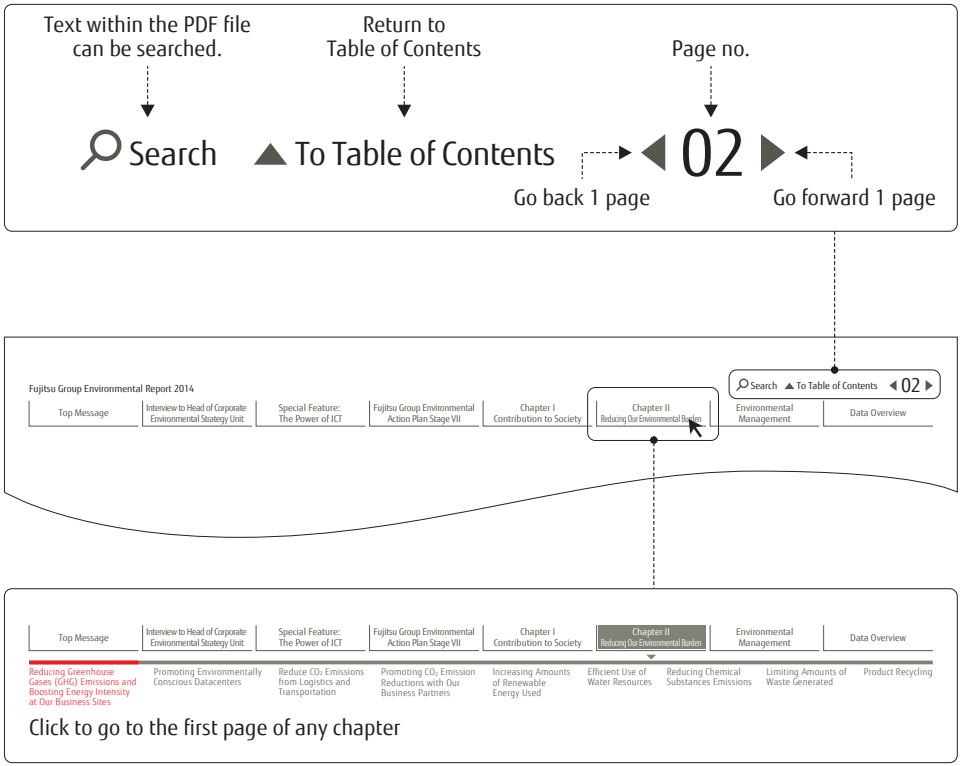
FUJITSU

Fujitsu Group Environmental Report 2014

shaping tomorrow with you

User Guide



Request for cooperation with questionnaire

Fujitsu welcomes readers' comments on this report, which are used as statistical data to help us create better reports. We thank you in advance for your cooperation.

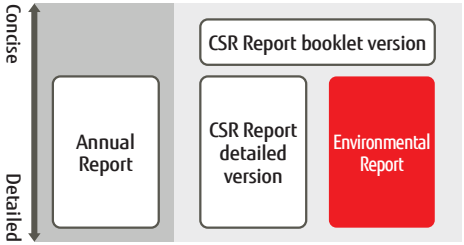
WEB http://www.fujitsu.com/global/about/environment/

Editorial Policy

With a focus on future plans, the Fujitsu Group Environmental Report 2014 offers a report on our recognition of environmental initiatives, our approach to initiatives, and our performance and major activities in FY 2013, in line with the Fujitsu Group Environmental Action Plan (Stage VII, FY 2013 – FY2015) that was formulated on the basis of expectations and requests from society and of important environmental aspects of the Fujitsu Group. Fujitsu Group strives to improve the reliability and transparency of the content of reports, through means including subjecting major data to examination by third-party organizations and publishing third-part opinions concerning indicators. In addition, we have taken ease of reading on PCs and tablets into account through a horizontally oriented page layout.

Reporting System

To meet the needs of readers, the Fujitsu Group releases detailed reports with care given to comprehensiveness of information, as well as reports that concisely summarize key points. We also keep our website updated with new information.



Reporting Period

This report focuses on activities in FY 2013, from April 1, 2013 to March 31, 2014, and the data presented is actual performance data from that period. Content from times outside that period, however, is also presented.

Target Readership

This report is written assuming the following readership:
All Fujitsu stakeholders, with high interest in environmental topics, including customers, employees, stockholders and investors, suppliers and business partners, international society and local communities, public institutions, and governments and specialists such as CSR survey institutions.

Organizations Covered

The coverage is of Fujitsu itself plus a total of 114 companies (including companies outside Japan) centering on consolidated subsidiaries that have built environmental management systems.

» List of Organizations Covered by the Report on Environmental Activities

» Environmental Performance Data Calculation Standards

Significant Changes in Coverage

In conjunction with a transfer of business, Fujitsu Integrated Microtechnology Limited has been excluded from the scope of this report.

Guidelines Used and Referenced

- GRI Sustainability Reporting Guidelines, Version 3.1 (G3.1) and G4 Sustainability Reporting Guidelines
- Ministry of the Environment: Environmental Reporting Guidelines (2012 edition) (Japanese)
- Ministry of the Environment: Environmental Accounting Guidelines (2005 edition) (Japanese)

Published

August 2014 (The next report will be published in August 2015 and the previous report was published in August 2013.)

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A Note Concerning Future Projections, Forecasts and Plans

This report not only describes past and present facts related to the Fujitsu Group but also includes future projections, forecasts and plans. Such projections, forecasts and plans are based on data available when the report was prepared, and therefore involve a degree of uncertainty.
Accordingly, future results of operating activities and other new developments may differ from the projections, forecasts and plans included in this report. We ask our readers' understanding of the fact that the Fujitsu Group cannot be responsible for such eventualities.









Fujitsu Group Environmental Report 2014

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Top Message

Fujitsu Group will Strive for Human Centric Innovation to Overcome Global Environmental Issues and Create a Sustainable Society.

Masami Yamamoto
Fujitsu Limited President

Global Environmental Issues Increase in Severity

We cannot sustain business without the Earth. The development of sustainable society and the growth of business are closely interconnected, inseparable issues. As the world's population grows toward eight billion people, a host of issues are intertwining to create a complex reality.

Among these, global warming and energy issues are becoming ever more severe. There is an urgent need to carry out fundamental and sustainable countermeasures so that we can hand down a prosperous and beautiful planet to the next generation.

The Potential of ICT and an Age in which Everything is Connected

As ICT evolves, we now stand at the entrance of an age in which everything is connected. Devices like smartphones connect though networks to the cloud, and anyone can now make unconscious use of the ever-evolving power of computers.

ICT has begun to hold new value in an age in which appliances, automobiles, social infrastructure, and all manner of things connect through networks. By continuing to provide the intelligence to analyze the voluminous data on networks (i.e., big data) at an advanced level and to support the decisions and actions of people, we hope to bring the innovation that will resolve social issues in fields including the environment, energy, disaster readiness, traffic, medicine, agriculture, and education.

Working Together to Resolve Issues through Human Centric Innovation

By expanding the use and application of ICT, the Fujitsu Group has made contributions to reducing the environmental burden of society and our customers. Unfortunately, global warming continues to advance despite our efforts. From here on out, we must take up the challenge of innovation that will change our lifestyles and society overall through ICT.

The Fujitsu Group is committing itself to technology that supports people—who, after all, drive innovation. Fujitsu is taking up the challenge of Human Centric Innovation, which will change people's lifestyles and society overall through the power of ICT.

Our Environmental Management

In order to fulfill our corporate philosophy of bringing about a prosperous future that fulfills the dreams of people throughout the world, the Fujitsu Group is aiming to realize a sustainable society. Starting with the reduction of our own environmental burden, we will act on our brand promise of "shaping tomorrow with you" and make further contributions to resolving global environmental issues in cooperation with our customers and society.

Interview

Head of Corporate Environmental Strategy Unit Discusses

Fujitsu's Environmental Management

Minoru Takeno
VP, Head of Corporate Environmental Strategy Unit

Toward a Company that Makes a Positive Impact on the Global Environment by Leveraging the Power of ICT

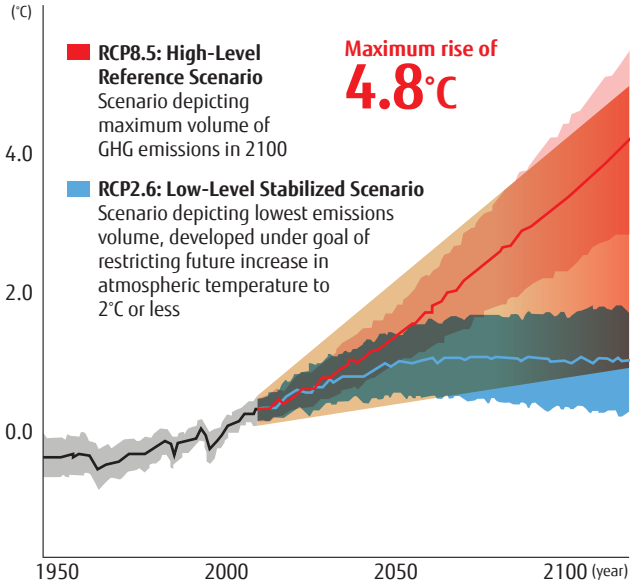
As Global Warming Continues Its Steady Advance, Climate Change, Natural Disasters, Destruction of Ecosystems, and Other Emerging Impacts Caused by Warming are Heightening Risks.
Amid the Complex Interaction of Consequent Social Issues Involving Energy, Food, Water, Health, and More, We Are Left to Wonder What Role ICT Will Fulfill.
The Fujitsu Group is Addressing These Important Themes Head-on to Contribute to the Resolution of Global Environmental Issues.





Q1 What Can ICT Do to Combat the Crisis Facing the Global Environment?

Change in Atmospheric Temperature from 1950 to 2100



*Forecasts from 2005 onward set an average value of 0.0°C for 1986-2005 forecast data, based on multiple climate forecast models
*The observed portion in black is calculated from the average of 42 climate forecast models, the red RCP8.5 from 39, and the blue RCP2.6 from 32
*Shading indicates the range of standard deviation in the yearly averages of individual models
*For each RCP scenario, gradation indicates values that exhibit a high probability of expressing the average for 2081-2100.
Source: IPCC Fifth Assessment Report 2013
Japan Center for Climate Change Actions website(http://www.jccca.org/english/)

A1 ICT Can Contribute not only through Mitigation of Global Warming but also through Adaptation to Its Effects.

Taking a look at current recognition of the global environment, the IPCC (Intergovernmental Panel on Climate Change) issued its Fifth Assessment Report from 2013 to 2014. The report stresses the undeniable reality of global warming, and foresees a 4°C rise in average atmospheric temperature by 2100. While companies have continued their efforts to reduce the emissions of greenhouse gases (GHG), these are unfortunately proving insufficient. There is a need to undertake fundamental and sustainable reduction of GHG emissions at global, national, corporate, and individual levels, and to make greater efforts to mitigate global warming.

The IPCC report further discusses the necessity of adaptation to effects of global warming that are already emerging. It is important that we consider and enact countermeasures against issues related to crop and water resource, natural disasters such as typhoons and flooding, health issues such as heat stroke and epidemics, and other impacts created by climate change.

While bringing convenience and comfort to society, ICT has also been able to promote the efficient use of energy and resources in lifestyles and industry by making work more efficient and making electrical power consumption visible, and by doing so has contributed to the reduction of GHG emissions.

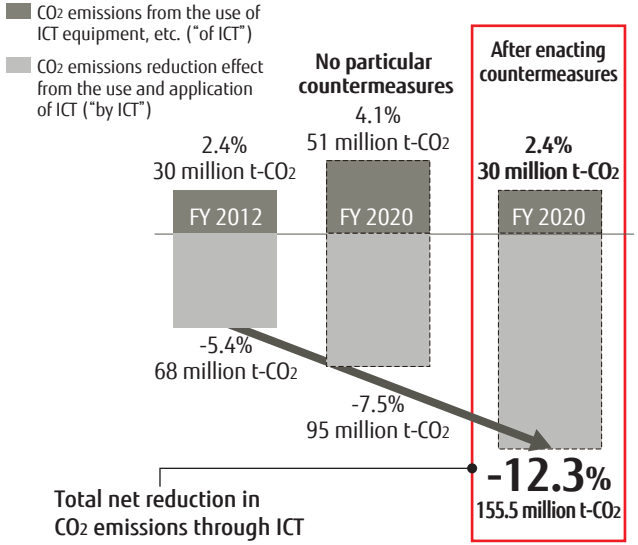
At the same time, we believe that ICT can also make great contributions in the increasingly important aspect of adaptation to effects of global warming. The widespread use and evolution of ICT enables fast collection and analysis of complex and voluminous information, providing support for the decisions and actions of people. In a broad range of domains, from the environment, energy, disaster prevention, and traffic to medical care, agriculture, education, and more, the potential for leveraging ICT is expanding.

As an example, simulating the impacts of typhoons and flooding with supercomputers and making use of the results to consider countermeasures, along with providing accurate and prompt information during disasters, can enable the control of damage to a minimum. Moreover, initiatives are moving ahead in fields such as agriculture, where the use of ICT has so far made less progress.

As an ICT company, Fujitsu is expected to communicate changes that may occur in the world in an easily understood way. While the technology to make data visible through analysis and processing has advanced, this has not been expressed in a way that can be understood by all people, including children and seniors. If means exist to let people perceive data through their eyes, ears, and sense of touch, then we believe that everyone will be able to sense changes arising across the globe as "their own."

Q2 On the One Hand ICT Contributes to Reducing Environmental Impacts, but doesn't ICT also Exhibit Negative Impacts?

CO_2 Emissions Volume of the ICT Sector Overall, and the CO_2 Reduction Effect of the Use and Application of ICT



About 125 million t-CO_2 (10% reduction compared with 1990)

Prepared from Ministry of Internal Affairs and Communications ICT Policy Task Force for a Global Era, 5th Global Issues Study Group materials, and Year 2020 CO_2 Reductions through ICT (Environmental Issues Working Group)

A2 This Is the Reason for a Need to Take Action from the Two Standpoints of "by ICT" and "of ICT."

Through the lowering of network costs and the spread of ICT devices, the global population of Internet users now exceeds 2.7 billion people. The age of the Internet of Things (IoT), in which automobiles, appliances, wearable devices, and all manner of things in the world connect over networks, is said to be upon us, and the number of things connected worldwide over the Internet is predicted to increase from 10 billion in 2013 to 50 billion in 2020. Amid these conditions, ICT is expected to play a role in empowering the human creativity that will change the nature of lifestyles, business, and society for the better. We believe that there is considerable potential for the birth of new innovation that leads to the resolution of environmental issues.

