY, INC.			●		
★ FUJITSU INTEGRATED MICROTECHNOLOGY LTD. Headquarters and Aizu Plant				●	
★ Miyagi Plant				●	
★ Kyushu Plant				●	
★ FUJITSU SEMICONDUCTOR IT SYSTEMS LTD.					●
★ FUJITSU FACILITIES ENGINEERING LTD.					●
e-Shuttle, Inc.			●		
❶ Fujitsu Semiconductor America, Inc.	●				
❷ Fujitsu Semiconductor Wireless Products, Inc.	●	●			
★ ❸ Fujitsu Semiconductor Europe GmbH	●	●			
❹ Fujitsu Semiconductor Embedded Solutions Austria GmbH		●			
★ ❺ Fujitsu Semiconductor Asia Pte. Ltd.	●				
★ ❻ Fujitsu Semiconductor Pacific Asia Ltd.	●				
★ ❼ Fujitsu Semiconductor (Shanghai) Co., Ltd.	●	●			
❽ Fujitsu Semiconductor Korea Ltd.	●				
★ ❾ Fujitsu Semiconductor Design (Chengdu) Co., Ltd.		●			
❿ Fujitsu Global Mobile Platform Inc.		●			

*On April 27, 2012, DENSO CORPORATION and FUJITSU SEMICONDUCTOR LIMITED concluded a basic agreement on the transfer of the company's Iwate plant to DENSO. The Iwate plant began new operations in 1 October 2012 as a wholly owned subsidiary of DENSO.

As a member of the Fujitsu Group, the Fujitsu Semiconductor Group has received ISO 14001 environmental management system (EMS) certification. For details, see the company website. WEB http://www.fujitsu.com/global/services/microelectronics/environment/iso14001/

Links between Businesses and Society

Main Applications and Products

Home Appliances

● **Applications**
Washing machines, dishwashers, refrigerators, air conditioners, warm water bidet toilets, LED lighting, microwave ovens
● **Products**
• Microcontrollers, FRAM products

Digital AV Equipment

● **Applications**
Recorders, digital cameras
● **Products**
• Microcontrollers, FRAM products
• Power management ICs

Industrial Equipment

● **Applications**
FA equipment, inverters, meters
● **Products**
• Microcontrollers, system LSIs
• ASICs, wafer foundry

Automotive

● **Applications**
Body control, car navigation, EV/HV
● **Products**
• Microcontrollers
• Graphics display controllers (GDCs)

Mobile

● **Applications**
Cell phones, mobile PCs
● **Products**
• Mobile FCRAM (memory)
• Power management ICs for portable devices

Telecommunications and OA Equipment

● **Applications**
Broadband communications equipment, FAX/ printers (MFP)
● **Products**
• System LSIs, FRAM products

The Fujitsu Semiconductor Group's CSR

CSR Basic Policy

The Fujitsu Group's CSR is the practice of the Fujitsu Way. We contribute to the sustainable development of the Earth and society by putting the Fujitsu Way into practice in all our business activities, considering the expectations and demands of our multiple stakeholders.

The Fujitsu Semiconductor Group gives priority to the following five issues in implementing CSR. We advance responsible management as a global ICT company by responding to these issues.

The Five Priority Issues

Priority Issue 1:
Provide opportunities and security through ICT

Contribute to the realization of a society where the world's seven billion people are linked and supported by ICT, and provide people with opportunities and security to achieve their dreams.

Priority Issue 2:
Support global environmental conservation

Contribute to the resolution of global environmental problems using ICT and reduce our own environmental load.

Priority Issue 3: Embrace diversity

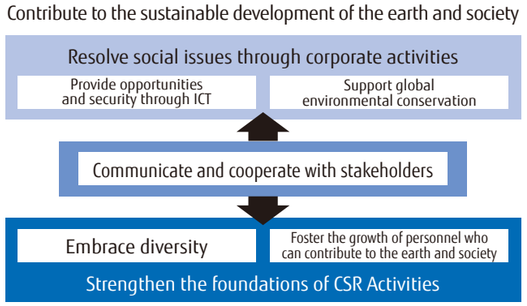
Accept and make use of diverse personnel regardless of nationality, gender, age, disability or values, so that the company and individuals can grow.

Priority Issue 4: Foster the growth of personnel who can contribute to the earth and society

Foster the growth of personnel with a global perspective and high aspirations to contribute to society ahead of others.

Priority Issue 5:
Communicate and cooperate with stakeholders

As a good corporate citizen, implement corporate activities with an understanding of the diverse expectations and demands of stakeholders.



FUJITSU Way

Corporate Vision

Through our constant pursuit of innovation, the Fujitsu Group aims to contribute to the creation of a networked society that is rewarding and secure, bringing about a prosperous future that fulfills the dreams of people throughout the world.

Corporate Values

What we strive for:

Society and Environment	In all our actions, we protect the environment and contribute to society.
Profit and Growth	We strive to meet the expectations of customers, employees and shareholders.
Shareholders and Investors	We seek to continuously increase our corporate value.
Global Perspective	We think and act from a global perspective.

What we value:

Employees	We respect diversity and support individual growth.
Customers	We seek to be their valued and trusted partner.
Business Partners	We build mutually beneficial relationships.
Technology	We seek to create new value through innovation.
Quality	We enhance the reputation of our customers and the reliability of social infrastructure.

Principles

Global Citizenship	We act as good global citizens, attuned to the needs of society and the environment.
Customer-Centric Perspective	We think from the customer's perspective and act with sincerity.
Firsthand Understanding	We act based on a firsthand understanding of the actual situation.
Spirit of Challenge	We strive to achieve our highest goals.
Speed and Agility	We act flexibly and promptly to achieve our objectives.
Teamwork	We share common objectives across organizations, work as a team and act as responsible members of the team.

Code of Conduct

- We respect human rights.
- We comply with all laws and regulations.
- We act with fairness in our business dealings.
- We protect and respect intellectual property.
- We maintain confidentiality.
- We do not use our position in our organization for personal gain.

Business Policy

- We use field innovation to find new approaches and the inspiration to improve ourselves, while delivering added value to our customers.
- We provide global environmental solutions in all our business areas.
- Fujitsu Group companies work together to accelerate our global business expansion.

What CSR Means at the Fujitsu Semiconductor Group

Strengthening our governance structure by pursuing sound and efficient management and practicing the Fujitsu Way.

Practicing the Fujitsu Way

For the Fujitsu Semiconductor Group, CSR means practicing the Fujitsu Way to address diverse social issues, providing products and services that draw together Group technologies to ameliorate and resolve those issues, and contributing to the development of a sustainable networked society.

In accordance with the Fujitsu Way, the Fujitsu Semiconductor Group places CSR at the core of our management, and works to realize the Corporate Vision while advancing business activities.

Corporate Governance

The Fujitsu Semiconductor Group is working to reinforce Group coordination to boost the transparency and fairness of our corporate governance and fulfill our corporate social responsibility in accordance with Fujitsu's "Basic Stance on our Internal Control Framework." We will continue conducting responsible corporate activities and working to build up relationships of trust with all of our stakeholders.

Human Resources Development

The Fujitsu Semiconductor Group introduced a professional certification system in 2011, and began activities in five technology communities. We held a professional convention in March 2012 with presentations of technology results from each community as first step toward knowledge-sharing. We will continue striving to improve semiconductor design and manufacturing techniques as well as new product development capabilities by handing down our accumulated technologies.

Respect for Human Rights and Diversity

The Fujitsu Semiconductor Group is advancing human rights education activities through in-house training by rank, the solicitation of human rights slogans, and other activities in accordance with the Fujitsu Way.

The in-house training addresses discrimination, harassment and various other problems, and educates managers and employees about human rights.

Among the human rights slogans collected as part of Human Rights Week activities, an entry from a company employee won the top Fujitsu Group award, and also received an award from the Industrial Federation for Human Rights, Tokyo.

In hiring activities, in our 2011 recruitment of career-track personnel and 2012 recruitment of new graduates, the Fujitsu Semiconductor Group hired several foreigners and made other proactive efforts at the recruitment of foreigners.