At the same time, ICT cannot operate without electrical power, and its continued expansion will increase the amount of energy used. Even if the amount of energy used by individual devices is small, if their number is large, the energy usage will be enormous. Furthermore, energy is required to operate the networks and datacenters that connect devices. Datacenters operate efficiently, aggregating customers' servers and other equipment, and thus contribute to reducing the overall energy usage of society. However, it is expected that the arrival of the IoT era will further increase the number of datacenters.

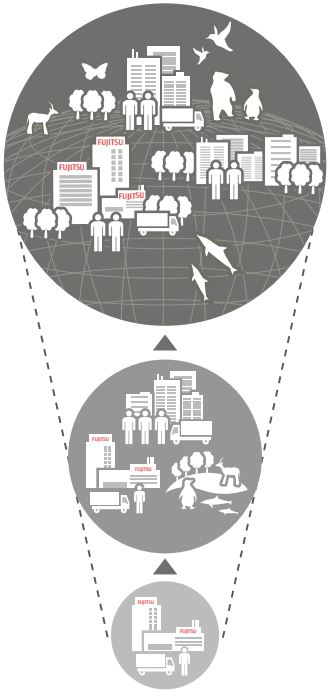
What is required during this phase is that we assess and reduce total environmental impacts. We must advance the use and application of ICT to contribute to the reduction of environmental impacts in society overall ("*by* ICT") and expand positive effects. At the same time, through the provision of environmentally considerate products, we must reduce the energy consumption that accompanies the use of ICT devices ("*of* ICT") and minimize negative effects. The Fujitsu Group has taken an early lead in basing initiatives on the two standpoints of "*by* ICT" and "*of* ICT."

In the same way, 50 billion devices connecting in the world of the IoT will create a need for a corresponding number of sensors and components. How will we secure the resources to build these, and handle the waste after their use? How will we secure the energy needed for the networks and systems to run the devices? We have to consider these issues together.

I believe that from here on out, we will have to quantitatively assess both positive and negative aspects, and engage in dialogues with society as we sketch a vision for Fujitsu Group's environmental management.

Q3 What Are the Key Points of the Environmental Action Plan (Stage VII)?

Changes in the Fujitsu Group Environmental Action Plan



Stage VII
(FY 2013-2015)
Expansion of our contributions to customers and society

Stage VI
(FY 2010-2012)
Promotion of environmental management centered on the three pillars of contribution to customers and society overall, further reduction of our own environmental impacts, and preservation of biodiversity.

Stage I-V
(FY 1995-2009)
Thorough enhancement of the Fujitsu Group's own consideration of the environment

A3 The Plan Clarifies the Contributions to Customers and Society through Our Business Activities.

The Fujitsu Group launched the Environmental Action Plan (Stage VII) in FY 2013. During Stages I-V, the Fujitsu Group worked to thoroughly enhance its own consideration of the environment, while Stage VI centered on the three pillars of contributions to customers and society, further reduction of our own environmental burden, and preservation of biodiversity.

In the Stage VII plan, we have made the contributions of our business activities more clear, reaffirming that our business contributes to reducing the environmental burden of customers and society and thus contributes to sustainability of the planet, while also reaffirming that our contribution is great in comparison with the impacts we place on the environment.

In particular, as the use of ICT cannot be separated from the use of electric power, the impact of Fujitsu Group's business on the environment, whether negative or positive, is most dependent upon energy consumption and the subsequent emission of GHGs. For that reason, we emphasize the importance of reducing GHG emissions in our Environmental Action Plan (Stage VII), and are focusing on providing solutions able to contribute to the reduction of GHG emissions by customers and society, as well as on developing and providing energy-saving and resource-saving products. We will of course continue reducing our own environmental burden, and in particular will strengthen our initiatives to save energy in datacenters.

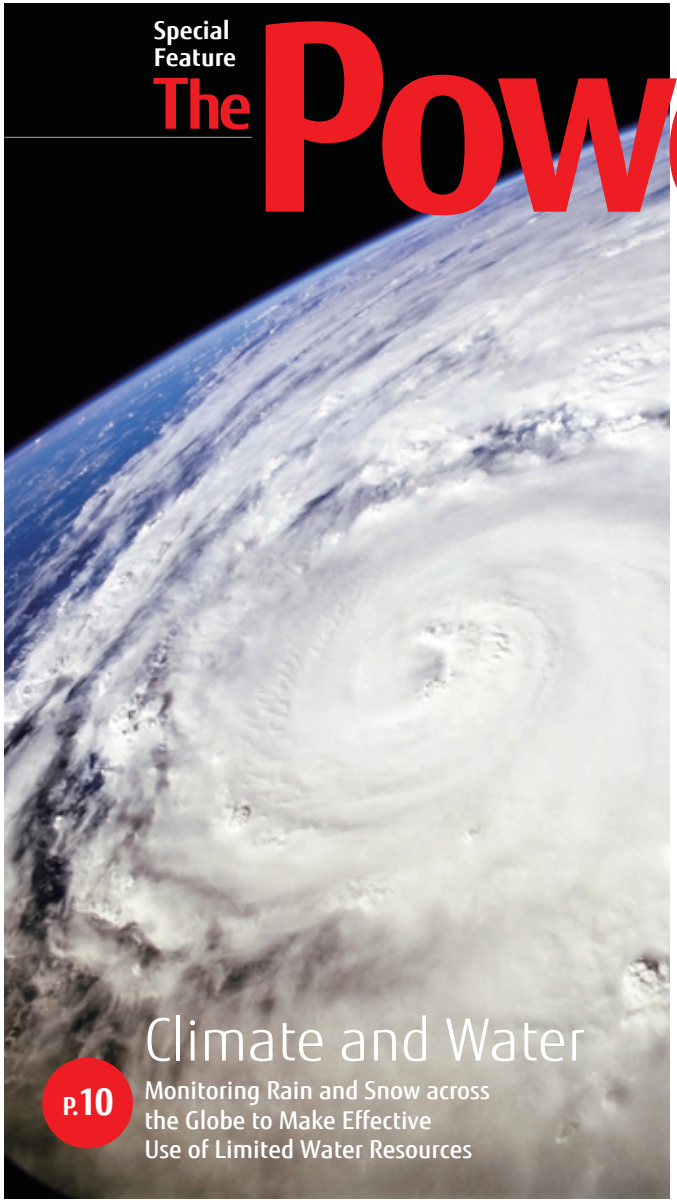
To realize a sustainable society, we must work toward not only energy conservation but also creation of technologies and solutions to address the host of social issues brought about by climate change, population increase, the aging of society, and other changes. The Fujitsu Group is convinced that, by providing ICT solutions that empower people to be innovative , we can stand by and support the people who will undertake the innovation for overcoming social issues.

Special Feature

The Power of ICT

Toward the Realization of Sustainable Society

To Help Create Innovation Aimed at Overcoming Global Warming and Other Environmental and Social Issues, the Fujitsu Group Empowers People to Be Innovative through Its Wide-Ranging ICT Solutions.



Climate and Water

P.10

Monitoring Rain and Snow across the Globe to Make Effective Use of Limited Water Resources

Agriculture

P.11

Achieve "Robust Agriculture" by ICT that Responds Flexibly to Changes in the Natural Environment

Energy

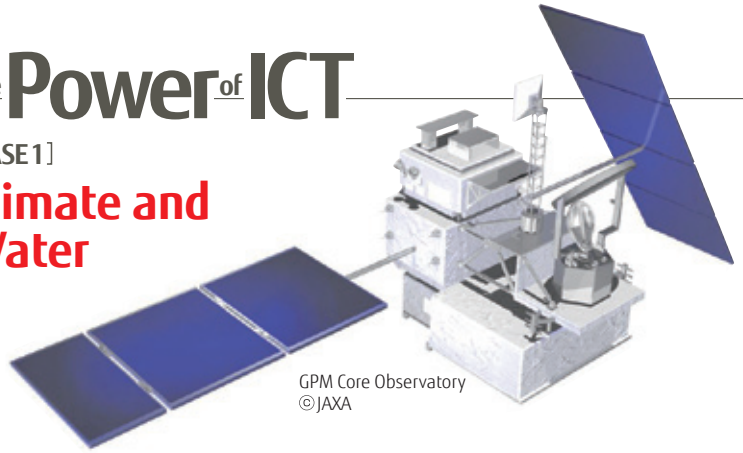
P.12

Contributing to an 80% Power Consumption Reduction and an Enhanced Educational Environment by Optimizing a Higher Education Datacenter

The Power of ICT

[CASE 1]

Climate and Water



GPM Core Observatory
ⓒJAXA

Monitoring Rain and Snow across the Globe to Make Effective Use of Limited Water Resources

——Developing an Operations System to Process Earth Observation Data in the Global Precipitation Measurement (GPM) Mission led by JAXA and NASA

Challenge Preparation for Droughts and Floods

Of the 1.4 billion square kilometers of water on our planet, groundwater and other fresh water usable in our lives accounts for a mere 0.8%. With demand for water expanding under the growth of economies and populations, effective use of the vital resource of fresh water requires that we monitor precipitation conditions over a broad range, and collect and manage data accurately. Currently, however, monitoring data from locations beyond the reach of monitoring networks, such as oceans, remote areas, and developing countries, is insufficient.

At the same time, disasters and economic losses due to extreme precipitation have been increasing worldwide in recent years. To lessen the damage from such disasters, real-time monitoring of precipitation and sharing of data are essential.

Solutions Monitoring of Rain and Snow in Real Time

Satellites are the most effective means of monitoring precipitation over a broad area. However, such monitoring has so far been infrequent, and covering the entire globe required several days. To enable high-frequency, high-precision monitoring of precipitation on a global scale, the Global Precipitation Measurement (GPM) mission, an international joint program led by JAXA and NASA, is now underway.

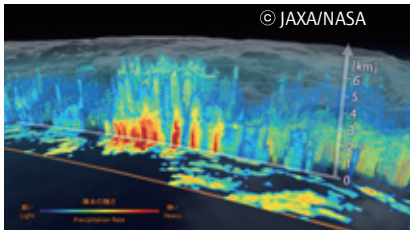
The key to detailed and accurate monitoring of rain and snow in this mission is the Dual-frequency Precipitation Radar (DPR) installed in the GPM Core Observatory. Fujitsu is in charge of the GPM/DPR Mission Operations System that will handle DPR data processing. This system processes and edits the radio waves that reach the satellite after being reflected from rain droplets and snowflakes, combines this with monitoring data from multiple other satellites, creates a precipitation map of the entire globe every hour, and provides the information to NASA and the Japan Meteorological Agency. This sort of data processing is unprecedented anywhere in the world.

The GPM Core Observatory was launched in February 2014, and is currently undergoing initial verification of the DPR.

Benefits Making Effective Use of Monitoring Data in Various Fields

Monitoring by multiple satellites enables the creation of global-scale, 24-hour, 365-day precipitation maps in close to real time. By assessing what degree of precipitation is occurring at any spot on earth, the system is expected to aid the management of water resources, and also to benefit agriculture, logistics, and other industries by improving the precision of weather forecasts. It is also thought that the ongoing accumulation of precipitation data will aid verification and improvement of our understanding of climate change and abnormal weather mechanisms.

Through the provision of ICT, Fujitsu will support adaptation to a changing global environment and will contribute to people's safe and secure lifestyles.



3D distribution image of precipitation observed by GPM's Dual-frequency Precipitation Radar

The Power of ICT

[CASE 2]

Agriculture

Achieve "Robust Agriculture" by ICT that Responds Flexibly to Changes in the Natural Environment

——Accumulating Cultivation Data and Making Production Technology Visible through the "Akisai" Food and Agriculture Cloud

Challenge — Growing Concerns over the Impact of Rising Temperatures on Crops

Over long eras, agriculture has advanced in step with the natural conditions and climates of local regions. With the rise in global average atmospheric temperature in recent years, however, negative impacts such as immature grain, discoloring, growth defects in dehiscent fruit, and insect damage have already begun to appear.* If warming continues to advance, there is a possibility that areas suitable for cultivation will change and the crops that had been grown there will permanently experience poor harvests. This would create problems that cannot be addressed by the experience and expertise of the past.

The field of agriculture must accurately and in real time grasp changes and trends in the cultivation environment, in accordance with hot summers, warm winters, low rainfall, heavy snow, and other perennial changes in temperatures and precipitation volume, and must carry out optimal agricultural work for the conditions.

* FY 2012 Survey Report on the Impact of Global Warming (Ministry of Agriculture, Forestry and Fisheries)

Solutions — Visualizing Farm Environments and Making Tacit Knowledge Explicit

In the cultivation of new crops under global warming, ICT contributes to lessening the risks of insufficient production expertise. Weather sensing devices on farms measure, aggregate, and analyze data including temperature, humidity, and insolation, enabling visualization of the farm environment. In addition to basing work decisions on their own senses, producers are able to use local weather data to optimize the content and timing of work and to engage in highly sustainable farm work and management.

By using work plans, work periods, types of herbicides and fertilizers, and other data aggregated at farmlands with specific cultivation experience, farmers are able to reduce risks.

To make the farming environment and production processes more visible through ICT, Fujitsu has offered the Akisai Food and Agriculture Cloud since 2012. The system's many users include agricultural corporations such as Japan Agricultural Cooperatives (JA).

Benefits — Contributing to the Resolution of Diverse Issues on Farms

The Akisai Farm was established in Numazu Plant to put the Akisai Cloud into practice. There, Fujitsu uses sensors and cloud technology to measure and control the environment, and undertakes year-round greenhouse cultivation of a vegetable (senjusai) that is generally cultivated only in fields in summer.

Moreover, at the Aizuwakamatsu Plant, Fujitsu has built a fully enclosed plant factory using the Akisai Cloud. Through the cultivation and sale of low-potassium chemical-free leaf lettuce, Fujitsu is contributing to the recovery from the Great East Japan Earthquake and to the revitalization of local industry.

In this way, ICT enables stable and efficient farm work not exposed to a natural environment and contributes to the strengthening of agricultural production and management. By aggregating, analyzing, and using diverse data worldwide, Fujitsu is working to resolve the global-scale issue of food shortages. We will continue to support a future for secure, safe, and abundant food through ICT.

The Power of ICT

[CASE 3]

Energy

External view of UCS

Contributing to an 80% Power Consumption Reduction and an Enhanced Educational Environment by Optimizing a Higher Education Datacenter

——University Campus Suffolk set aside storage scalability thanks to virtualization technology

Challenge An ICT strategy to meet critical needs at a higher education institution

Growth in student numbers participating in higher education has led to significant changes in ICT service provision. In the UK, University Campus Suffolk (UCS), as part of its 2020 vision, was planning for rapid expansion in their 4,500 undergraduate student population.

A five year strategic initiative was put in place to service growth in student numbers, which included a campus wide ICT modernization program and new build data center, to replace an older data center with a PUE*1 of over 2.0.

The overall ambition of the project was to eliminate prolonged downtime, due to aging and increasingly unreliable storage and server equipment and fragmented service delivery to staff and students. Flexible storage provision, lower power consumption and consolidation of services were the keystone of the ambitious project plan.

*1 PUE
The PUE (Power Usage Effectiveness) value is an index expressing the ratio of power consumed by the datacenter as a whole to power consumed by the IT equipment inside it, with the goal being to come as close to 1.0 as possible.

Solutions 80% Energy Consumption Reductions from Virtualizing Data Storage

UCS's installation of two FUJITSU Storage ETERNUS DX80 systems, as part of the modernization plan, enabled a twofold increase in storage performance, and the consolidation of their legacy servers into a unified storage environment. This established a stable platform for service modernization.

Virtualization of legacy servers was the next logical step. UCS took nearly 100 physical servers and virtualized them onto five FUJITSU Server PRIMERGY RX300 units. The RX300 servers feature highly energy efficient 80 PLUS *2 certified power supplies, as a key feature of the overall design.

The project vision was achieved, resulting in a reduction of power consumption by up to 80%, floor space utilization by 70%, and a corresponding reduction in operating costs.

*2 80 PLUS®
Power saving standards, formulated mainly by U.S. industry groups, for the power supply units in computers and servers (see Page 18).

Benefits Contributing to an Enhanced Education Environment

With this new, updated SAN and virtualization solution, UCS was able to realize a PUE close to 1.2, which was a significant reduction from the original PUE, of over 2.0.

UCS is deploying additional Fujitsu technologies, across campus, as an expansion of the original strategic vision. For example UCS's Computer Games Design course purchased FUJITSU CELSIUS M370 workstations, to replace gaming PCs. The highly performant CELSIUS workstations gave greater scope for ambitious 3D graphics and gaming projects, enabling Games Design students to realize their ambitions more quickly than ever before, while contributing towards UCS's green campus targets.

Fujitsu is dedicated to providing solutions for the issues facing higher education institutions and, along with supporting the development of a new generation of workers, strives to contribute to reducing energy consumption and efficiently using resources by optimizing ICT environments.

Fujitsu Group Environmental Action Plan Stage VII (FY 2013–FY 2015)

To set specific targets for putting Fujitsu Group Environmental Policy into practice, the Fujitsu Group formulated medium-term action plans.
For the period FY 2013-2015, Fujitsu has formulated and is enacting the Fujitsu Group Environmental Action Plan (Stage VII).

Our world faces many challenges relating to population growth. These include the security of supply of energy, other resources and food, climate change, the increasing frequency of natural disasters, and loss of biodiversity. These social and environmental issues are deeply interconnected, and they cannot be managed in isolation. Society expects businesses to proactively take actions to address these challenges.

Deploying information and communications technology (ICT) in an intelligent manner can improve the efficient use of energy and other natural resources and reduce greenhouse gas emissions. ICT can also assist society preparing for and responding to natural disasters. Fujitsu believes ICT has a major role to play in helping society address the world's environmental challenges. Beyond meeting today's demands, ICT has the power to connect people, enable sharing of knowledge and experience, and shape a safer, sustainable, and more prosperous tomorrow.

Through our business activities, Fujitsu will continue to respond to these social and environmental challenges, by increasing the deployment of ICT sustainability solutions throughout society and developing new innovative technologies. As a leading ICT company, we will continue working together with our stakeholders in the global value chain including our customers, partners and suppliers to shape a sustainable and prosperous society.

	Theme	Target items (targets through the end of FY 2015)
Our Society	Contribution to Society by ICT: Reduce Greenhouse Gas Emissions	Reduce greenhouse gas emissions for our customer and society over 26 million tons. *1
	Contribution to Society by ICT: Increase Solutions	Increase the deployment of sustainability solutions.
	Design and Deliver Eco-efficient Products: Energy Efficiency	Achieve top-level energy efficiency *2 of more than 50% of the newly developed products.
	Design and Deliver Eco-efficient Products: Resource Efficiency	Increase resource efficiency of newly developed products by 20% compared to 2011.
	Leading Edge R&D	Develop innovative technologies that enable solutions and products to reduce the environmental load.
	Corporate Citizenship: Social Challenges	Support initiatives that address the complex social and environmental challenges, e.g. biodiversity conservation.
	Corporate Citizenship: Social Activities	With society, support our employees to volunteer social activities.
Our Business	Efficient Business Operations: Reduce Greenhouse Gas Emissions	Reduce greenhouse gas emissions in our business facilities by 20% compared to 1990.
	Efficient Business Operations: Energy Intensity	Improve energy intensity in our business facilities over 1% each year.
	Efficient Business Operations: Data Centers	Improve environmental performance of our major data centers.
	Efficient Supply Chain: Logistics	Reduce CO_2 emissions *3 per sales from logistics over 4% compared to 2011. *4
	Efficient Supply Chain: Procurement	Expand activities of reducing CO_2 emissions to all types of suppliers.
	Efficient Use of Resources: Renewable Energy	Increase generation capacity and procurement of renewable energy.
	Efficient Use of Resources: Water	Continue efforts for efficient use of water, e.g. water recycling and water saving.
Continuous targets *5	Reduced Environmental Impact: Chemicals	Reduce chemical emissions to less than the average level of 2009-2011 (PRTR: 21t, VOC: 258t).
	Reduced Environmental Impact: Waste	Reduce the amount of waste to less than average level of 2007-2011 (amount of waste: 31,134t). Keep Zero Emission in factories in Japan.
	Reduced Environmental Impact: Recycling	Maintain over 90% resource reuse rate of business ICT equipment at Fujitsu recycling centers.

*1 **26 million tons:** Calculate the numeric target by multiplying annual sales of each solution category by a conversion factor of CO_2e savings per sales which is based on around 300 case studies of Environmentally Conscious Solutions in Japan.
*2 **Achieve top-level energy efficiency:** Achieve more than 25% of market benchmark in energy efficiency such as top-runner products (first in the world or industry, top of the world or industry)
*3 **Reduce CO_2 emissions:** Calculate emissions of CO_2 equivalence from energy consumption
*4 As the initial target was achieved, from FY 2014 the Fujitsu Group has changed the target to "reduce CO_2 emissions per sales from transport over 1% (on average) compared to FY 2013."
*5 **Continuous targets:** Targets to be achieved through business activity because already achieved high level performance.

Chapter I

Contribution to Society

Under the Environmental Action Plan (Stage VII), the Fujitsu Group is aiming to expand our contributions to society overall and is globally expanding the scope of our targets, including reduction of GHG emissions through the provision of ICT and social contribution activities by employees. Moreover, as ICT is able to contribute to the resolution of various environmental issues, Fujitsu has set goals for expanding the provision of solutions that will contribute to global sustainability, as well as for promoting research and development. In addition, the company will make efforts to improve the environmental performance of the ICT products that are used by our customers.

Key Achievements in FY 2013

- Contribution to reducing GHG emissions through ICT: **10.87 million tons**
- New products with top-level energy efficiency: **39.0%**
- Resource efficiency of new products: **21.3% improvement** (compared with FY 2011)
- Hours of social contribution activities by employees: **129,000 hours**

About Symbols Used ✓Examined by third-party organization ○FY 2013 target achieved ●FY 2013 target not achieved

Our Society

Theme	Target items (targets through the end of FY 2015)	FY 2013 Key Performance	Status	
Contribution to Society by ICT: Reduce Greenhouse Gas Emissions	Reduce greenhouse gas emissions for our customer and society over 26 million tons. *1	Contributed to reducing customers' and society's GHG emissions by 10.87 million tons (Japan: 6.68 million tons; overseas: 4.19 million tons)✓	○	P.15
Contribution to Society by ICT: Increase Solutions	Increase the deployment of sustainability solutions.	Prepared an action framework Set a definition and criteria of a sustainability solution, and identified potential solutions	○	P.17
Design and Deliver Eco-efficient Products: Energy Efficiency	Achieve top-level energy efficiency *2 of more than 50% of the newly developed products.	Made 39.0% of new products top-level energy efficient✓	●	P.18
Design and Deliver Eco-efficient Products: Resource Efficiency	Increase resource efficiency of newly developed products by 20% compared to 2011.	Increased resource efficiency of new products by 21.3% compared to FY 2011.✓	○	P.20
Leading Edge R&D	Develop innovative technologies that enable solutions and products to reduce the environmental load.	Announced 18 key green technologies	○	P.22
Corporate Citizenship: Social Challenges	Support initiatives that address the complex social and environmental challenges, e.g. biodiversity conservation.	Funding: Provided support for NPO activities and for typhoon victims Technology: Provided the Mobile Photo System cloud service Human resources: Provided management know-how for small-scale charities	○	P.24
Corporate Citizenship: Social Activities	With society, support our employees to volunteer social activities.	Dedicated 129,000 hours to social contribution activities by employees	○	P.24

*1 26 million tons: Calculate the numeric target by multiplying annual sales of each solution category by a conversion factor of CO_2e savings per sales which is based on around 300 case studies of Environmentally Conscious Solutions in Japan.
*2 Achieve top-level energy efficiency: Achieve more than 25% of market benchmark in energy efficiency such as top-runner products (first in the world or industry, top of the world or industry)

GHG Emission Reduction through the Provision of ICT

Our Approach

Through the provision of ICT, the Fujitsu Group is working to create innovations in wide-ranging areas of society, including improvement of efficiency in energy usage, greater efficiency in production activities, and reduction in the movements of people and goods. By doing so, we aim to contribute to the reduction of GHG emissions. We believe that the use of ICT by large numbers of customers will reduce GHGs in society overall, while leading to ongoing business growth for the Fujitsu Group as well.

The Fujitsu Group is working to quantitatively visualize – and also expand – the contribution to GHG reductions from the ICT used by our customers. Between FY 2009 and FY 2012, this ICT usage has contributed to a cumulative reduction of 12.23 million tons of CO_2 emissions. From FY 2013, we will extend the scope of our targets overseas, and aim to contribute to a global cumulative reduction in emissions of 26 million tons or more over the three years through FY 2015.

Summary of FY 2013 Achievements

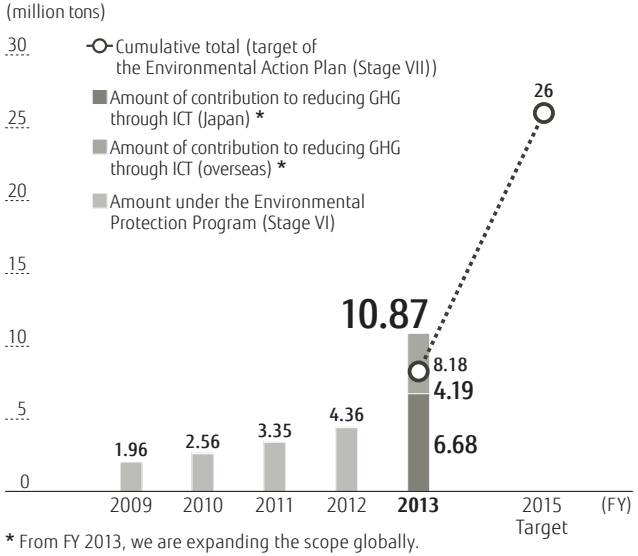
Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Reduce greenhouse gas emissions for our customers and society: over 26 million tons
FY 2013 Targets	Contribute to reducing customers' and society's greenhouse gas emissions by: over 8.18 million tons
FY 2013 Key performance	10.87 million tons [Japan 6.68 million tons, Overseas 4.19 million tons]

Performance and Results for FY 2013

Expanding Environmentally Conscious Solutions

To advance the quantitative visualization of GHG reduction effects through ICT, we recognize solutions with an expected reduction effect of 15% or more as "environmentally conscious solutions." In FY 2013 we moved ahead with recognizing these cases, centered on solutions that we provide to large numbers of customers. Moreover, we leveraged opportunities to propose environmental contribution effects to customers and worked to convey the environmental value of our solutions.

Amount of Contribution to Reducing Emissions of Greenhouse Gases (GHG) through the Provision of ICT



* From FY 2013, we are expanding the scope globally.

Recognizing 48 New Cases that Contribute to 10.87 million Tons of GHG Reduction

The Fujitsu Group recognized 48 new cases of environmentally conscious solutions in Japan, bringing the cumulative total to 349. These new cases include the Global Communication Platform that transforms work styles, and the SupportDesk Service that offers total support for customers' ICT operation. The result has been a reduction effect of 10.87 million tons of GHG worldwide, meeting our target.

FY 2014 Targets and Plans

Setting Priority Solutions and Advancing Recognition

Toward our target of a 16.99 million-ton cumulative amount of contribution to GHG reduction from FY 2013, we are placing priority on solutions which we provide to large numbers of customers and solutions for which we foresee expanded use by customers, such as cloud computing and mobile, as we engage in recognition of environmentally conscious solutions. We will also work to make the results of assessments of these easily understood to customers in terms of environmental value.

Examples of Priority Solutions (FY 2013)

1. FUJITSU Managed Infrastructure Service SupportDesk
2. Global Communication Platform
3. FUJITSU Software Systemwalker
4. Product Lifecycle Management (PLM) Solution FJPLEMIA
5. FUJITSU Software SIMPLIA
6. Patent management cloud service ATMS PROPAS

Main Activities in FY 2013

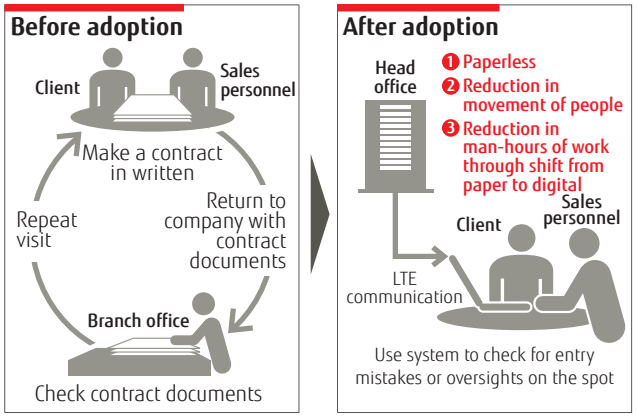
Reducing CO_2 Emissions by 43.1% through Adoption of Sales Tablet Computers for Life Insurance Company

In December 2013, Fujitsu provided a tablet computers-based solution as the core of the insurance policy management system for insurance sales personnel.

The sales personnel have traditionally relied on voluminous paper documentation. In addition, such paperwork are typically performed at sales offices. Through enhanced security functions, our solution allows the sales personnel to perform business tasks, from explanation of products to preparing contracts, using tablets at the customer's location. The solution achieves paperless documentation and eliminates travel from the field to the office.

Tablet usage image

Overview of the Solution



Assessment of the environmental contribution effect for customers revealed a GHG reduction effect of 43.1% (Fujitsu's estimate). In addition to enabling significant reduction in paper usage on the order of tens of millions of sheets, the solution has had a marked effect in reducing personnel movement (including business travel expenses and transportation expenses) and office space (including the use of energy for lighting, air conditioning, etc.).