Promotion of Work-life Balance

Fujitsu Semiconductor held a lecture on work-life balance for its employees in the Shin-Yokohama area, where its head office is located.

We invited a lecturer from Fujitsu YFC Ltd., which is advancing leading approaches to work-life balance within the Fujitsu Group. He spoke about how that company became engaged with "work-life balance policies that make employees happy" and their subsequent efforts and results. The lecture was attended by many Fujitsu workers who discovered how work-life balance can help them shine as employees and as individuals.

Lecture on work-life balance

Compliance Promotion Activities

The Fujitsu Group is engaged in a wide range of activities to spread compliance awareness.

We revised the guidebook to practicing the Fujitsu Way Code of Conduct at workplaces and in business, "Understanding and Practicing the Fujitsu Way Code of Conduct," and posted this on the company intranet. The document includes examples that constitute problems under the Antimonopoly Act and bribery laws. The Fujitsu Group also established a common Antimonopoly Act consultation and reporting office.

Help Line

The Fujitsu Semiconductor Group has been operating a Help Line since September 2004 as a system for internal reporting (whistle-blowing) and consultations (including seconded personnel, contract employees, part-time workers and other fixed-term and dispatched workers).

The Fujitsu Semiconductor Group's CSR

Risk Management

The Fujitsu Semiconductor Group advances activities to prevent, minimize the effects, and prevent the recurrence of the various risks that emerge from business activities; implements risk management and continuous improvements throughout the Group; and aims at increasing corporate value and contributing to the development of society.

Business Continuity Management

The Fujitsu Semiconductor Group has been creating business continuity plans since 2008 and otherwise advancing business continuity management to prepare for unforeseen events that threaten continued business activities such as earthquakes, fires and other large-scale disasters and epidemics like new strains of influenza. We seek to assure the stable supply of the high-environmental-performance semiconductor devices that our customers require even when such risks emerge.

In the Great East Japan Earthquake last year, Fujitsu Semiconductor promptly established a countermeasures headquarters in accordance with the business continuity plan. The entire company worked together at restoration activities, which made it possible to recover to the full production levels prior to the earthquake on June 9.

Disaster Prevention

Disaster prevention organizations have been formed throughout the Fujitsu Semiconductor Group, and disaster prevention drills are conducted to minimize the damage to life and property in the event of a major disaster.

Since 2008, the Fujitsu Semiconductor Group has been participating in the Fujitsu Group joint disaster drills held on the national Disaster Prevention Day each year. The fiscal 2011 drill assumed a major earthquake directly beneath the Tokyo metropolitan region. The drill included (1) workshop-format disaster countermeasures headquarters training, (2) practice confirming the safety of all employees working in the metropolitan area, and (3) an exercise establishing a temporary disaster countermeasures headquarters at an alternative location assuming conditions making it difficult to establish the headquarters within the Tokyo metropolitan region as planned. The workshop format was not based on a scenario arranged beforehand. It included such means as giving unexpected accidents which the participating departments had to respond to during the training, with the participants thinking of responses on the spot and being forced to take action, making the training more practical. The 2012 training will assume simultaneous earthquakes in the Chugoku and Kyushu regions, in order to verify the effectiveness of our disaster response plan.

Basic Stance on Information Security

The Fujitsu Semiconductor Group practices the maintenance of confidentiality stipulated in the Fujitsu Way Code of Conduct through our information security efforts. We realize the guiding principle of becoming our customers' irreplaceable partners and building up mutually beneficial relationships with our business partners.

Information Security (Domestic Initiatives)

With "Complete information management - information management is the lifeline of the Fujitsu Group" as a common slogan, since FY2008 information security posters have been displayed at Fujitsu Semiconductor and all its domestic Group companies, and information security stickers attached to all employees' work PCs.

In addition, we have introduced mail checkers to prevent erroneous e-mail transmissions outside the company and remote data deletion solutions (CLEARSURE) throughout the company, and worked to boost the information security awareness of each and every employee while promoting the use of ICT. We also hold e-learning information security training for all directors and employees every year.

Information Security (Introduction of Zero Clients to all Internal PCs)

In October 2010, Fujitsu Semiconductor Europe GmbH introduced Fujitsu Zero Clients, further evolving the previously developed Fujitsu Thin Clients which have no hard disk drive. Because the Zero Clients have only limited software installed, including a dedicated OS (Operating System) for display of the virtual desktop environment, they provide superior security against information leaks, viruses and spyware.

Heath Management

The Fujitsu Semiconductor Group's efforts in recent years to improve health management have included specific health guidance to individual employees. as well as services to help employees quit smoking and no smoking initiatives at all workplaces.

From 2012, a "Food Project" was launched at Fujitsu Semiconductor's Akiruno Technology Center in an effort to prevent the onset of lifestyle diseases and improve eating habits. This initiative mostly involves improving the cafeteria menu.

Other efforts to promote health included the Fujitsu Semiconductor Group Joint Sports Tournament (Tokyo-Yokohama area) in November 2011, health lectures by industrial physicians, and health guidance by medical staff.

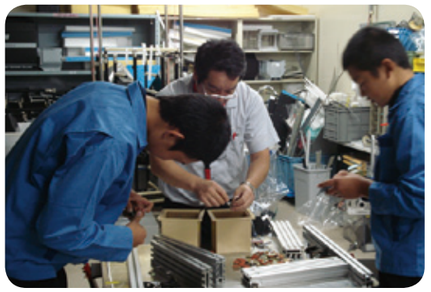
Industrial Safety and Hygiene

We have established safety and hygiene committees at each of our Group companies' business establishments which strive to improve industrial safety, hygiene and disaster prevention. We inspect work sites to check for potential dangers, and use risk assessments to build up safe and secure workplaces and manufacturing.

Following the March 11, 2011, great earthquake, the Fujitsu Semiconductor Group is also working to strengthen disaster prevention with disaster drills, evacuation drills and drills having employees return home on foot assuming a major earthquake directly beneath the Tokyo metropolitan region.

Social Contribution (Workplace Experience Learning for Junior High School Students)

The Fujitsu Semiconductor Mie Plant provided workplace experience learning to 8th grade students in local schools November 9-11, 2011. The junior high school students were given a chance to experience work at the plant by entering clean rooms, operating devices, and using electron microscopes.



Workplace Experience Learning

Social Contribution (Reconstruction Support)

Fujitsu Facilities Engineering Ltd., which provides energy to the Fujitsu Semiconductor Group's manufacturing plants, provided a set of 50 used personal computers for a personal computer room for the Kumamachi and Ohno elementary schools of Okuma Town, Fukushima Prefecture. The two elementary schools had evacuated together to Aizuwakamatsu City in the same prefecture because of the accident at the Fukushima Daiichi Nuclear Power Station following the Great East Japan Earthquake.

A collaborative structure was established with each Fujitsu Group company and the non-profit organization E-Elder to support the Okuma Town reconstruction plan's main policy of providing proper education during the evacuation period. The partners worked together to make all the necessary arrangements from securing idle PCs to renewing the computers, installing educational software, setting up networks and providing the required desks and chairs.

Computer room class

Social Contribution (Career Education Support)

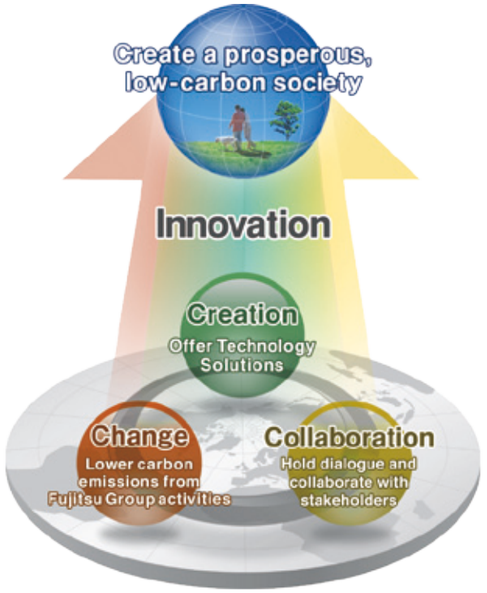
Fujitsu Semiconductor provides career education to students. In FY2011, Environmental Division staff were dispatched to the "Listen to Professional Workers Meeting" held by the Kodaira Daini Junior High School in Kodaira City, Tokyo Prefecture.