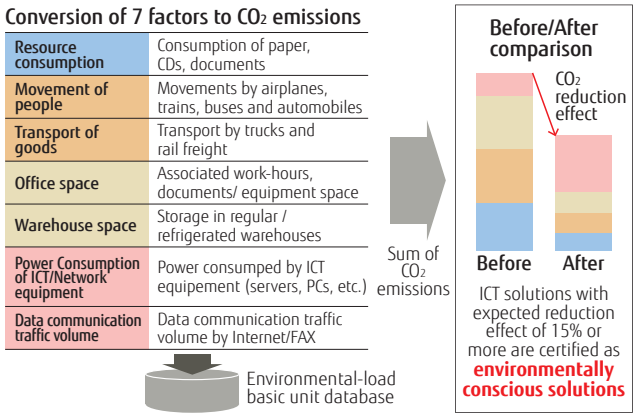
Reference Information

Calculation Method for Amount of GHG Reduction Effect

At the Fujitsu Group, we have assessed the quantitative reduction in environmental burdens (in terms of reduced CO_2 emissions) from ICT adoption using an environmental impact assessment method developed in 2004 by Fujitsu Laboratories Ltd. We have assessed the CO_2 emission-lowering impacts in over 300 prior cases and have calculated the CO_2 reduction effect per unit of sales from the accumulated data.

In calculating the amount of contribution to GHG reduction, we calculate the annual amount of reduction effect from the CO_2 reduction effect per unit of sales and from the annual sales of each solution category.

Overview of Environmental Impact Assessment Methodology



Comment from Third-Party Verification Body

From a third-party perspective, we reviewed the FY 2013 data on the amount of contribution to GHG emission reduction through the provision of ICT.

In the calculation of the amount of GHG emission reduction effect, environmental assessment results for each solution were used as basic data. These data all undergo checks by the internal Environmentally Conscious Solutions Examination Board, which functions effectively as a method of securing reliability of the data. In addition, we note that the documents used in calculations have been properly prepared, and efforts have been made to make the calculation method transparent.

At the same time, we concluded that the method for calculating GHG reduction effect per unit of sales, a key point of the calculations, holds room for improvements to increase the accuracy of results. As examples, we believe that reviewing category classifications when calculating GHG reduction effect per unit of sales, as well as resetting baseline scenarios to better match current reality, would be effective methods, and we hope that further consideration will be given here.

Masatoshi Sakaguchi
System Certification Division, Bureau Veritas Japan

Deploying Sustainability Solutions

Our Approach

Achieving a sustainable society requires that we address not only measures against global warming by reducing GHG emissions, but also a variety of environmental and social issues including resource efficiency, conservation of biodiversity, food supply security, urbanization, and disaster preparedness.

In response, the Fujitsu Group is increasing deployment of sustainability solutions as we continue to respond to global environmental and social issues through ICT solutions. We are studying and implementing these solutions through the global members of our Environmental Solutions Committee and its constituent working group (WG).

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Increase the deployment of sustainability solutions.
FY 2013 Targets	Sort out issues to be resolved and identify solutions. Create mechanisms for systemization.
FY 2013 Key Performance	1. Prepared action frameworks to expand our provision of sustainability solutions. 2. Set a definition and criteria of a sustainability solution, and identified potential solutions.

FY 2013 Performance and Results

Constructed Action Frameworks and Set a Definition and Criteria

To achieve the targets of the Environmental Action Plan (Stage VII), the Fujitsu Group has established a working group (WG) whose global members come together under the Environmental Solutions Committee.

We have set criteria and a definition ("ICT Solutions that contribute to resolving the world's environmental and social issues") for a sustainability solution in the Fujitsu Group, and, drawing on an analysis of the Fujitsu Group's strengths and those of our competitors, have divided issues concerning sustainability into four areas: food and energy, urbanization, use of resources, and biodiversity. We have also engaged in the identification of candidate solutions and the collection of case studies from customers.

TOPICS

Using an Energy Management System for Central Management of Public Facilities in Date-City (Fukushima Prefecture)

Fujitsu's cloud-based energy management system, called FUJITSU Intelligent Society Solution Enetune-BEMS (Enetune-BEMS), differs from previous BEMS* that handled electricity consumption on a building-by-building basis. The new system, via a cloud-based platform, allows central management, integration, and visualization for multiple business sites.

Furthermore, the system supports energy conservation measures, energy saving measures, and energy management at these customer sites, through benefits such as demand management and remote/automatic control of energy consuming equipment.

In Date-City (Fukushima Prefecture), an Enetune-BEMS system was adopted, with some parts operational from April 2014. This has enabled the city to efficiently and effectively limit power consumption during peak periods, first by utilizing central management, via government office PCs, of a total of 32 public facilities and elementary and middle schools in the city, and second by designating sites that require priority treatment. On top of this, by constructing an information sharing system, the city has become able to share information on power usage, as well as the status of power saving measures, between public officials, and quickly and efficiently transmit information to citizens as well.

* BEMS (Building Energy Management System): A system for achieving efficient energy usage through centralizing information on building and office energy consumption, and equipment and facility operation status, in addition to offering visualization, operation optimization, and proposals for improvement measures.

FY 2014 Targets and Plans

Deliver Messages on Sustainability Solutions to Customers

With the aim of increasing the deployment of solutions to customers, during FY 2014 we will broadly disseminate messages on sustainability solutions through our website and other channels.

We will also work to provide case studies and to expand our lineup of solutions.

Development of Top-Level Energy Efficient Products

Our Approach

As energy-related regulations for ICT products increase in number and in the breadth of the products they target, energy efficiency is taking on importance within society in the form of environmental label conformance and green procurement requirements.

Amid this background, the Fujitsu Group believes that we must accelerate improvement of the energy performance of products during their use, in order to reduce GHG emissions. For that reason, we are engaged in the development of products featuring top-level energy efficiency. Up to now, we have worked to improve the energy efficiency of products through development of "Super Green" products. As we now seek to further increase energy efficiency, in our Environmental Action Plan (Stage VII) we have set a target of making over 50% of all new products top-level energy efficient.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Achieve top-level energy efficiency of more than **50%** of newly developed products.
FY 2013 Targets	Make **40%** or more of new products top-level energy efficient.
FY 2013 Key Performance	Made **39.0%** of new products top-level energy efficient.

FY 2013 Performance and Results

Actively Applied Energy-Saving Technology in All Divisions

In each of our business divisions, we have set targets for the achievement of top-level energy efficiency based on the number of product series that are expected to be developed during FY 2013. We have adopted high-efficiency power supplies in our storage systems and servers, have adopted energy-saving displays and optimized energy-saving control in our smartphones, and have strengthened power management features in our scanners. In addition, all of our divisions are actively undertaking the application of energy-saving technologies such as aggregation of LSIs, reduction of components, and adoption of energy-saving devices, and are engaged in development of top-level energy efficient products.

FUJITSU Server PRIMERGY RX300 S8 Employs Industry-Leading High-Efficiency Power Supply Units

Realizes Energy Consumption Reductions from a High-Efficiency Power Supply Unit with 80 PLUS® Titanium* Certification.

* The highest certification rank given through a U.S. industry group-focused program that sets energy efficiency standards for PC/server power supply units.

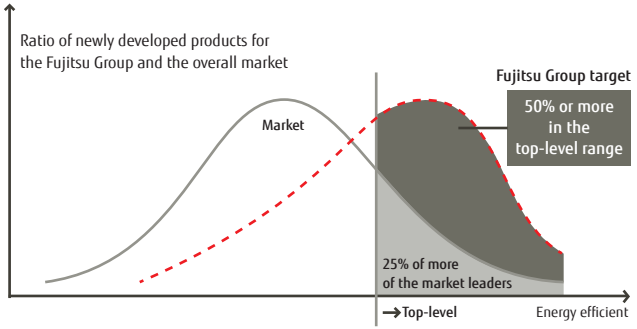
Fell Barely Short of Our Target due to Unplanned and Delayed Development

The Fujitsu Group's performance in FY 2013, at 39.0%, fell just short of our target. Major causes included the occurrence of unplanned development due to rapid changes in market demands, and delays by external organizations in the setting of standards adopted in our targets, which resulted in inability to meet the standards and subsequent delays in development.

Reference Information

Top-Level Energy Efficient Products

Products, beginning with "top-runner" products (first in the world or industry, top of the world or industry), that achieve 25% or more of the market benchmark in energy efficiency.



FY 2014 Targets and Plans

Deploying Outstanding Energy-Saving Technology and Expanding Its Application to Products

To achieve our fiscal year target of making 45% or more of new products top-level energy efficient, we will review plans to pursue actions such as the addition of top-level product development in all divisions. In addition, as a measure to improve energy efficiency, we will deploy outstanding energy-saving technology across the company and expand its application to products. Looking toward the future, we aim to advance the development of advanced technology for energy-saving devices, which will contribute to revolutionary improvements in energy efficiency.

Main Activities in FY 2013

Smartphones that Achieve the Industry's Highest-Level Battery Life

ARROWS NX F-06E/F-01F

For many smartphone owners, fast-draining batteries have been the greatest source of dissatisfaction. In response, Fujitsu worked to reduce energy use in the products it launched in FY 2013, and achieved industry-leading battery life with the ARROWS NX F-06E and top-class battery life with the ARROWS NX F-01F.

Three elements have supported Fujitsu in this effort: large-capacity compact batteries, optimized energy-saving control, and reduced power consumption in displays. With regard to the latter, the F-01F led the industry in adopting cutting-edge displays that achieve a 45% reduction in liquid crystal backlight power consumption at the brightest setting, compared with general TFT displays.

Disk Storage Systems that Reduce Power Consumption in Eco-Mode

FUJITSU Storage
ETERNUS DX100/200/500/600S3

Fujitsu's ETERNUS DX disk storage system is equipped with an Eco-mode function that supports the use of MAID technology to spin the drive's disc only when needed. When the drive has not been accessed for a set length of time, the system spins down the disk to reduce power consumption. When the stopped disk drive is accessed, it can be used for about one minute.

In addition to Eco-mode, Fujitsu has adopted power supply units with the industry's highest-level efficiency to control losses from power conversion (AC-DC), as well as technology that finely controls the rotation speed of cooling fans in accordance with the surrounding temperature.

Reference Information Top-Level Energy Efficient Product Target Standards

For its targets in each product area, Fujitsu sets standards that recognize top-level energy efficiency compared with the market overall or with conventional products.

Example of Target Standards*1

Reference Level	Product Categories
ENERGY STAR criteria (in effect) compliant	PCs, imaging equipments , etc.
Top-level achievement rate of the Top Runner Program (FY 2011) under the Law concerning the Rational Use of Energy (Energy Conservation Law)	Servers*2, storage systems, etc.
Industry-leading energy efficiency	LSI, products for specified fields, etc.
Industry's highest-level battery life	Smartphones
Power consumption reductions over prior products/prior performance	Network products*3, electronic components, etc.

*1 Depending on product specifications, standard values differ even for products within the same category.
*2 Excluding PC servers.
*3 A larger number of stars designate the top-level, concerning the products which are assessed by Ecology Guideline For the ICT Industry.

Improving the Resource Efficiency of Products

Our Approach

Amid the depletion of national resources, rising international resource prices, uncertain supply of rare metals, and other growing threats to the sustainability of companies and society, there is also a growing view worldwide of the importance of resource efficiency. An example can be seen in the EU's designation of resource efficiency as a growth strategy and its establishment of the Resource Efficiency Flagship Initiative.

The Fujitsu Group, too, believes in the importance of efficiently using resources in the ICT products that we provide to customers. Toward that end, we have engaged in "3R design" that draws on the principles of reduce, reuse, and recycle, and have developed our products with technology that is effective in reducing the use of resources. We are making efforts to reduce environmental burdens through improved resource efficiency, which is made possible by designing products to be lighter and smaller, using recycled plastics, reducing the number of parts, enhancing ease of disassembly, and improving recyclability. Our goal is to offer outstanding products that provide customers with benefits including compactness, light weight, and space savings.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Increase resource efficiency of newly developed products by **20%** or more (compared to FY 2011)
FY 2013 Targets	Increase resource efficiency of new products by **10%** or more (compared to FY 2011)
FY 2013 Key Performance	Increased resource efficiency of new products by **21.3%** (compared to FY2011)

FY 2013 Performance and Results

Improving the Resource Efficiency of New Products

In the past, there have been no officially released indicators of efficiency of resource, or mechanisms for its comprehensive, quantitative evaluation. In response, in FY 2012 the Fujitsu Group created its own definition of "resource efficiency". In FY 2013 we began using our indicators in the evaluation of products* newly developed by Fujitsu, while also undertaking initiatives aimed at reducing the number of parts in products and reducing the size of products through smaller, thinner, and lighter parts and higher-density mountings.

* **Products newly developed by Fujitsu:** Excludes products for which resource efficiency would be determined by customer specifications or standards.

Achieving 21.3% Improvement in Resource Efficiency

Fujitsu has achieved a 21.3% improvement in FY 2013 resource efficiency, against a target of 10%. This is the result of smaller size and lighter weight, primarily in smartphones, PCs, servers, palm vein authentication devices, and mobile phone base stations.

Examples of New Products (Resource Efficiency Improved)

Non-Contact Palm Vein Authentication Sensor

LIFEBOOK U904 Ultrabook™

ARROWS NX F-06E

ARROWS NX F-01F

Car-Mounted Speaker

Reference Information — Definition and Calculation of Resource Efficiency

Resource efficiency is evaluated by dividing the value of a production, by the environmental burden (in terms of use and disposal) of the elements (resources) comprising the products.

$$\text{Resource efficiency} = \frac{\text{Product value}}{\text{Environmental burden from resource usage} + \text{Environmental burden from resource disposal}}$$

Environmental burden from resource usage = Σ (Resource burden coefficient x Resource usage volume)

Environmental burden from resource disposal = Σ (Resource burden coefficient x Resource disposal volume)

Definition of Each Item

Product value	To place emphasis on the valuation of reduction in environmental burden due to resource usage and disposal, product value is limited to those that related to resource usage and is set on a per-product basis. (Example of factor not considered : CPU performance improvements)
Resource burden coefficient	Environmental burden weighting coefficient that is specific to a particular resource and considers factors like exhaustibility, scarcity, and environmental impact from mining and disposal. Activities will begin with this figure set to a value of "1" for all resources.
Resource usage volume	Mass of each resource used in the product (excluding the mass of recycled plastic used).
Resource disposal volume	Mass of each resource disposed of (not reused) in connection with a post-use product (design value). Activities will begin with this figure set to a value of "0".

FY 2014 Targets and Plans

Aiming for Further Improvements in Resource Efficiency

Toward our fiscal year goal of improving resource efficiency of new products by 15% or more compared to FY 2011, the Fujitsu Group is not only continuing its FY 2013 initiatives but is also working to expand development of new lightweight, rigid materials and the use of recycled materials. We also seek to widely publicize our products' environmental performance to increase recognition of this factor, which we will link to sales growth.

Main activities in FY 2013

Commercializing the World's Smallest, Thinnest, and Lightest Non-Contact Palm Vein Sensor for Use in Thin PCs and Tablets

The Fujitsu Group has commercialized the world's smallest, thinnest, and lightest (as of April 2013) non-contact palm vein sensor. Using non-contact, reflective-based authentication, this palm vein authentication sensor is adapted to applications calling for compact and slim form. By using an ultra-compact image sensor and a new lens design, we have achieved dimensions of 25.0mm width x 25.0mm depth x 6.0mm height (a 61% volume reduction from previous sensor) and a 4.0g weight (a 56% reduction in weight). Through repeated testing and simulation we have ensured the same high quality as in previous models, avoiding any loss of strength and precision in parts despite the smaller and lighter form. By adopting energy-saving sensors and ultra-compact, high luminous efficiency LEDs, we also reduced power consumption by 18% from previous models.

The sensor is easily incorporated into slim-type laptop PCs and tablets, and will broaden the uses of palm vein authentication.

Announcing the World's Thinnest Notebook PC

Fujitsu has achieved both thinness and toughness in the LIFEBOOK U904 Ultrabook™, the world's thinnest (as of June 2013) HDD-equipped laptop PC. We modified the sheet thickness of the palm rest component and the underside plate to better fit the form of the electronic components, slimming the thickest parts of components while thickening those parts that require strength.

A variety of improvements, including a thinner and lighter liquid crystal display unit, a smaller-circumference hinge, aggregation of motherboard-mounted components onto one side of the board, and lower height due to a folding, slide-out LAN connector, bring the thickness of the body down to 15.5mm.

Advancing 3R Design

Through our proprietary product environmental assessments and green product evaluations, the Fujitsu Group is working toward the application of reduced resource usage, improved recyclability, and other technologies that take into account the 3Rs. Examples of the effective resource-saving technologies that we are deploying in our products include reductions in the number of components and cables, performance enhancements, space savings through higher-density integration, and digital product manuals.

From 2010, we have also conducted regular study tours for designers at the Fujitsu Group recycling centers. In addition to hands-on experience with dismantling used products, designers gain feedback from staff in charge of recycling through idea exchanges and explanations of the obstacles to ease of dismantling. This information is used by the designers in improving product recyclability.

From here on out, the Fujitsu Group will summarize examples of the obstacles to ease of dismantling that we have learned from the recycling centers, and from the product development stage will incorporate these lessons into design for easier dismantling of post-use products.

Gaining experience in dismantling at receycling center study tour

Research and Development of Advanced Green ICT

Our Approach

To expand our contribution to society through our business activities, we must undertake two key approaches: "Green *of* ICT," which seeks to reduce energy and resources consumed by ICT equipment and infrastructure, and "Green *by* ICT," which seeks to reduce environmental burdens through the use of ICT.

Fujitsu Laboratories Ltd., which engages in research and development of advanced green ICT, conducts R&D from an environmental perspective in all related domains, that range from product materials and devices, to facility and system solutions. Thus far, we have prioritized Green *of* ICT mainly for the purpose of strengthening platform technologies for green ICT. Hereafter, we will also focus our efforts on Green *by* ICT, which has a significant ripple effect in society. In particular, we are aiming to drive green ICT in the domain of Social Innovation, the core of the Fujitsu Group's growth strategy.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)

Develop innovative technologies that enable solutions and products to reduce the environmental load

FY 2013 Key Performance

Announced **18** key green technologies

FY 2013 Performance and Results

Positioning and Highlighting Our Key Green Technologies

To disseminate the Fujitsu Group's advanced green ICT throughout society, and to support its early deployment in businesses, we positioned as our key green technologies "best-in-class" and "world-first" technologies, as well as technologies with notably high environmental contribution. We are also highlighting our technological capabilities by advancing our R&D for these key green technologies and assertively promoting them through press announcements.

In addition, with the aim of creating social innovation that connects and leverages heterogeneous information, such as that generated by corporations, governments, individuals, and sensors, we established a Social Innovation Laboratory within Fujitsu Laboratories Ltd., and engaged in driving and generating green ICT.

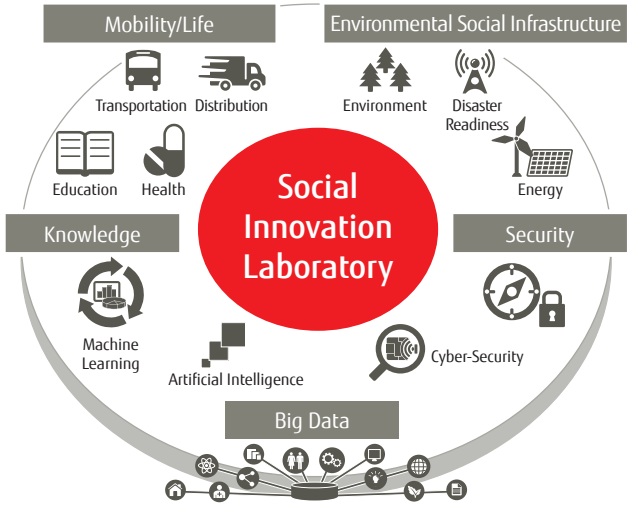
Announcement of 18 Key Green Technologies

In FY 2013, the Fujitsu Group announced 18 technology development achievements centered on the domains of Green *by* ICT and the domain of Social Innovation: 13 technological developments (including 6 developments in the domain of Social Innovation), while 5 developments were in Green *of* ICT.

Development Achievements

- Large-Scale Data Storage and Search Technology for Linked Open Data
- Millimeter-Wave Transceiver Module Technology
- High-Speed Thin Client Gateway Technology
- IaaS Platform Technology for Physical Servers
- High-Speed Homomorphic Encryption Technology
- Transmitter Power Amplifier Circuit Technology
- Low-Noise Signal-Generating Circuit Technology
- Remote File-Access Technology
- Technology for Automatically Linking with Open Data
- Image-Correction Technology for Improving Image Quality
- Wireless Transceiver Technology for Medical Devices
- Glove-Style Wearable Devices
- Social Media Analysis Technology
- Assessment Tool for Visualization of Local Government Characteristics
- Operations-Manual Analysis & Automation-Support Technology
- Wide-Area Network Distribution Technology
- OpenADR 2.0-Standard Demand Response Technology
- Speech Synthesis Technology

Fujitsu Laboratories Group – Social Innovation Domains



FY 2014 Targets and Plans

Accelerating Creation of Green Solutions

While further enhancing the environmental contribution of our advanced technologies, the Fujitsu Group will accelerate the creation of not only individual technologies, but also the creation of related green ICT that connects such technologies. In particular, in the domain of Social Innovation, we are actively advancing the fusion of green ICT and data that supports it, along with aggressively advancing R&D of our Platform Technologies, as we continue to promote and publicize to society our technological achievements.

Main Activities in FY 2013

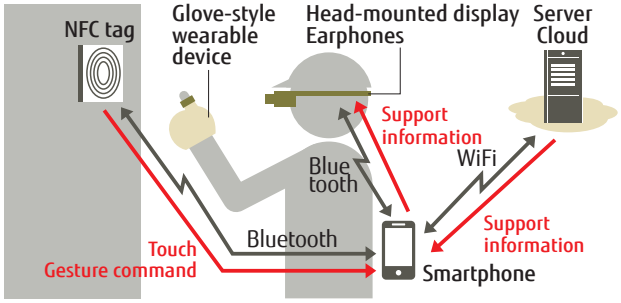
Development of a Glove-Style Wearable Device that Offers Low Power Consumption and Extended Operational Time

Fujitsu Laboratories Ltd. has developed a glove-style wearable device equipped with a Near Field Communication (NFC) tag reader and gesture-based input functionality. During fieldwork, such as factory or building maintenance, this device makes it possible to provide workers with alerts and with supporting information matched to the work scenario.

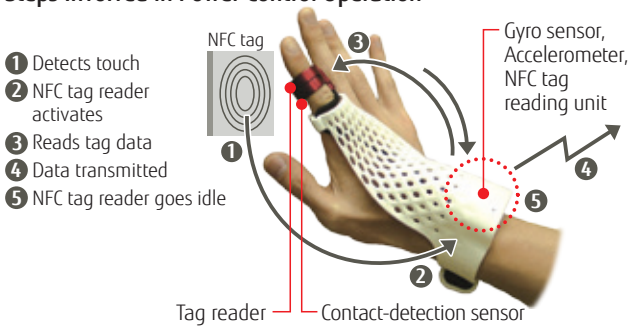
Using the device, a simple touch of the fingertip to NFC tags attached to work objects enables the presentation of relevant information. Moreover, a gyrosensor and acceleration sensor mounted at the wrist enables gesture recognition.

For wearable devices, considerations such as wearability and burden on the wearer prevent the use of large batteries, making low power consumption a prerequisite. Fujitsu's glove-style wearable device mounts contact sensors at the fingertips, and achieves low power consumption by operating the NFC tag reader only during the instant at which touching occurs. This extends the operational time for a glove-style wearable device from 3 hours in the absence of electric power control to 9 hours, achieving operating time sufficient for a day's work.

Work Support Using a Glove-Style Wearable Device



Steps Involved in Power Control Operation

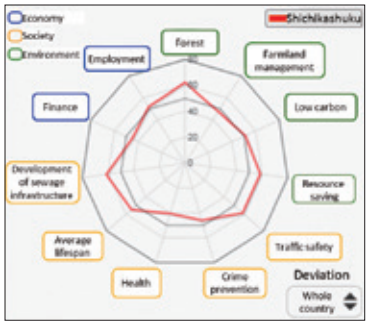


Fujitsu Develops First-of-Its Kind Assessment Tool that Visualizes Community's Characteristics: Contributes to the Creation of Sustainable Societies

In February 2014, as an industry first, Fujitsu Laboratories Ltd. and Fujitsu Research Institute co-developed the first assessment tool from an ICT company that visualizes a community's characteristics, such as its local government, from multiple perspectives, including the environment and economy.

Existing urban assessment tools can quantify environmental performances, infrastructure functions, and other factors. However, future assessments will need to be more comprehensive, especially for ensuring the sustainability of a community, and will need to take into account a region's particular attributes, including topography, population, and industrial areas.

Utilizing more than 1,200 categories of public data from government statistics and other sources, this project selected 50 items for evaluation related to regional revitalization needed to create sustainable societies. These were chosen in accordance with quality of life and stability, safety and security, prosperity, and other factors for 3 regional revitalization policies, as benchmarks associated with the environment, economy and society. Based on these policies, the newly developed tool visualized the strengths and challenges of local communities by performing comparative assessments of local governments that share similar characteristics in terms of population, industrial structure, and other representative regional attributes. In addition, Fujitsu Laboratories and Fujitsu Research Institute conducted field trials of the tool in cooperation with the town of Shichikashuku in Miyagi Prefecture, Japan. Based on the results, Fujitsu Research Institute proposed to Shichikashuku that a "forest and water experience project" and a "forestry, biomass, and solar power project" be taken as measures for a regional revitalization program.



Municipal evaluation tool-based visualization of characteristics and resource valuation of Shichikashuku town, Miyagi Prefecture, Japan

Collaborating with Communities and Taking Action as a Good Corporate Citizen

Our Approach

Fujitsu Group deploys its funds, technology (ICT), and people (expertise) to support the activities of NPOs, NGOs, educational institutions, local governments, citizens' groups, and other diverse bodies that seek to resolve social issues. Specific examples include technological support for citizen enlightenment and studies for biodiversity strategies by local governments; funding support for rare species protection by NPOs and global warming countermeasure projects; technological support for monitoring and other systems; and support for human resources participating in the social contribution programs of international institutions. We determine the targets and content of support based on the needs and issues of local communities.

In addition, we support the social contribution activities undertaken by employees, encouraging each and every employee to maintain high awareness of social and environmental issues and to take an active involvement in resolving these.

Summary of FY 2013 Achievements

	Corporate Citizenship: Social Challenges	Corporate Citizenship: Social Activities
Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Support initiatives that address the complex social and environmental challenges, e.g. biodiversity conservation.	With society, support our employees to volunteer social activities.
FY 2013 Key Performance	**Funding:** Supported a charity run and victims of Typhoon Haiyan. **Technology:** Provided with the Mobile Photo System cloud service. **Human resources:** Provided small-scale charitable organizations with management know-how.	Dedicated **129,000 hours** to social contribution activities by employees

FY 2013 Performance and Results

Aggregating Results to Assess the State of Activities

To expand our social contribution activities, the Fujitsu Group has begun aggregated management of activities that had previously been planned and implemented separately by country, workplace, and Group company. This step will allow us to assess the state of the activities, share exemplary case studies, and connect activities to resolution of issues, and will also be of aid in planning and setting internal targets for the next fiscal year.

Conducting 129,000 Hours of Social Contribution Activities in Japan and Overseas

Through the provision of funding, technology, and human resources, Fujitsu has supported conservation of biodiversity, employment for persons with disabilities, education for the next generation, and other activities aimed at diverse social issues. Among the social contribution activities undertaken by our employees are forestation projects throughout Japan, forest thinning work, environmental lessons at elementary and junior high schools, and local clean-up initiatives. Overseas, our employees have participated in charity events, rain forest revitalization activities in Malaysia, and environmental education classes. In Japan and overseas, employees spent 129,000 hours in social contribution activities.

Examples of Social Contribution Activities

- **Covering entrance fees for charity Fun Run participants: Fujitsu UK and Ireland (Great Britain)**
  Including our partner companies, 300 employees donated GBP 15,000 took part in a fun run called Vertical Rush, hosted by Shelter, a housing support NPO.

- **Support for typhoon disaster victims: Fujitsu Philippine Global Delivery Center (the Philippines)**
  USD 1,500 was donated to the Red Cross to support victims of the incredible damage in the Philippines from Typhoon Haiyan.
- **Cloud technology support for graduate school students: Nanjing Fujitsu Nanda Software Technology Co., Ltd (China)**
  We provided technological support for analysis and services, plus cloud computing data management, for graduate school students of NanJing Normal University.
- **Providing know-how to small-scale charity organizations: Fujitsu UK and Ireland (Great Britain)**
  We dispatched one person for approximately one year to The Joshua Tree Charity to provide support for strategic governance and for installing their ICT environment.
- **Teaching environment classes: FUJITSU DIE-TECH (the Philippines)**
  Two employees taught a class at Timbao Elementary School, in the Province of Laguna, and explained the current state of environmental issues, as well as what children can do to address them.

FY 2014 Targets and Plans

Expansion of Opportunities and Hours for Participation in Activities by Employees

Assessing the state of activities in FY 2013 revealed lower performance overseas than in Japan, as well as a lack of opportunities for activities by employees in regions with large numbers of employees. In FY 2014, we intend to respond by giving consideration to project launches overseas, and by expanding preservation activities and educational activities in which employees can participate.