Listen to Professional Workers Meeting

Environmental Vision

Midterm Environmental Vision "Green Policy 2020"

Green Policy 2020 is a midterm environmental vision indicating the direction and roles that the Fujitsu Group should pursue toward the realization of a prosperous, low-carbon society. With the three key concepts of creation, collaboration and change, Green Policy 2020 sets the following three goals for 2020.



1 Benefit our Customers and Society

Reduce domestic CO_2 emissions by 30 million tons per year

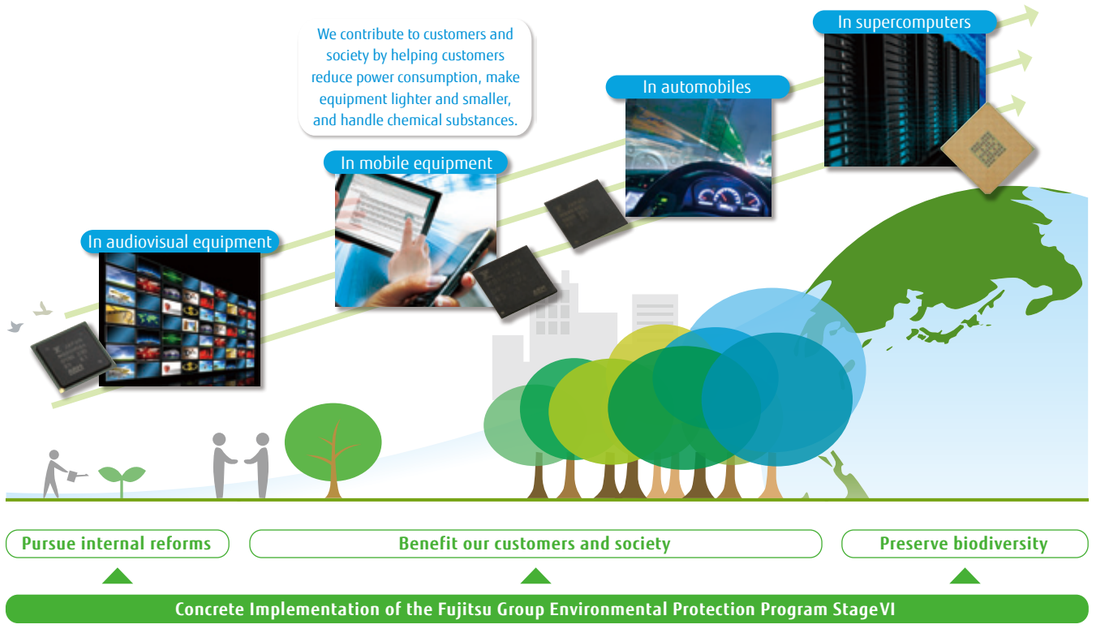
2 Pursue Internal Reforms

Realize overall world-class energy efficiency in all our business areas

3 Preserve Biodiversity

Advance all the items specified in the Leadership Declaration of the Business and Biodiversity Initiative

To achieve these three goals, the Fujitsu Group Environmental Protection Program Stage VI, initiated in April 2010, sets specific themes to be addressed over the next three years.



Environmental Management

Environmental Management System

Environmental Management System

The Fujitsu Semiconductor Group is advancing environmental management globally under our environmental policy.

The Fujitsu Semiconductor Group has also established the Fujitsu Semiconductor Group Environmental Goals and Targets, which specify numerical targets to be achieved based on the Fujitsu Group Environmental Protection Program. We are advancing environmental management activities while making systematic and continuous improvements. Eight domestic and five overseas Group companies had received ISO 14001 certification as of March 2012. We will continue striving to further strengthen our environmental governance.

Fujitsu Semiconductor Group Environmental Policy

With our customers, we contribute to the protection of a rich global environment, using state-of-the-art technology to provide semiconductor devices with superior environmental characteristics.

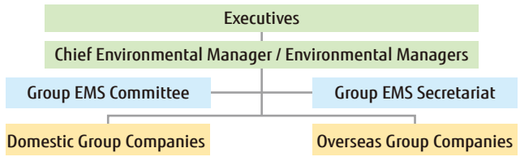
◆Operational Principles

By applying the following principles, we work to prevent pollution of the global environment and reduce the environmental burden of our products throughout their lifecycles, including development, procurement, manufacture, sales, usage, and disposal:

1. By aggressively promoting the development of Super Green Products and the proper management of product chemical content, we improve the environmental characteristics of our products and actively reduce the burden on the global environment and our customers.
2. We aggressively promote measures to counteract global warming and reduce emissions of greenhouse gases (e.g., CO_2, PFCs).
3. We aggressively promote chemical management and reduced emissions of volatile organic compounds (VOCs).
4. We aggressively promote waste reduction and appropriate recycling.
5. We conform to environmental regulations around the world and keep our promises to customers.
6. We work to improve the individual environmental consciousness of our employees, to help them become good environmental citizens, promote the preservation of biological diversity, and make environmental and social contributions in their local communities.
7. We expand the effectiveness and transparency of our environmental management system, driving continuous improvement and development.

April 6, 2011
FUJITSU SEMICONDUCTOR LIMITED
President Haruki Okada

● Fujitsu Semiconductor Group Environmental Management System Structure



Observing Environmental Laws and Regulations

There were five compliance violations in the Fujitsu Semiconductor Group during FY2011. These were minor items such as late reporting of changes in responsible personnel. Regardless, we have investigated the causes, examined measures to prevent recurrence, and completed rectification by implementing certain countermeasures.

These violations of laws or regulations were discovered through compliance audits (internal audits) and efforts to strengthen compliance evaluations.

The Fujitsu Semiconductor Group will continue striving to reinforce our compliance management.

Group EMS Committee

The Fujitsu Semiconductor Group holds regular meetings of the Group EMS Committee twice each year where environmental managers from manufacturing plants and other workplaces discuss the progress and issues toward achieving the Group's overall environmental goals and targets. These meetings include information exchanges on global environmental regulations and trends, The meetings are useful for developing new environmental initiatives and securing compliance.

Environmental Audits

The Fujitsu Semiconductor Group implements global Group internal audits within Japan and overseas under the Fujitsu integrated environmental management system. For effective audits, auditor education programs are conducted each year to improve the competence of our internal auditors. The Group is also working to increase the number of auditors with external credentials and otherwise strengthen our environmental auditing activities.

As external audits, the Fujitsu Semiconductor Group undergoes ISO 14001 audits by JACO (Japan Audit and Certification Organization for Environment and Quality) within Japan and by DNV (Det Norske Veritas AS) and DQS (DQS Holding GmbH) overseas, and maintains its ISO 14001 certification.

Environmental audit at the Mie Plant

The Fujitsu Group Environmental Protection Program Stage VI

The Fujitsu Semiconductor Group sets specific activity targets and advances environmental activities based on its Environmental Protection Program.

Since 1993, the Fujitsu Group has been preparing and implementing environmental action plans which set specific goals to implement the Group's environmental policy. The Fujitsu Group Environmental Protection Program Stage VI, which runs from fiscal 2010 through fiscal 2012, sets 18 specific activity goals in six fields: ❶ "strengthen advanced green ICT research and development," ❷ "improve the environmental value of products and services, and enhance the development and delivery of green ICT," ❸ "enhance efforts to reduce the Fujitsu Group's environmental load," ❹ "strengthen environmental governance," ❺ "promote environmental contributions to society," and ❻ "promote efforts to preserve biodiversity."

Based on this Environmental Protection Program, the Fujitsu Semiconductor Group has also set 10 specific activity goals in five fields and is advancing activities to achieve them.

● Environmental Protection Program Stage VI: Fujitsu Semiconductor Group Fiscal 2011 Activities Targets and Achievements

Categories	Items	Details	Environmental Targets	FY2011 Targets	FY2011 Achievements	FY2011 Results	FY2012 Targets
❷ Improve the environmental value of products and services, and enhance the development and delivery of green ICT	Develop and provide eco-friendly products (Super Green Products)	① Increase the percentage of Super Green Products (which help reduce the environmental load via energy and resource conservation) in newly developed Green products to at least 60% by the end of 2012.	Expand Super Green Products	Create at least one product group out of five product groups	Certified 8 products from the FRAM product group	○ (100%)	Create at least one product group out of every five product groups
		② Achieve an environmental efficiency factor*1 of 3.0 compared with fiscal 2008 products for newly developed Green Products by the end of fiscal 2012.	Achieve eco-efficiency factors	Conduct observations and verifications based on proposed environmental efficiency factors and load reduction goals	Completed verification of new environmental efficiency factors	○ (100%)	Achieve environmental efficiency factor 3.0
❸ Enhance efforts to reduce the Fujitsu Semiconductor Group's environmental load	Reduce greenhouse gas emissions (GHG)	③ Reduce CO_2 emissions from energy consumption by 28.0% (422,000 tons) from the fiscal 2007 level by the end of fiscal 2012.	Reduce CO_2 emissions from energy consumption	To 427,000 tons CO_2 or less	383,000 tons CO_2	○ (111%)	422,000 tons CO_2
		④ Reduce emissions of greenhouse gases other than CO_2 by 34.5% (170,000 tons GWP) from the fiscal 1995 level by the end of fiscal 2012.	Reduce emissions of greenhouse gases other than CO_2	To 175,000 tons GWP or less	131,000 tons GWP	○ (134%)	170,000 tons GWP
	Factory improvements (chemicals and waste)	⑤ Reduce discharges of PRTR (Pollutant Release and Transfer Register) Law-controlled chemical substances by 70.7% (266,000 tons) from the fiscal 2007 level by the end of fiscal 2012.	Reduce discharges of PRTR Law-controlled chemical substances*3	To 30.4 tons or less	22.3 tons	○ (136%)	26.6 tons
		⑥ Reduce the volume of waste products generated by 13.1% from the fiscal 2007 level to 11,900 tons or less by the end of fiscal 2012, and continue to maintain zero emissions activities.	Reduce the volume of waste products generated	To 10,700 tons or less	8,500 tons	○ (126%)	11,900 tons
	Office improvements	⑦ Achieve a Green Office System*2 level of ★★★★ or higher by the end of FY2012 at all subject domestic workplaces.	Achieve a higher Green Office System rating	Evaluate and respond using the new standards	Completed survey of current conditions	○ (100%)	Achieve a level of at least ★★★★
❹ Strengthen environmental governance	Promote environmental management through communications with stakeholders	⑧ Promote environmental communications (strengthen the transmission of environmental information) at each organization toward improving the quality of environmental management.	Strengthen the transmission of environmental information	Publish the Fujitsu Semiconductor Group Environmental Report (Japanese, English and Chinese versions)	Published the Fujitsu Semiconductor Group Environmental Report (Japanese, English and Chinese versions)	○ (100%)	Publish the Fujitsu Semiconductor Group Environmental Report (Japanese, English and Chinese versions)
❺ Promote environmental contributions to society	Increase environmental awareness among all staff through community-based environmental actions	⑨ Continue environmental social contribution activities at each base, while pursuing activities which can contribute more to local communities.	Environmental social contribution activities	Conduct at least one environmental social contribution activity per year at each site based in the local community	Implemented 74 activities at 12 sites (6 activities per site)	○ (617%)	Implement at least one activity per year at each site
❻ Promote efforts to preserve biodiversity	Contribute to community building that preserves biodiversity	⑩ Implement biodiversity conservation and education activities at all bases by the end of fiscal 2012.	Biodiversity conservation activities	Implement at least one biodiversity conservation activity per year at each site	Implemented 27 activities at 12 sites (2 activities per site)	○ (225%)	Implement at least one activity per year at each site

*1. Environmental efficiency factor: An environmental index which quantitatively grasps improvements in a product's environmental load and value (functions and performance) for comparing new versus prior models, introduced to promote the production of products which provide higher value with a lower environmental load.

*2. Green Office System: Original Fujitsu Group system to reduce the environmental load from our offices by comprehensively evaluating the level of environmental consideration, by encouraging voluntary initiatives, and by making them visible.

*3. The programs to reduce discharges of PRTR Law-controlled chemical substances select a single VOC at each business site. The chemical substances selected had the highest discharge volume in fiscal 2007.

Environmental Education & Environmental Risk Management

Environmental Education

The Fujitsu Group has conducted environmental education for all employees once every three years since 1995 using environmental e-learning so that employees understand the content of the Group Environmental Protection Program which is developed every three years.

Environmental education is also included in the general education given when employees enter their company and when they are promoted. Employees responsible for work related to the environment receive specialized education including internal auditor education and waste products management education.

In addition, the Fujitsu Semiconductor Group provides environmental education to employees each year in accordance with the nature and format of the semiconductor industry, and is working to boost the environmental awareness of all employees.

Environmental Risk Management

■Response to Groundwater Contamination

Groundwater contamination with fluorine and nitrate nitrogen levels exceeding environmental standards was confirmed in groundwater on the grounds of the Iwate Plant during 2012. The results of analysis from observation wells confirmed that the range of contamination was limited to a portion of the grounds, with no discharge beyond the grounds. The groundwater is presently being pumped up to the surface to recover the contaminated water and prevent any further spread of the contaminants.

■Management of PCB Waste

The Fujitsu Semiconductor Group is advancing preparations for prior registration with the Japan Environmental Safety Corporation (JESCO) so that the fluorescent lamp ballasts held by the group can be treated as soon as possible. The ballasts are being carefully and securely stored at a specialized warehouse until treatment by JESCO becomes possible.

Internal Environmental Awards System

The Fujitsu Group has been presenting the Fujitsu Environmental Contribution Awards and holding environmental contests every year since 1995, to honor particularly meritorious environmental activities.

The Fujitsu Environmental Contribution Awards received 104 entries in FY2012, and the Fujitsu Semiconductor Group received four encouragement prizes.

Encouragement Prizes

Green Policy Management
"Business Risk Management through RoHS Directive Lobbying Activities"
FRAM RoHS Directive Exemption Application Project
Fujitsu Semiconductor Ltd.

Green Policy Products
"FRAM Development Contributing to Low Electric Power Consumption and Resource Conservation"
General Use FRAM Development Team
Fujitsu Semiconductor Ltd.

Green Policy Factories (see p.14 for the activity details)
"Major Reduction in Plating Waste Liquid from Advancing Process Reform"
Environmental Preservation and Biodiversity Conservation Activities Project
Kyushu Plant, Fujitsu Integrated Microtechnology Ltd.

Green Policy Earth
"Ramsar Convention Imuta Pond Critically Endangered Libellula Angelina Dragonfly Conservation Activities"
Environmental Preservation and Biodiversity Conservation Activities Project
Kyushu Plant, Fujitsu Integrated Microtechnology Ltd.

The Fujitsu Semiconductor Group is positively advancing global warming countermeasures, chemical substances reduction, waste reduction and other efforts to preserve the global environment.

Global Warming Countermeasures

Measures to Reduce CO_2 Emissions from Energy Consumption

The Fujitsu Semiconductor Group reduced FY2011 CO_2 emissions from energy consumption to about 35% below the FY2007 level. This was achieved through operations improvements beginning with optimization of production equipment operations, together with the introduction of high-efficiency turbo refrigeration equipment, the introduction of inverters, the optimization of cold heat source systems, and other energy conservation measures. We are also advancing additional energy conservation efforts such as priority operation of high-efficiency equipment and optimization of air conditioning air flow.

Main Summer Electricity Conservation Efforts

To respond to the electricity shortages in the Tohoku Region this summer, the Fujitsu Semiconductor Iwate Plant introduced a thermal storage system for shifting its peak daytime electricity consumption. The Iwate Plant also reduced peak consumption by operating absorption refrigerators. Additional electricity conservation was achieved through reducing the air conditioning load by further optimizing clean room pressure and moisture.