Main Activities in FY 2013

Supporting Biodiversity Survey Projects through the Provision of the Mobile Photo System Cloud Service

Fujitsu's Mobile Photo System lets users take photos of flora and fauna with GPS-equipped mobile phones or smartphones, then upload the photos by email for storage in a database. This database can be browsed online together with mapping data. By enabling the collection and management of data with participation by citizens, the system can reveal what sort of plants and animals grow and thrive in what locations. We are providing the system as a cloud service to 13 organizations that use the data in work to preserve biodiversity.

National Census of Flower-Visiting Bumblebees

The national census of bumblebees, which are on the decline due to factors including the impact of invasive species, uses the Mobile Photo System. Based on photos sent from citizens nationwide, the census is creating a domestic distribution forecast map.

A User's Voice

In FY 2013, bumblebee photos submitted by users around the country exceeded 1,300 photos. Using a method called niche modeling, we were able to use the data to estimate habitat distributions for several species. In particular, we were able to estimate environmental factors that impact the distribution of species including *Bombus ardens ardens, Bombus hypocrita hypocrita, and Bombus diversus diversus.*

Masakado Kawata
Professor, Graduate School of Life Sciences, Tohoku University

TCE Animal and Plant Species Habitat Distribution Survey

Using the Mobile Photo System in fieldwork curriculum, this survey seeks to enlighten students and test the practicality and extensibility of the system. In the future, it will also help train human resources who will engage in environmental conservation.

A User's Voice

As a result of using the Mobile Photo System in our school's fieldwork over the course of the year, we uploaded over 2,600 items of reliable data, primarily from students. Through the work, students also became proficient in the use of the system. In FY 2014, we plan to focus efforts on collecting information on the species that are the target of the activity.

Masaaki Komaru
President, Tokyo College of Environment

Starting the Project "Regeneration and Collaboration Forest" in Miyako City, Iwate Prefecture

Over two days in October 2013, 76 Fujitsu Group employees and members of their families participated in the project "Regeneration and Collaboration Forest".

Operated under the theme of "Connecting with the Region," the project consists of forest revitalization activities that leverage "Present Tree in Miyako," an initiative in which Miyako City NPOs and local forestry businesses participate jointly. Each participant becomes a "foster parent" to one tree and watches over its growth for 10 years. The activity creates opportunities to build ties to the region over the long term and to support reconstruction.

In the Taro district, a region affected by the Great East Japan Earthquake, local residents described the disaster to employees through vivid memories and videos. They also offered employees a hands-on work experience at the Mazaki *wakame* processing plant, which reopened a year after the disaster.

From the residents, we received words of gratitude, including, "We're so happy that you came all this way, saw and learned about the conditions here, and haven't forgotten us," and, "We'll be waiting for you next year, too!" Fujitsu will continue the project in FY 2014 and beyond.

An Employee's Voice

This event provided a great parent-child experience.

Visiting the sites of the disaster and hearing the accounts of residents gave me a strong sense of the magnitude of the disaster and the importance of readiness. Also, I'm very glad that the forest revitalization activity doesn't end with the planting, and that through the opportunity to watch over the tree from here on out, I've formed ties to an area with which I had no connection in the past.

Misa Nagumo
Corporate Brand Office, Global Marketing Division

Chapter II

Reducing Our Environmental Burden

Since formulating the Fujitsu Environmental Protection Program (Stage I) in FY 1993, the Fujitsu Group has worked to reduce the environmental burden of its own business activities. Amid an upward trend in energy consumption at datacenters as cloud services expand in recent years, the Fujitsu Group has set new targets in our Environmental Action Plan (Stage VII) for the promotion of environmental considerations in datacenters. In addition, we have set targets that include reduction of GHG emissions from workplaces, business partners, and distribution operations; the effective use of water resources; and expanded use of renewable energy.

Key Achievements in FY 2013

- Greenhouse gas (GHG) emissions Reduced by **29.4%** (compared to FY 1990)
- CO_2 emissions in transport per sales Reduced by **32%** (compared to FY 2011)
- Water usage Reduced by **6.3%** (compared to FY 2012)

About Symbols Used ✓ Examined by third-party organization ○ FY 2013 target achieved

	Theme	Target items (targets through the end of FY 2015)	FY 2013 Key Performance	Status	
Our Business	Efficient Business Operations: Reduce Greenhouse Gas Emissions	Reduce greenhouse gas emissions in our business facilities by 20 % compared to 1990.	Reduced GHG emissions by 29.4% compared to FY 1990 ✓	○	P.27
	Efficient Business Operations: Energy Intensity	Improve energy intensity in our business facilities over 1% each year.	Improved energy intensity in our business facilities 1.6%	○	P.27
	Efficient Business Operations: Data Centers	Improve environmental performance of our major data centers.	Established the Green Datacenter Committee Set internal targets (common and individual targets)	○	P.29
	Efficient Supply Chain: Logistics	Reduce CO_2 emissions *1 per sales from logistics over 4% compared to 2011. *2	Reduced CO_2 emissions per sales from logistics by 32% compared to FY 2011 ✓	○	P.31
	Efficient Supply Chain: Procurement	Expand activities of reducing CO_2 emissions to all types of suppliers.	Reached 95.9% of business partners implementing CO_2 reduction or limitation measures	○	P.33
	Efficient Use of Resources: Renewable Energy	Increase generation capacity and procurement of renewable energy.	Installed 210 kW of new solar power generation facilities Purchased approx. 23,000 kWh of green power ✓	○	P.34
	Efficient Use of Resources: Water	Continue efforts for efficient use of water, e.g. water recycling and water saving.	Water usage: 18,620,000 m^3 (reduced by 6.3% compared to FY 2012)	○	P.36
Continuous targets *3	Reduced Environmental Impact: Chemicals	Reduce chemical emissions to less than the average level of 2009-2011 (PRTR: 21 tons, VOC: 258 tons).	PRTR: 21 tons; VOC: 246 tons ✓	○	P.37
	Reduced Environmental Impact: Waste	Reduce the amount of waste to less than average level of 2007-2011 (amount of waste: 31,134 tons). Keep Zero Emission in factories in Japan.	Waste generated: 23,522 tons ✓ Achieved zero emissions at domestic business sites	○	P.38
	Reduced Environmental Impact: Recycling	Maintain over 90% resource reuse rate of business ICT equipment at Fujitsu recycling centers.	Achieved 92.7% resource reuse rate of business ICT products at Fujitsu recycling centers ✓	○	P.40

*1 **Reduce CO_2 emissions:** Calculate emissions of CO_2 equivalence from energy consumption *2 As the initial target was achieved, from FY 2014 the Fujitsu Group has changed the target to "reduce CO_2 emissions per sales from transport over 1% (on average) compared to FY 2013." *3 **Continuous targets:** Targets to be achieved through business activity because already achieved high level performance.

Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites

Our Approach

The Fujitsu Group is working in every location where it does business to reduce emissions from its own sites, promote the reduction of emissions along its value chain, and contribute to the reduction of emissions by its customers and society overall, in order to help fight global warming, and to do so from a common understanding of the necessity to halve (or cut by 80%, in the case of developed countries) greenhouse gases emitted across the globe by 2050.

The primary GHG emissions from our business sites (plants, datacenters, and offices) are CO_2 accompanying energy (electricity, fuel oil, and gas) usage, and perfluorocarbon (PFC), hydrofluorocarbon (HFC), sulfur hexafluoride (SF_6), and nitrogen triflouride (NF_3) used in semiconductor manufacturing. We have set reduction targets for these and are striving to decrease the amounts we use and emit.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Reduce greenhouse gas emissions in our business facilities by **20%** (compared to FY 1990) Improve energy intensity in our business facilities over **1%** (each year)
FY 2013 Targets	Reduce greenhouse gas emissions in our business facilities by **19%** or more (compared to FY 1990) Improve energy intensity in our business facilities by an average **1%** or more (each year)
FY 2013 Key Performance	Reduced greenhouse gas emissions in our business facilities by **29.4%** (compared to FY 1990) Improved energy intensity in our business facilities **1.6%**

FY 2013 Performance and Results

Promoted Reductions of CO_2 Emissions Accompanying Energy Consumption

As CO_2 reduction measures, we are continuing energy saving practices with the machinery at each business site (including installing energy efficient models, free cooling systems, and inverters, as well as switching fuels, etc.) optimizing production processes and drive machinery, optimizing office air-conditioning temperatures, saving energy used for lighting and office automation equipment, and promoting visualization and data measurement with regard to energy consumption.

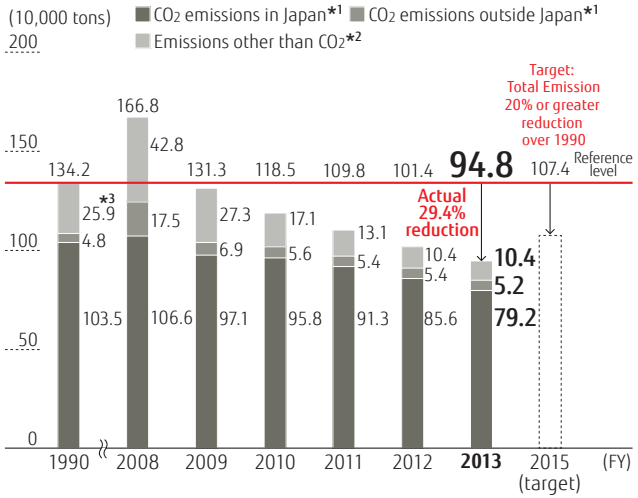
In addition, to reduce emissions of gases other than CO_2 (such as PFC, HFC, SF_6, and NF_3), we are switching to low global warming potential (GWP) gases, and installing abatement systems on production lines.

66,000-ton Year-On-Year Reduction of GHG

FY 2013 overall GHG emissions were approximately 948,000 tons (emission rate per unit of sales: 19.9 tons/100 mill. yen), which was a 29.4% reduction compared to FY 1990. The transfer of some businesses greatly affected reductions, bringing a 66,000-ton YoY reduction.

The breakdown of GHG was approximately 844,000 tons of CO_2 (792,000 tons emitted in Japan, 52,000 tons outside Japan) and approximately 104,000 tons of gases other than CO_2.

Trends in Total Greenhouse Gas Emissions



*1 CO_2 emissions in/outside Japan: CO_2 conversion factor for purchased electric power has been calculated with a fixed value of 0.407 tons of CO_2 per MWh since FY 2002 for performance reports in our Environmental Action Plan.
*2 Emissions other than CO_2: These are converted to equivalent amounts of CO_2 using the global warming potential (GWP) of each gas.
*3 Our FY 1995 performance is taken to be the same as emissions in FY 1990.

FY 2014 Targets and Plans

Continually Strengthen Facility Investment and Operational Improvements

At our datacenters and in some of our manufacturing of electronic components, increased CO_2 emissions are projected accompanying increases in energy usage. However, we will strive for 20% or greater reductions, compared to FY 1990, through continual efforts to invest in facilities and improve operations.

Main Activities in FY 2013

Energy Savings By Changing Humidification in Clean Rooms

At Fujitsu Component Limited's technology development center, we are working to save energy by changing the way we humidify clean rooms, and by efficiently using waste heat from compressors.

Previously, we humidified our clean rooms at touch panel manufacturing plants by using steam from heating and cooling system boilers. This method, however, was insufficient, so we switched to a humidification system using pure water vaporizers inside the rooms. This allowed us to better regulate the humidity and also reduced our use of boiler fuel. Furthermore, although air-conditioning runs in the clean rooms year round, the pure water mist lowers room temperatures as the mist evaporates. This leads to lower loads on our air-conditioners, and reduces the electricity they use.

With regard to compressors, we are using coolers to lower room temperatures affected by the compressors' waste heat and to mitigate effects of high temperature on the efficiency of machinery. At the same time, we had been using steam from boilers to heat intake water in our water purifying machines. To address this, we started using heat exchangers and started heating intake water with waste heat from compressors. This allowed us to simultaneously reduce cooler electricity usage and boiler fuel consumption. These measures resulted in annual CO_2 emission reductions of approximately 650 tons (close to 20% less YoY).

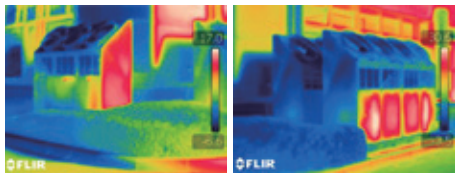
Humidification with pure water mist

Deploying Our Energy Saving Caravan to Share Energy Reduction Measures Inside Fujitsu

In order to work toward ever greater energy saving, we initiated the Energy Saving Caravan at Fujitsu Facilities Limited, which is a company especially skilled at facility management. Employees from the leading ranks of each business site are appointed to the Caravan.

In FY 2013, the Caravan conducted crosschecks between eight target Fujitsu business sites. We examined the extent to which the energy saving measures we have accumulated and shared up to this point have been spread and adopted at each site, and we worked to pinpoint areas for improvement by offering multiple observations from new points of view. In order to make detailed checks of appropriate operations in different seasons of the year, inspections were carried out at three different times: in the hot period of summer, in an intermediate season, and in the cold period of winter. Expected benefits from deploying the Caravan, including benefits from the adoption of improvement proposals, brought a decrease in electricity usage of approximately 1,390 MWh.

Caravan members use a thermograph to check machinery outside of a heating/cooling room



Acquiring ISO 50001 Certification at FTS Augsburg (Germany)

Fujitsu Technology Solutions GmbH in Augsburg Germany and its Energy Management System have been certified in accordance with ISO 50001* in May 2014.

The scope of the established Energy Management System includes design, production, purchasing, supply chain, sales, service and data centers for ICT products and ICT solutions. The requirements of ISO 50001 are met based on energy policy, energy planning and continuous activity.

This certification ensures continuous efforts to improve energy efficiency and energy performance of our products and also their development and manufacturing in Europe.

ISO 50001 Certificate

* ISO 50001: An international standard for energy management systems for encourageing continuous improvement of energy performance, energy efficiency and energy saving measurements.

Promoting Environmentally Conscious Datacenters

Our Approach

With the spread of cloud computing, energy use by datacenters is on an upward trend and society is showing more concern over the environmental performance of datacenters. Also, electricity costs are increasing with rising electric utility rates. Datacenters comprised 27% of FY 2012 CO_2 emissions in the Fujitsu Group, with emission rates increasing 8.1% over the three years from FY 2010–12 at our 19 main datacenters in Japan. Furthermore, our datacenter CO_2 emissions are expected to continue to rise as our cloud business grows, making environmentally conscious datacenters a social responsibility for the Group, as well as a critical theme to address in strengthening our business foundation over the long term.

In the Fujitsu Group, we are targeting* approximately 80% of our datacenters (based on server room floor space) and we are working to boost environmental performance.