Response to the Revised Energy Conservation Law

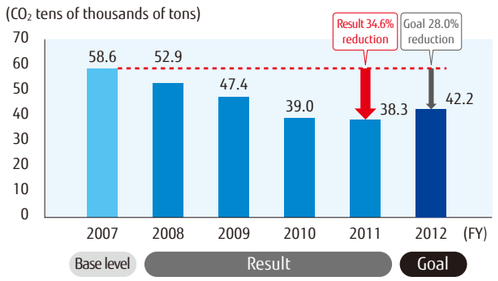
The Fujitsu Semiconductor Group organized working groups throughout our companies, including office bases, in FY2011 and is advancing energy conservation activities to respond to the FY2010 revisions to the Energy Conservation Law.

Measures to Reduce Emissions of Greenhouse Gases Other than CO_2

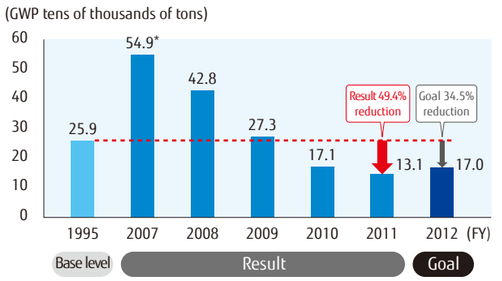
The Fujitsu Semiconductor Group achieved the semiconductor industry's voluntary action program targets of a 10% reduction from FY1995 levels (259,000 tons-GWP) by 2010 through the introduction of gas-abatement equipment and other measures. We are continuing these efforts to reduce greenhouse gas emissions from FY2011 through process conditions optimization, the introduction of additional gas-abatement equipment, and switching over to gas with a low global warming coefficient.

PFC gas-abatement equipment

●Emissions of CO_2 from energy consumption



●Emissions of greenhouse gases other than CO_2



* The emissions volume increase in FY2007 resulted from the integration of lines with a low installation rate of gas abatement equipment. Thereafter, countermeasures were implemented and emissions reduced.

Measures to Reduce Chemical Substances and Waste Products

Reduction of PRTR Law-controlled Chemical substances*

* One VOC with a high volume handled selected at each workplace

Reinforcing Operations Management of Organic-Exhaust Gas-Treatment Equipment

The Fujitsu Semiconductor Group has introduced equipment to absorb organic gases at its semiconductor front-end process plants to limit emissions of volatile organic compounds (VOCs). The Group works to carefully maintain this equipment's absorption capabilities. We also use alternatives to organic chemicals in processes and limit VOC emissions by reducing the volume of chemical substances controlled by the PRTR Law.

Other Activities

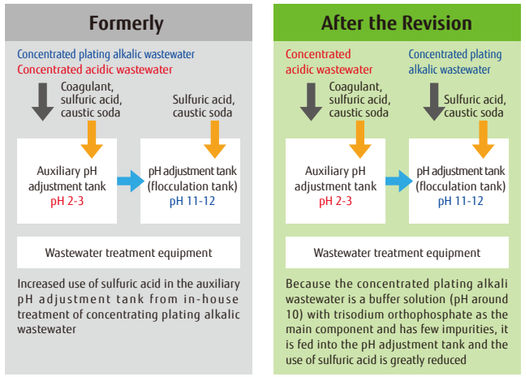
The Fujitsu Semiconductor Aizuwakamatsu Plant reduced the quantity of IPA (isopropyl alcohol) used by changing manufacturing equipment.

The Fujitsu Integrated Microtechnology Miyagi Plant also reduced the quantity of IPA used by introducing aqueous flux.

Reducing the Amount of Waste Generated

Reduction of Plating Alkalic Wastewater

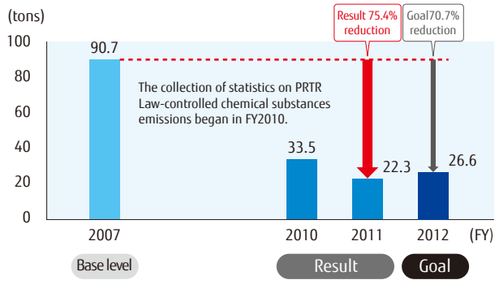
The Fujitsu Integrated Microtechnology Kyushu Plant has reduced the external environmental load by treating some of its alkaline wastewater on site instead of transporting it to outside industrial wastewater contractors. Additionally, Improvements were also made to reduce the volume of pH adjustment chemicals used, further reducing the environmental load.



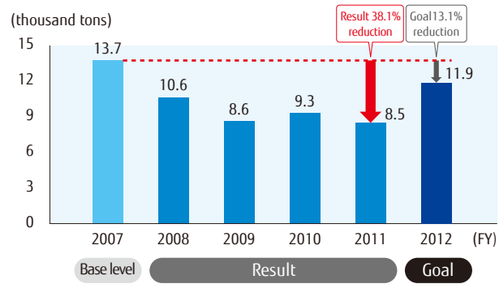
Other Activities

The Fujitsu Semiconductor Iwate Plant is also working to reduce waste products by promoting in-house wastewater treatment, and other plants are reducing the volume of waste products through advancing sales of valuable waste products.

●PRTR Law-controlled Chemical Substances Emissions



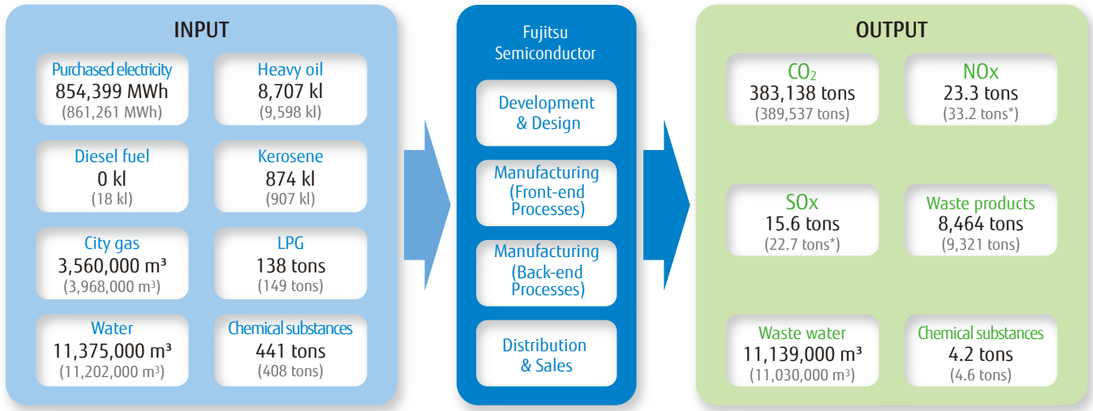
●Waste Products Generation



Business Activities and Environmental Load (Materials Balance)

The Fujitsu Semiconductor Group quantitatively measures the overall environmental load arising from our production activities, and advances environmentally friendly business activities.

●FY2011 Business Activities and Environmental Load (Materials Balance)



* Figures inside parentheses denote revisions to NOx and SOx figures from last year.

●Calculation Method

INPUT	Development, design and manufacturing	Energy	Volume of electric power, oil and gas used at plants and workplaces in FY2011
		Water	Volume of water used at plants and workplaces in FY2011
		Chemical Substances	Volume of PRTR Law-controlled chemical substances handled at plants and workplaces in FY2011
OUTPUT	Development, design and manufacturing	Atmospheric Emissions	CO_2: FY2011 CO_2 emissions that accompany energy consumption at plants and workplaces NOx, SOx: Calculated based on measurements of substance concentrations in exhaust gas emitted from exhaust vents at plants and workplaces in FY2011
		Waste Products	Amount of waste products generated by plants and workplaces in FY2011
		Wastewater	Amount discharged into sewerage, rivers and streams from plants and workplaces in FY2011
		Chemical Substances	Calculated by measuring the FY2011 concentration of PRTR Law-controlled chemical substances at plant water outlets and exhaust vents multiplied by the total emissions volumes or based on the chemical substances balances

Environmental Accounting

The Fujitsu Semiconductor Group fiscal 2011 environmental accounting aggregated results are presented in the following table, which shows investments of 196 million yen, costs of 2,961 million yen and an economic effect of 3,667 million yen.

■ Investments

Investments mostly focused on measures to counter global warming and to prevent ground and groundwater pollution.

■ Costs

The Fujitsu Semiconductor Group is advancing improvements in energy conservation measures and waste volume reductions, centered on air and water pollution prevention costs (environmental analysis costs, etc.). The Group will continue to advance efficient environmental investments and to work to reduce the environmental load through analysis of environmental accounting results.

●Fujitsu Semiconductor Group Environmental Accounting Aggregate Results (FY2011)

Unit: million yen

Item		Main areas	Capital Investment		Cost		Economic benefits	
Business Area	Pollution prevention costs/benefits	Preventing air pollution, water pollution, etc.	60	(38)	1,395	(1,416)	1,641	(1,606)
	Global environment preservation costs/benefits	Preventing global warming, energy saving, etc.	92	(265)	508	(615)	224	(244)
	Resource circulation costs/benefits	Disposal of waste, efficient utilization of resources, etc.	1	(0)	612	(723)	1,377	(1,639)
Upstream/downstream costs/benefits		Collection, recycling and resale of products and goods, etc.	0	(0)	7	(5)	17	(15)
Administration costs/benefits		Maintenance and operation of environmental management systems, etc.	19	(0)	344	(309)	53	(52)
Research and development costs/benefits		Research and development of products that contribute to environmental protection, etc.	0	(0)	0	(0)	156	(208)
Social activities costs/benefits		Donations and assistance to environmental conservation groups, etc.	0	(0)	0	(0)	0	(0)
Environmental damage costs/benefits		Restoration of soil and groundwater contamination, etc.	24	(1)	95	(1)	200	(0)
Total			196	(304)	2,961	(3,069)	3,667	(3,764)

• Some figures are rounded off, so the totals may not match. Some items do not appear in the figures due to rounding off. Many activities are being steadily advanced without incurring large costs.
• Figures inside parentheses are for the prior fiscal year.

Environmental Considerations in Products

Green Procurement; Green Logistics

Green Procurement

The Fujitsu Group has set out the basic requirements for environmentally sound procurement of parts, materials and products in the Fujitsu Group Green Procurement Direction, and works with its suppliers on green procurement activities.

We ask all our business partners to arrange and administer an EMS (Environmental Management System) to continually implement activities to reduce the environmental load. We also ask parts and materials suppliers to arrange a CMS (Chemical substances Management System). The Fujitsu Group Environmental Protection Program Stage VI which is currently underway, also calls for efforts toward restricting and reducing CO_2 emissions, and for conserving biodiversity. The Group is working together with our business partners on initiatives to address climate change issues and the conservation of biodiversity, which have become international issues.

In advancing these activities, we held explanation meetings with our business partners so they could understand and adopt the activities, prepared and provided guidelines regarding the conservation of biodiversity, and supported the activities of our business partners.

The Fujitsu Semiconductor Group is participating in these efforts as a member of the Fujitsu Group, strengthening our upstream management while providing support to our business partners, and working to create a sustainable, low-carbon society.

Green Logistics

To prevent the damage of goods during shipping, Fujitsu Electronics Inc., which is responsible for all the distribution works of the Fujitsu Semiconductor Group, is making every effort to protect the quality of our products using cushioning material and improved sealing. Responding to the small-lot production of a wide range of products, however, resulted in an increase in the amount of cushioning material used per package.

Consequently, the company has been asked to reduce its waste products from packaging materials.

After examining various types of packaging methods, Fuji Electronics confirmed that the effectiveness of the Air X packaging system provided by Nexusair Co. Ltd. matches the desired packaging, and introduced this system in April 2011.

The introduction of this system has reduced waste products by 1.5 tons per year compared with the bubble cushioning and filler sheet materials previously used.

(Before the change) (After the change)

While ensuring quality during shipping so customers can use our products without concern, the Fujitsu Semiconductor Group is striving to reduce the weight of packaging materials to decrease the volume of waste products.

We will continue advancing green distribution with environmentally friendly distribution and by putting customer satisfaction first.

Approach to Chemical Substances in Products

The Fujitsu Semiconductor Group promotes appropriate management of chemical substances in products so we can provide our customers with products they can use without concern.

The Fujitsu Group has designated substances that are harmful to people and the environment and whose use is prohibited or regulated by law as "Fujitsu Group Designated Prohibited Substances." We strictly prohibit the use of those substances, eliminate them through green procurement activities, and provide products that do not contain them. Moreover, when there are concerns that certain substances may be harmful, they are classified as "Fujitsu Group Designated Controlled Substances" or "Fujitsu Group Designated Reporting Substances" to protect customer safety and the environment. The amount of these substances contained in products is properly managed to prepare for their possible reclassification as Designated Prohibited Substances if it is determined that the substances are harmful.

■Ongoing Response to Domestic and Foreign Regulations

Various laws and regulations have been enacted concerning chemical substances contained in products in each country, starting with the EU REACH regulation which requires chemical substances registration and notification. Amid this trend, the Fujitsu Semiconductor Group is using the Joint Article Management Promotion Consortium (JAMP) formats for chemical substances management and information transmission so we can respond flexibly to additional future regulatory tightening.

■Response to the EU RoHS Directive and the China RoHS

The Fujitsu Semiconductor Group provides semiconductor products that comply with the EU RoHS Directive* and the China RoHS.

The Group still uses lead in certain products as requested by customers and in certain old products, but we are advancing the switchover to lead-free products as appropriate.

The Fujitsu Semiconductor Group regards minimizing the risks posed by designated chemical substances as a priority issue, and actively advances measures to address substances that may possibly be harmful, based on the principle of prevention.

* Certain products fall under RoHS Directive exclusions categories.

WEB http://www.fujitsu.com/global/services/microelectronics/environment/products/

Super Green Products

The Fujitsu Semiconductor Group conducts green product assessments prior to product development, to evaluate product environmental factors such as energy conservation, 3R design* and the use of chemical substances. Products which meet our standards under these assessments are certified as Green Products. Those Green Products with particularly top-level environmental factors and which are clearly superior compared with products on the market and with other Fujitsu Semiconductor products are certified by the Fujitsu Group as Super Green Products.

* Design considering the 3Rs for waste products - Reduce, Reuse and Recycle.

Super Green Products Certified in FY2011

■Achieved Industry-Leading Low Electricity Consumption Performance

Eight FRAM products were certified as Super Green Products in FY2011. FRAM is a non-volatile memory that combines the strong points of ROM and RAM. Compared with other non-volatile memories, FRAM products are superior in terms of speed, working life, cyclic capability and energy conservation, and have a wide range of applications including household appliances, digital cameras, electronic toys, RFIDs, and smart cards.

■Environmental Factors

For all models: Energy conservation; Use of chemical substances
For the MB85RS64: Energy conservation; Use of chemical substances; 3R design

- Energy conservation
  Industry-leading low-electricity-consumption performance
- Use of chemical substances
  Does not contain any REACH-regulated substances
  Does not contain any EU RoHS Directive-regulated substances
- 3R Design
  Volume reduced by half compared with prior products

■Eight certified FRAM products

MB85R1001A/MB85R1002A, MB85R4001A/MB85R4002A, MB85RC16, MB85RC16V, MB85RC64V, MB85RC128, MB85RS128A, MB85RS64

●FY2011 Fujitsu Group Environmental Contribution Awards Encouragement Prizes

MB85RC16V, MB85RS64, MB85RC64V, MB85RS128A

WEB http://www.fujitsu.com/global/about/environment/products/gproducts/

Customer Adoption Examples

Murata Machinery adopts Fujitsu Semiconductor's MB86C36 network-answering proxy LSI for its low-power-consumption MFX-2870 multi-function printer.

In advancing its development of lower-power-consumption multi-function printers, Murata Machinery Ltd. has adopted Fujitsu Semiconductor's MB86C36 network-answering proxy LSI in its new multi-function printer. The MB86C36 greatly reduces power consumption compared with prior models when the machine is in standby mode (0.3W power consumption in standby mode, 0.7W power consumption during network response; TEC value*[1] of :1.5 kWh).