* Activity targets: Global datacenters 1,000 m^2 or larger, in principle, or specific datacenters requested by datacenter business units.

Summary of FY 2013 Achievements

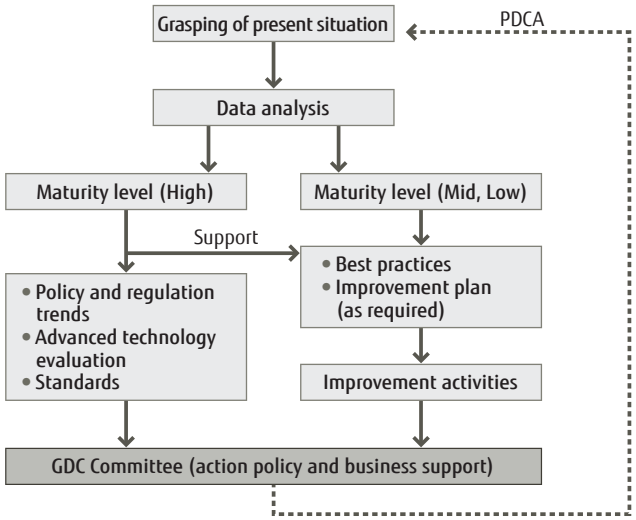
Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Improve **environmental performance** of our major datacenters.
FY 2013 Key Performance	Established the Green Datacenter (GDC) Committee. Set internal targets (common and individual targets).

FY 2013 Performance and Results

Established the Green Datacenter (GDC) Committee

We established the Green Datacenter (GDC) Committee and set an action policy toward implementing the Fujitsu Group Environmental Action Plan (Stage VII). We established the GDC Working Group (GDCWG), which plans and implements activities under the GDC Committee, and the Domestic and Overseas Sub-Working Groups (SWGs), while proceeding with activities that have produced the target results.

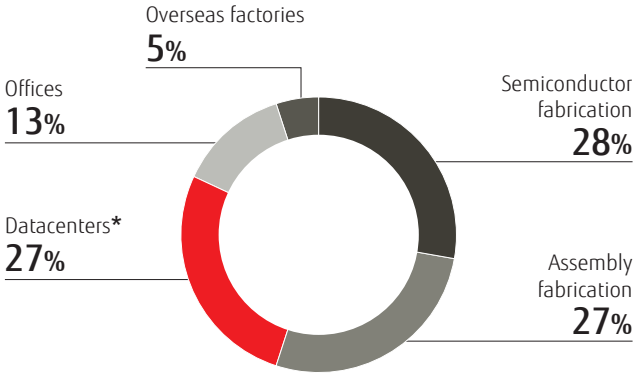
Activity Flow of GDC Committee



Setting Internal Objectives

We set internal objectives, consisting of common and individual objective items, for the target datacenters. For the common objectives, we used internationally recognized datacenter energy indices (PUE, etc.) and set targets for improvement rates. For the individual objectives, each site selected indices individually and decided to measure these indices regularly.

Percentages of CO_2 Emitted by Various Businesses (FY 2012)



* "Datacenters" indicate 47 datacenters in Japan and overseas (19 in Japan, 28 in overseas)

FY 2014 Targets and Plans

Promote the achievement of internal targets

First, with regard to common targets, along with assessing the level of progress since the benchmark year, FY 2012, we plan to adopt outside-air cooling, "visualize" air-conditioning temperatures and energy, improve full usage of rack space, increase air-conditioning temperatures, and implement hot/cold air separation. Additionally, with regard to individual targets, we plan to set guidelines for promoting policies suited to the characteristics of each datacenter, and work on improvement activities in line with those guidelines.

Main Activities of FY 2013

Open New Facilities at the Akashi System Center, Making it an Environmentally Conscious Datacenter Using Outside-air

At the Akashi System Center, our main datacenter in Western Japan, we opened two new modular datacenters (a seismic isolation datacenter and an earthquake-resistant datacenter). Along with adopting high efficiency equipment and a server room layout that was designed using thermodynamic simulations, these new facilities utilize Fujitsu's existing environmentally conscious datacenter expertise, while being our first facilities to use outside-air for the primary air-conditioning.

Outside-air is used for cooling during winter, intermediate seasons, and as much as possible in summer, while electric cooling is only used to supplement the outside-air, maximizing air-conditioning efficiency. In addition, we have developed and adopted new cooling technology (patent pending) that combines packaged air-conditioners (PAC) for general use computing rooms as supplemental cooling equipment in summer to make cooling with outside-air possible throughout the year, even in warm climates.

Exterior view of the Akashi System Center

New facility (seismic isolation datacenter)

This technology can be easily deployed regardless of the datacenter's scale or building's specification, promising to improve the energy efficiency of existing datacenters.

In the new facilities of the Akashi System Center, our design goal is a PUE value of less than 1.2 at times of full operation.

Contributing to Verification Projects for Using Datacenter Waste Heat to Achieve Exceptional Reductions in CO_2 Emissions

Fujitsu is pushing forward environmental consciousness in existing datacenters and participating in the Keihanna (Kyoto) Datacenter Verification Tests of the Ministry of the Environment's FY 2013 project for developing and demonstrating technologies for reducing CO_2 emission. This project emphasizes the reuse of datacenter waste heat, aiming for exceptional reductions in CO_2 emissions.

Since it is crucial to raise the temperature of waste heat as much as possible in order to increase the efficiency of its utilization, servers that can operate safely in high heat environment are necessary. Fujitsu provided the datacenter with 154 of its FUJITSU Server PRIMERGY RX200 S7 servers, which can operate in 40°C environment. The servers have been operated one side only to create a concentrated, high heat environment. Moreover, power conversions were cut to one third of normal levels due to the PRIMERGY RX200 S7's use of DC (direct current) power. This made it possible to boost the power usage effectiveness rate (thermal conversion efficiency) to 90%, as opposed to the existing rate of 70-80%.

At the Keihanna Datacenter, they realized a 30% cut in power consumption in FY 2013, aiming for a final overall reduction of 70%. Along with actively contributing to this project going forward, Fujitsu will further promote environmental consciousness at our existing datacenters.

A Message from a Joint Collaborator in Verification Projects at the Keihanna Datacenter

Current datacenters are mainly built with an enclosed, vertically integrated system structure. Since the datacenters themselves have a system design comprised of combinations of multiple devices, reducing power consumption for ICT equipment only (such as servers, etc.), or for air-conditioning only, does not optimize energy savings for the entire datacenter.

In order to solve this, we are bringing together experts in each layer or component of the datacenters, such as air-conditioning, servers, datacenter management, etc., and are working to achieve efficiency for the overall system.

Osaka University Cybermedia Center
Professor Morito Matsuoka
(right)

(Left: Hideaki Fujimaki, Product Marketing Unit, Fujitsu Limited

Reduce CO_2 Emissions from Logistics and Transportation

Our Approach

Given the broad geographical range of Fujitsu Group companies and business sites inside and outside Japan, and the materials/parts sourced from a significant number of business partners, reducing CO_2 emissions accompanying the logistics and transportation activities of the Group is a priority issue.

To this end, the Group has strengthened its targets for CO_2 emission reductions from domestic transport. Furthermore, our Environmental Action Plan (Stage VII) has expanded the scope of reductions beyond domestic targets to transport within regions overseas, as well as international transport, while the Plan is also driving forward rationalization and efficiency improvements in global logistics. In addition, the Group is working toward lowering environmental impacts along our entire supply chain, and working on cooperative efforts with business partners, such as displaying copies of the Fujitsu Group Green Procurement Direction, in order to strengthen our partnerships. Lastly, as an initiative in our distribution process overall, the Group is devoting effort to the 3Rs (Reduce, Reuse, Recycle) with respect to packaging products and materials/parts.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Reduce CO_2 emissions per sales from logistics over **4%** (compared to FY 2011)
FY 2013 Targets	Reduce CO_2 emissions per sales from logistics over **2%** (compared to FY 2011)
FY 2013 Key Performance	Reduced CO_2 emissions per sales from logistics by **32%** (compared to FY 2011)

Overview of Initiatives

Promoting Initiatives in Domestic, Overseas Local, and Overseas International Transportation

With regard to the Group's transportation inside Japan, we are effectively utilizing rail transport and shifting from air to ground transport as an ongoing modal shift initiative. In addition, relaxing specific delivery times and making transport boxes more compact has led to increased truck loading efficiency rates and a decreased number of trucks.

Modal shift endeavors are also being implemented in international and overseas local transportation. The Group is shifting from air to ocean transport, shortening transport distances, raising container loading ratios, and engaging in other efforts such as reducing the amount of air transport.

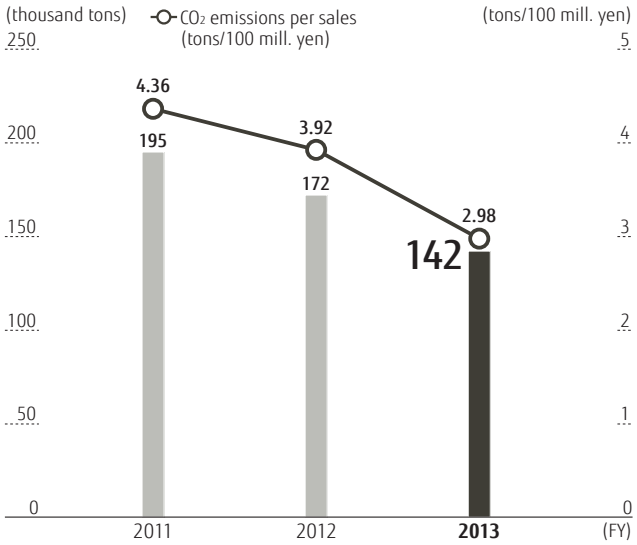
FY 2013 Performance and Results

Results Broadly Surpassed Targets

FY 2013 CO_2 emissions from transport were 142,000 tons. Of that amount, 25,000 tons were from domestic transport, while 117,000 tons were from international and overseas local transport. CO_2 emissions per sales were reduced 32% compared to FY 2011, which broadly surpassed our Environmental Action Plan (Stage VII) targets.

Major contributors to this achievement were a 22% reduction from expanded shifts from air to ocean transport in our overseas transport practices and a 10% reduction from reassessing the GHG protocol coefficient used in our calculations.

Trends in CO_2 Emissions from Transport



FY 2014 Targets and Plans

Setting New Targets and Pushing Forward

Given our achievement of FY 2013 targets, the Fujitsu Group reassessed its targets from FY 2014 to FY 2015.

We set a new target to "reduce CO_2 emissions per sales from transport over 1% (on average) compared to FY 2013" and will promote green logistics throughout the Group.

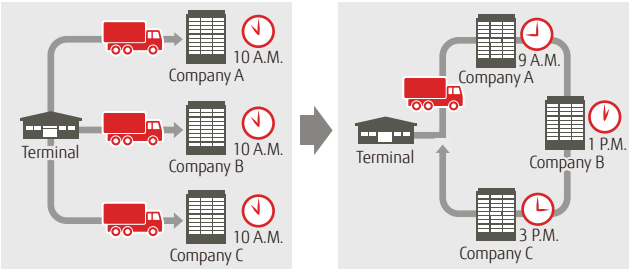
Report on Main Activities in FY 2013

Reducing the Number of Trucks Used for Domestic Shipments

Fujitsu cooperated with its Sales Unit to relax specified delivery times to customers with regard to network products (base stations) shipped domestically. Rather than specifying A.M. delivery, we switched to delivery "within the day." This resulted in the better patterns for truck loading and a reduced number of trucks used.

In addition, we were able to all but eliminate specified delivery times of corporate PCs to customers of Fujitsu Isotec Limited (in Fukushima Prefecture) and Shimane Fujitsu Limited (in Shimane Prefecture). Negotiations with customers minimized the number of individual charter shipments. With regard to consumer PCs, we also strove to reassess delivery times and limit the number of trucks used.

Relaxing Specified Delivery Times to Reduce Truck Numbers



Promoting and Expanding Modal Shifts

The Fujitsu Group is working to reduce CO_2 emissions through an ongoing modal shift. This entails effectively utilizing rail transport and shifting from air to ground transport.

Our rate of modal shift (the rate of rail usage for transport) within Fujitsu domestically as of March 2011 topped 15%, for which we received the Eco Rail Mark certification, as defined by the Railway Freight Association and the Ministry of Land, Infrastructure, Transport and Tourism. In 2013 as well, we continued to hold the certification.

Eco Rail Mark

At Fujitsu Ten Limited, we are working to reduce transport CO_2 emissions through a modal shift in international transport, by for example, switching from air transport to ocean ferry transport between our Chinese plant and Japan. Ocean ferry transport has a lower environmental burden than air transport and also carries half the cost. In addition, compared to typical ocean container shipping, we are able to ship the cargoes at the half lead time than ordinary shippings. Utilizing ocean ferry shipments realized efficiencies both economically and environmentally.

Reducing Packaging Materials through Downsizing Efforts

To reduce the whole environmental burden of the distribution process, the Fujitsu Group are promoting 3R efforts for packaging products and parts.

At Fujitsu Isotec Limited, we downsized boxes for PC servers by using dedicated boxes in place of the previous ones shared with other equipment, which led to reductions in packaging material. In addition, for ODM* laptop computers made overseas, downsizing boxes helped reduce the usage volumes of cardboard, cushioning, and other packaging.

* **ODM:** An abbreviation for Original Design Manufacturer, refers to work, from product design to manufacturing, carried out under another company's brand. OEM (Original Equipment Manufacturer), on the other hand, refers to subcontracted manufacturing.

Dedicated PC server boxes (returnable containers) that can be reused

Promoting CO_2 Emission Reductions with Our Business Partners

Our Approach

The reduction of CO_2 emissions through society-wide energy saving has become a critical theme for global warming prevention. Fujitsu Group believes that it is necessary to work toward CO_2 reductions in-house, as well as along its entire value chain, which is why we advocate measures to reduce or limit the CO_2 emissions of our business partners.

To date, we have made component suppliers part of this effort, however, from FY 2013, we are expanding the scope to business partners in various other areas, including construction, facilities, maintenance, and software. Specifically, we are surveying the status of business partners' activities for CO_2 emissions reduction and offering support and appeals for extra efforts to business partners that do not meet standards set by our Group. Going forward, we intend to leverage the environmental expertise of the Fujitsu Group to work with our business partners on initiatives and contribute to decreasing the environmental burden of society overall.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Expand activities of reducing CO_2 emissions to all types of suppliers.
FY 2013 Targets	Reach a **60%** or higher ratio of business partners implementing CO_2 reduction or limitation measures.
FY 2013 Key Performance	Reached **95.9%** of business partners implementing CO_2 reduction or limitation measures

FY 2013 Performance and Results

Surveyed and Supported Initiatives at Business Partners

Under our Environmental Action Plan (Stage VII), we are encouraging business partners in the solutions segment and others, in addition to parts business partners. We are distributing our Group's original environmental surveys to our business partners and checking the status of their activities for reducing CO_2 emissions. For business partners who have not reached stage 2 activities (the implementation of CO_2 reduction and limitation activities with numerical targets), we provide our own check lists featuring easily actionable case studies as opportunities for partners to start implementing activities.