*1:The TEC or Typical Electricity Consumption value represents an electrical product's typical weekly energy consumption. It is a standard value for conformance with the international Energy Star program.

Issue

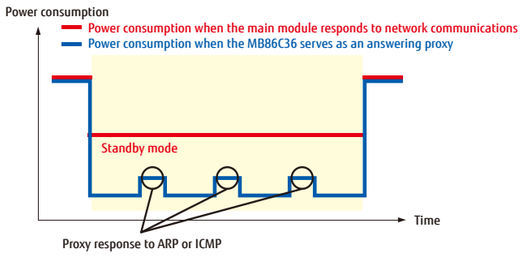
To reduce electric power consumption while maintaining network connectivity

Because personal computers and multi-function printers are always exchanging packets over networks, network connectivity must be maintained even when they are in standby mode, so in the past the CPU handling this was always active. That posed a bottleneck to reducing power consumption.

Toward Resolving the Issue

Fujitsu Semiconductor developed answering proxy technology

Answering-proxy technology greatly reduces electric power consumption by having the exceptionally low-power-consumption MB86C36 (instead of the main LSI) processes the packets to maintain network connectivity. During this time, the main LSI is either in sleep mode or its power source turned off.



(Note): Because this diagram is an image, the rated values depend on the actual systems.

Murata Machinery received an encouragement award at the Japan Environment Association's Eco Mark Award 2011 for its energy conservation technology development as represented by the inclusion of the network standby function and high-speed startup, and its efforts to develop environmental products beginning with Eco Mark products.

Adoption Comment

"The proxy-answering function is why we chose the MB86C36. Depending on the processing, when the main LSI does not have to be engaged, the response can be handled by proxy answering. This highly refined adjustment reduces the number of times the main LSI engages, making it possible to reduce the electric power consumption of multi-function printers."

Mr. Tomoki Suruga,
Electronics Development Group, Technology Department, Information Equipment Division, Murata Machinery, Ltd.

Fujitsu Broad Solution & Consulting Adopts 32-bit ARM® Core Microcontroller FM3 Family for the F-PLUG.

Fujitsu Broad Solution & Consulting, Inc. (Fujitsu BSC) develops embedded systems, which are software that controls electronics devices. Fujitsu BSC has now fused state-of-the-art technology with the abundant know-how accumulated in its existing software businesses to develop and manufacture the Solar Cubic A-1 solar lantern and other environmental and electricity-conservation-related products.

Fujitsu BSC has adopted the FM3 family MB9BF116N as the main microcontroller for its F-PLUG, an electric plug which measures the power consumption of connected electronics devices along with the surrounding temperature, humidity and brightness levels. Fujitsu BSC developed the F-PLUG as its next product following the Solar Cubic A-1.

Adoption Points

The F-PLUG required a microcontroller with many high-speed, high-precision ADC channels to precisely measure power consumption, temperature, humidity and brightness. The F-PLUG itself also required a large-capacity internal flash memory to store at least one month of measurement data.

The MB9BF116N meets these conditions, and ultimately allowed the F-PLUG to exceed initial specifications and store 40 days worth of data.

Environmental Factors

Thanks to the the effect provided by Fujitsu Semiconductor's EcoRAPID* flash memory low-power-consumption technology, the power used in this operation is just 0.3W, even though the F-PLUG frequently writes the measurement data onto the flash memory. This is markedly less than the power consumed by equivalent products manufactured by other companies.

* EcoRAPID (Ecology Read Access Path Isolation Dynamic technology)
Fujitsu Semiconductor's proprietary circuit technology which simultaneously achieves fast speed and low power consumption current by applying FCRAM technology to flash memories.

Product Applications

The F-PLUG measures power consumption, temperature, humidity and brightness. (The F-PLUG is plugged into an electric outlet and sends the measurement data to a personal computer via Bluetooth. An electricity consumption graph and the electricity charges are displayed on the computer screen.)

Product Features

- Simple composition of just an F-PLUG and a personal computer
  - No wiring is required because of the wireless connection between the F-PLUG and the personal computer
  - Inexpensive adoption costs because wireless LAN routers and expensive home gateways are not required
- Electric power consumption and electricity charges can be viewed graphically on large personal computer screens
- The F-PLUG achieves the lowest power consumption in the industry, with 0.1W power consumption in standby mode and 0.3W power consumption when operating (Fujitsu Semiconductor figures)

Adoption Comment

"While the ease of use and replete functions were points for adopting the FM3, the greatest factor was that Fujitsu Semiconductor proposed a plan and business model for the F-PLUG. Even after we selected the microcontroller, Fujitsu Semiconductor gave us highly refined development support, making it possible to develop the F-PLUG through to sales at a very fast speed. We would like to continue building up a solid relationship with Fujitsu Semiconductor as a business partner."

Mr. Osamu Sugimoto,
Department Manager, East Japan Operating Department, Embedded Systems Division, Fujitsu Broad Solution & Consulting Inc.

Environmental Communication

Conservation of Biodiversity

Environmental Lecture

An environmental lecture on the theme of "Living Creatures around Aizuwakamatsu City" was presented at the Fujitsu Integrated Microtechnology Aizu Plant on August 4, 2011. This time, the presentation was made by a speaker from the Aizuwakamatsu City Environment and Community Services Division, who spoke about the conservation of biodiversity and the animals which inhabit the Aizu region with its abundant nature.

Environmental lecture "Living Creatures around Aizuwakamatsu City"

An environmental lecture regarding biodiversity was presented at the Fujitsu Semiconductor Aizuwakamatsu Plant on February 17, 2012.

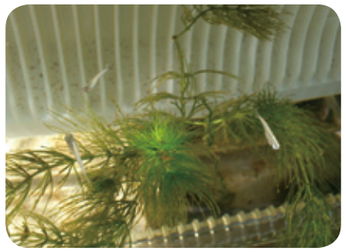
The lecture was presented by a speaker from the Aizuwakamatsu City Environment and Community Services Division, who spoke on "The Water Environment of Lake Inawashiro" including environmental rankings, changes in water quality, and remarkable water purification mechanisms.

Environmental lecture "The Water Environment of Lake Inawashiro"

Fujitsu Semiconductor Begins Using Locally Hatched Killifish to Monitor the Impact of Plant Wastewater on Ecosystems

With the growing concern regarding biodiversity, the environmental managers at the Fujitsu Semiconductor Mie Plant were seeking a means to demonstrate that the water released from the plant does not harm the ecosystem around the Ohsugitanigawa River, and actually plays an important role in maintaining the ecosystem. They decided to include trying to raise local killifish as a biodiversity activity goal.

They began raising killifish collected from irrigation channels near the plant in July 2011. Killifish fry about 8mm long were raised only in water discharged from the plant. They steadily grew into mature fish and laid eggs in August, which hatched and produced new fish. This demonstrated that the water released from the plant supports life. The young fish and their parents are healthy and now living together in breeding tanks.



Killifish fry

The plant will now work at stepping up to a system whereby they can continue the monitoring without collecting killifish. That is really the best result, showing that plant is helping to take responsibility for conserving the important water source that supports the ecosystem.

Killifish swimming in a water tank at the plant entrance hall

Green Curtain Promotion Activities

The Fujitsu Semiconductor Group promotes the cultivation of "green curtains" at many of our bases each year. These living curtains block the hot summer sun and reduce indoor temperatures.

Green curtain

At the Fujitsu Semiconductor Aizuwakamatsu Plant, 523 morning glory plants grown from seeds collected from company flower beds were distributed to employees to promote the cultivation of green curtains at employees' homes.

Distribution of morning glory seedlings

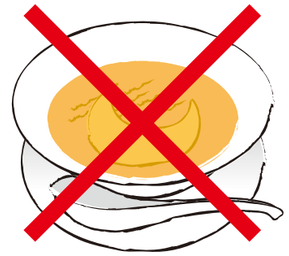
At the Fujitsu Semiconductor Mie Plant, about 1,400 bitter melons were grown and harvested, served at the employee cafeteria, and distributed to employees.

Cafeteria menu

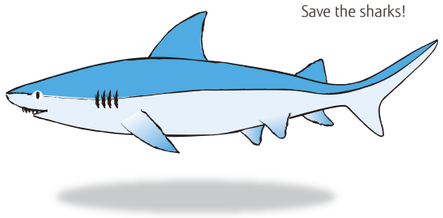
Refraining from shark fin soup

The main reason why the number of sharks is drastically decreasing worldwide is the increased consumption of sharks as food. While shark fin soup is a traditional Chinese dish, Fujitsu Semiconductor Pacific Asia Limited (Hong Kong) is broadly calling on its employees not to order the soup because sharks are becoming threatened with extinction worldwide.

Fujitsu Semiconductor will also continue advancing this simple initiative to prevent the overfishing of sharks from destroying ocean ecosystems.



Save the sharks!



Contributions to Local Communities

Local Cleanup and Nature Conservation Activities

The Fujitsu Semiconductor Group advances efforts closely tied to local communities, including cleanup and greening activities to protect nature near each workplace in Japan. We will continue to advance diverse local activities, emphasizing our relations with local communities.

Greenery and flowers bank tree planting project (cutting grass) (Fujitsu Semiconductor Iwate Plant)

Cleanup activities combined with greenery maintenance (Fujitsu Electronics Central Distribution Center)

Cleanup activities nearby workplaces (Fujitsu VLSI)

"Clean Fukushima" cleanup activities (Fujitsu Integrated Microtechnology Aizu Plant)

Rivers and ocean cleanup operation (Fujitsu Semiconductor Mie Plant)

Cleanup activities nearby the Technology Center (Fujitsu Semiconductor Akiruno Technology Center)

Free Distribution of 400kg of Organic Fertilizer at the Tado Sports Festival

In addition to serving as volunteers to help with the Tado Sports Festival, which is held in Tado Town, Kuwana City (Mie Prefecture) each autumn, Fujitsu Semiconductor employees presented "Grow Grow Green" organic fertilizer made using food scraps from the employee cafeteria as prizes. A total of 400kg of the organic fertilizer was distributed to local residents at the 2011 festival.

Organic fertilizer distribution (Fujitsu Semiconductor Mie Plant)

Fujitsu Semiconductor Exhibits at Aizu Brand Manufacturing Craftsmanship 2011 Fair

The Aizu Brand Manufacturing Craftsmanship 2011 Fair, which draws craftsmen and engineers from throughout the Aizu region, was held October 29 and 30, 2011. The event collected a wide range of products from the Aizu region ranging from traditional crafts items to world-class, cutting-edge technologies. Along with artisans' work and delicious local foods, the fair also celebrated the region's rich traditions and the new manufacturing skills to be passed on to future generations. Fujitsu Semiconductor presented information at the corner on the education of next-generation industrial workers.

Display corner (Fujitsu Semiconductor Aizuwakamatsu Plant)

Environmental Studies and Plant Visit for Local Elementary School Students

Fifteen third graders and two teachers from a nearby elementary school visited the Fujitsu Semiconductor Mie Plant on November 17, 2011, for environmental studies. A General Affairs Department Environmental Management Section employee served as the instructor, and gave an overview of the Mie Plant, its local ties, and the environmental activities at the plant along with some magic tricks. The students then observed the separation of waste products, the equipment that turns food scraps from the cafeteria into organic fertilizer, and the facilities that treat the plant's wastewater. They eagerly took notes and asked the instructor many questions.

School group visiting the plant (Fujitsu Semiconductor Mie Plant)

Meetings to Exchange Opinions on Environmental Reports

Environmental Education

As part of its internal activities, Fujitsu VLSI held a traveling environmental class for employees and their families. The class combines an environmental magic show with a demonstration of dismantling a personal computer. It deepens understanding of the 3Rs (Reduce, Reuse and Recycle), mixing the presentation with magic while actually dismantling a computer to teach the importance of recycling.

This was an initial attempt at a traveling environmental class for employees and their families, and drew a total of about 100 participants. Families learned about the 3Rs while having fun. It also provided a good opportunity for participants to hear about the traveling environmental classes that the company regularly presents at elementary and junior high schools.

External Awards

Fujitsu VLSI Wins Grand Prize at Kasugai City Green Curtain Contest

Thirty-six employees at Fujitsu VLSI created a green curtain 50 meters wide and 4.5 meters high on the south face of their head office building. The planters were made from discarded materials, and used organic fertilizer composted from cafeteria food scraps.

In 2011, the employees grew and harvested about 320 bitter melons, winter melons and cucumbers.

Following an award in the 2009 Aichi Green Curtain Contest, their efforts were recognized with the grand prize at the 2011 Green Curtain Contest held by Kasugai City.

Exhibitions

The Fujitsu Semiconductor Group introduces environmental activities through public exhibitions to heighten interest in our environmental initiatives and in Fujitsu Green Products.

The exhibitions themselves also consider the environment, for example, by positively using green electricity.

Exchange of Opinions with Renesas Electronics Corporation

As in FY2011, the Fujitsu Semiconductor Group once again held meetings with Renesas Electronics Corporation this year to exchange opinions on draft versions of the two companies' environmental reports. We received frank opinions and suggestions from Renesas which were reflected in this Environmental Report 2012, including the items noted below.

Through this exchange of opinions, the Fujitsu Semiconductor Group improved the report to make it more detailed, complete and easy to understand. We will continue striving to make our environmental reports easier for stakeholders to read and understand.

No	Main Opinions and Proposals	Response by the Fujitsu Semiconductor Group	Concerned pages
1	The font seems small, so using a font one size larger would make the report easier to read. Also the colors along the tops of the pages should use one color for each topic.	We returned to font size to the same size used last year, and changed colors at the top of each page to use one color for each topic.	All
2	In information security, the efforts by the affiliate in Germany are very advanced but how about including more specific descriptions about the activities in Japan?	Along with the information about overseas programs, we provided information about domestic activities as well.	P6
3	The Environmental Protection Program table does not include the targets for FY2012. These should be included.	We changed the data to show the FY2012 targets, instead of the FY2010 performance.	P11
4	I think the environmental accounting would be easier to understand using graphs. You may want to consider this for the next fiscal year.	We went without graphs this year given the page space limitations, but we will address this issue in FY2012.	P15
5	The inclusion of customer adoption examples and of comments from customers makes the information easy to relate to. This is really good.	We will continue including customer comments in future years.	P18-19

Receipt of Opinions on the Environmental Report

This was the second year that Fujitsu Semiconductor and Renesas Electronics Corporation exchanged opinions on the two companies' environmental reports. The discussions moved into greater detail, and were highly significant. We sincerely thank Renesas Electronics Corporation for their valuable insights.

The Fujitsu Semiconductor Group will continue working to improve the content of our environmental reports so readers can more easily understand the Group's environmental philosophy and initiatives.

Participants in the Meetings to Exchange Opinions

- Mr. Tsutomu Kikuchi, Mr. Toyotaka Hiue, and Ms. Fumie Igarashi, Legal & Compliance Division, CSR & Compliance Department, Renesas Electronics Corporation
  Mr. Yutaka Karita, Mr. Takashi Okabe, Mr. Yasuki Sakata, and Ms. Yoshiko Wakimoto, Production and Technology Unit, Environment Promotion Department, Renesas Electronics Corporation
- Yutaka Okada, General Affairs Department, Fujitsu Semiconductor Ltd.
  Junichi Konno, Shoichi Sakuma, Hiroshi Osuda, Kohji Nomaki, and Kumiko Nemoto, Environment Promotion Office, Fujitsu Semiconductor Ltd.

Meeting dates: March 27, May 28 and July 2, 2012.

Survey Request

Thank you for reading the Fujitsu Semiconductor Group Environmental Report 2012.

To help us create the next report, we ask for your cooperation in completing the survey found at the following link.

Those completing the survey will receive a copy of the Fujitsu Semiconductor Group Environmental Report 2013.

Survey link WEB **http://edevice.fujitsu.com/en/eco/enq/**