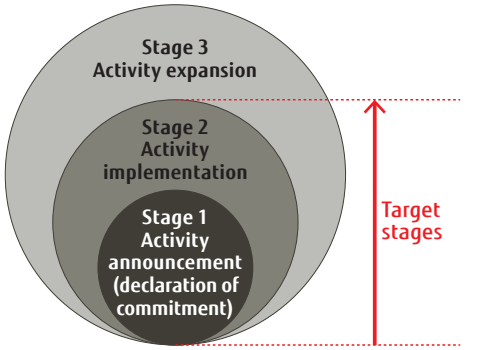
Accomplished of First FY Target

With 64.1% of all business partners reaching stage 2 activities as of the end of September 2013, we achieved our FY 2013 target of 60%. After achieving that target, we continued our support, as a Group, to encourage business partners who had not met stage 2. Our compounded efforts achieved a result of 95.9% as of the end of March 2014.

Examples of Encouragement for Business Partners

- We provided tools that were able to calculate CO_2 emissions from electricity usage and to monitor progress toward numerical goals.
- We provided the Fujitsu Group's original materials and checklists that clearly explain steps business partners can use for setting targets and carrying out CO_2 reduction programs.

Drawing Up an Activity Evaluation Index



Stage 1 Activity announcement (declaration of commitment)	The stage when the significance of reducing/limiting CO_2 is understood and a declaration of commitment is made as a company.
Stage 2 Activity implementation	The stage when initiatives are implemented, each with fixed numerical targets, policies, or plans.
Stage 3 Activity expansion	The stage when activities are expanded from inside to outside the company (such as support for the upstream supply chain or cooperative efforts to review approaches with external organizations).

FY 2014 Targets and Plans

Strive for 100% Achievement ahead of Schedule

While we earned the understanding and cooperation of many business partners committed to our initiatives as a Group in FY 2013, still a portion of business partners, overseas and in the non-components businesses like solution services, have not committed to the initiatives due to differences in each country or differences between industries. We will strive to address these challenges across the Group, to continuously seek the understanding of business partners, and to support CO_2 reduction activities in order to reach the 100% level (set for achievement by FY 2015) ahead of schedule in FY 2014.

Increasing Amounts of Renewable Energy Used

Our Approach

Furthering the spread of renewable energy in society has reached a new level of importance from the perspectives of combating global warming, securing stable energy supplies through diversifying our sources of energy, and growing our economy with energy as a pillar of support.

In the Fujitsu Group, we see energy supply and demand issues as one of the links of the fight against global warming. Our Environmental Action Plan (Stage VII) actively aims to expand our use of renewable energy, adopt solar panels at our business sites, and purchase power generated from renewable energy sources.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Increase generation capacity and procurement of renewable energy
FY 2013 Key Performance	Installed new solar power generation facilities: **210 kW** Purchased green power: **approx. 23,000 kWh**

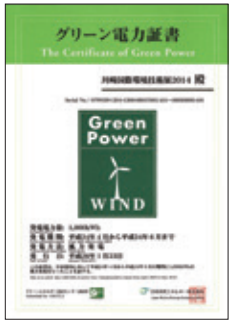
FY 2013 Performance and Results

Created Guidelines for Adopting Renewable Energy

In trying to increase our adoption of renewable energy, we set up an in-house working group to survey changes in new technology and equipment, and to conduct a review of whether these could be installed at our businesses sites. We summarized these results and findings in our Guidelines for Adopting Renewable Energy, and standardized the process toward adoption at each business site. In addition, we created Optimum Installation Maps & Power Generation Estimation Tools based on the conditions (environmental parameters such as amount of sunshine, wind, etc.) for each business location.

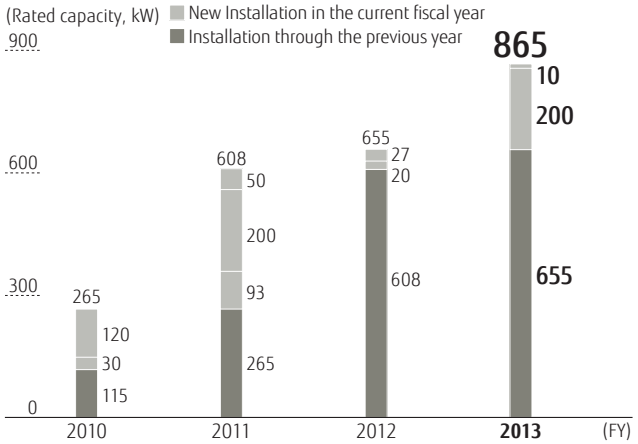
Installed Solar Power Generation Facilities at Two Business Sites

We adopted solar power facilities capable of generating 200 kW at Fujitsu Wireless Systems Limited and 10 kW at the Fujitsu Akashi Plant. As a result, we have 865 kW of cumulative generation capacity as of the end of FY 2013. In addition, we purchased green power of approximately 23,000 kWh for our FY 2013 exhibitions and events.



Green power certificate

Cumulative Total Installed Solar Power Generation (renewable energy)



FY 2014 Targets and Plans

Promote Expanded Use of Renewable Energy

We aim to further increase our use of renewable energy by utilizing the Guidelines for Adopting Renewable Energy and the Optimum Installation Maps & Power Generation Estimation Tools, and by reviewing renewable energy adoption at business sites. We will also strive to continually offset our power usage by actively using green electricity at our exhibitions and events.

Main Activities in FY 2013

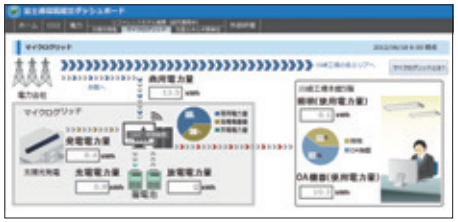
Microgrid Verification Tests at the Kawasaki Plant

Solar power generation that has rapidly spread in recent years has the advantage of addressing peak periods of power consumption because it generates more power during the high demand times of mid-day and during the summer. However, power output changes greatly with fluctuations in the weather, making it difficult to effectively use solar power to meet demand. With this challenge in mind, Fujitsu developed technology for optimizing battery usage so that solar power can be effectively used to mitigate peak periods of power consumption.

This technology predicts over 10,000 scenarios simulating a variety of possible supply and demand situations based on the weather. Using these scenarios, plans for optimum battery usage are created in advance and stored in a database that selects and changes plans in response to supply and demand for power. In verification tests of the system at the Kawasaki Plant, peak periods of power consumption were mitigated an average of 23% during the operation period from July 2012 to June 2013. We were also able to confirm that repeatedly altering battery usage plans can steadily improve the effects of mitigating peak periods.

This battery optimizing and control technology is one of the results of projects that Fujitsu has quickly adopted in-house as part of our effort to effectively utilize a microgrid for bringing about local production and local consumption of green energy. The microgrid makes use of small, dispersed power sources, combined with batteries and other technology. Going forward, we will strive to develop further technology for effectively utilizing inherently intermittent natural energy.

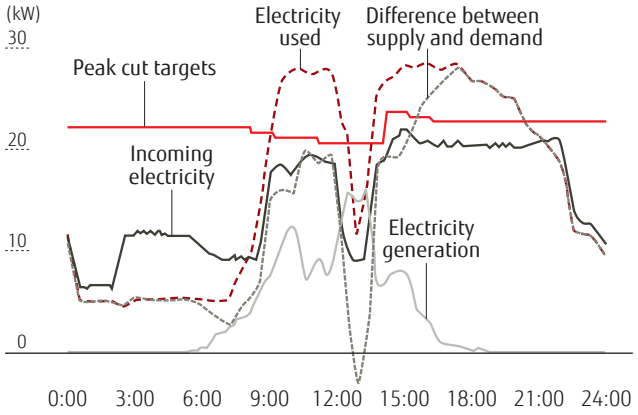
Solar panels and batteries used in the verification tests



Dashboard showing the operating status of our microgrid

The Verification System in Operation

Despite two instances of marked decrease in generation due to fluctuations in the amount of sunlight, the system was able to achieve an approximate 23% decrease in peak electricity consumption, and an approximate 8% reduction in incoming electricity, through the control system's use of the operating plan database to adjust "peak cut" targets.



Installing Solar Power Generation Facilities

In October 2013, we installed solar power generation facilities with generation capacity of 200 kW at the Kumagaya Plant, Fujitsu Wireless Systems Limited, in order to reduce our amount of power consumption and limit peak periods of consumption. We are trying out various approaches, such as spreading water on the solar panels to keep their surfaces from overheating, to maintain maximum power generation efficiency. As a result of installing the facilities, we have been able to reduce power usage at the entire plant by approximately 10%.

Solar panels at Fujitsu Wireless Systems Limited

Efficient Use of Water Resources

Our Approach

Global water shortage risks are increasing along with climate change, destruction of forests, and economic and population growth in emerging and developing countries. For companies, as well, water shortages bear risks toward business continuity. Reducing water usage and recycling water are critical issues.

Since the Fujitsu Group uses especially large amounts of water in our semiconductor and printed circuit board manufacturing, we believe it is particularly necessary to reduce our water consumption in these areas. In addition to general water saving, to date we have been continuously striving to recirculate and reuse water by recycling pure water and reusing rainwater. From FY 2013, we established efficient water usage as a new goal and have boosted our efforts even greater than in the past.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Continue efforts for efficient use of water, e.g. water recycling and water saving
FY 2013 Key Performance	Water usage: **18,620,000 m³** reduced by **6.3%** (compared to FY 2012)

FY 2013 Performance and Results

Collectively Rolling out Reduction Activities at Our Semiconductor Plants

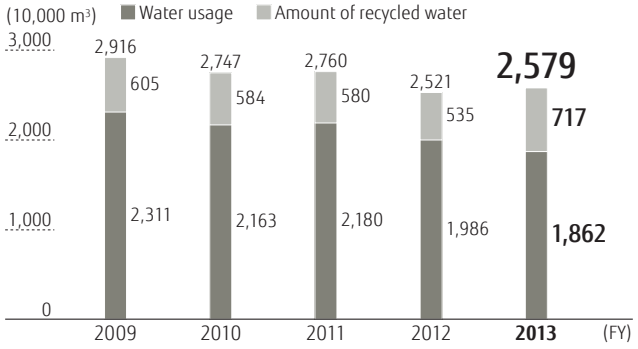
We bolstered our reduction of water usage at our semiconductor plants. To reduce usage of pure water, which is indispensable for semiconductor manufacturing, we adjusted the amount of water flowing to each piece of machinery while confirming that the change would not affect the manufacturing process. This allowed us to optimize our water consumption for more than 1,000 machines overall.

Adjusting pure water flow to manufacturing machinery

6.3% Reduction in Water Usage From FY 2012

Water usage for FY 2013 was 18,620,000 m³ (usage rate per unit of sales: 391 m³/100 mill. yen), which was a 6.3% reduction compared to FY 2012. The proportion of recycled water overall was 38.5%, which greatly contributed to efficient usage.

Trends in Water Usage and Amounts of Recycled Water



TOPICS

Promoting Efficient Water Use at Semiconductor Plants

Pure water is indispensible for semiconductor manufacturing. Up to this point, we have focused our concern on the manufacturing process, which meant keeping pure water continuously flowing to machinery even when it was idle and not processing any products. This used voluminous amounts of water. In response, we formed a cross-divisional team of members from the manufacturing, design technology, administration, and plant management divisions at our semiconductor plant in Aizuwakamatsu, Fujitsu Semiconductor Limited, and the main plant of Fujitsu Semiconductor Technology Inc., and began efforts to reduce our usage of pure water.

We optimized the precise amount of water that could be fed to each piece of machinery so that water flow could be reduced while water temperature would still remain within permissible levels and no impact would be felt in the manufacturing process. For machinery that did not have flow meters, we devised approaches to adjust the flow rate, such as using a stopwatch to measure the flow time. As a result, we were able to optimize usage for more than 1,000 pieces of machinery overall and achieve an annualized water usage reduction of 212,000 m³ without any financial investment.

FY 2014 Targets and Plans

Strive to Continually Achieve our Targets

To pursue our Environmental Action Plan (Stage VII) goal to "continue efforts for efficient use of water, e.g. water recycling and water saving," we will combine efforts one by one at each of our plants and further endeavor to efficiently use water resources following on from actions in FY 2013.

Reducing Chemical Substances Emissions

Our Approach

We manage the amounts used for about 1,300 chemicals in the Fujitsu Group in order to prevent environmental risks that could lead to environmental pollution or adverse health effects due to our use of harmful chemical substances. We operate a Chemical Information System called "FACE," which we use to register and monitor chemicals at every site, manage Safety Data Sheets (SDS), control income and expenditures in conjunction with purchasing data and inventory data, and strengthen our management and efficient use of chemicals.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Reduce chemical emissions to less than the average level of FY 2009-2011 (PRTR: 21 tons, VOC: 258 tons)
FY 2013 Key Performance	PRTR: 21 tons / VOC: 246 tons

FY 2013 Performance and Results

Ensured Stronger Control of Chemical Substances by Linking Our Chemical Information and Purchasing Data Systems

As a new initiative to strengthen our legal compliance regarding chemical substances, we linked our FACE Chemical Information System with our Purchasing Data System, such that it is now impossible to purchase chemical substances that are not registered in our systems.

Achieved On-Going PRTR Substance and VOC Emission Targets

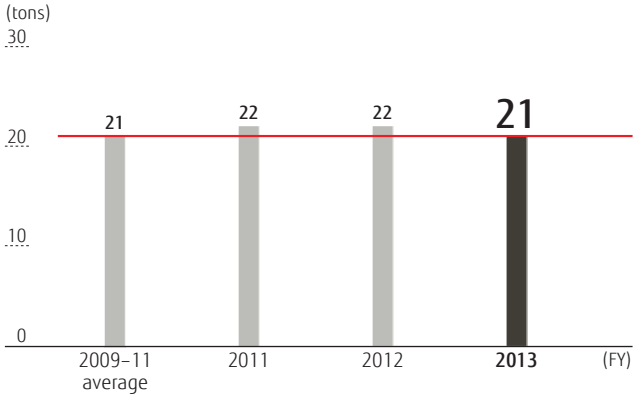
As we work to improve our recovery rate of chemical substances, we were able to hold FY 2013 emission amounts below the average from FY 2009-2011. Group-wide chemical substance emissions for the year came to 21 tons for PRTR substances and 246 tons of VOC, thanks to efforts that included enhancing our maintenance of recovery equipment.

FY 2014 Targets and Plans

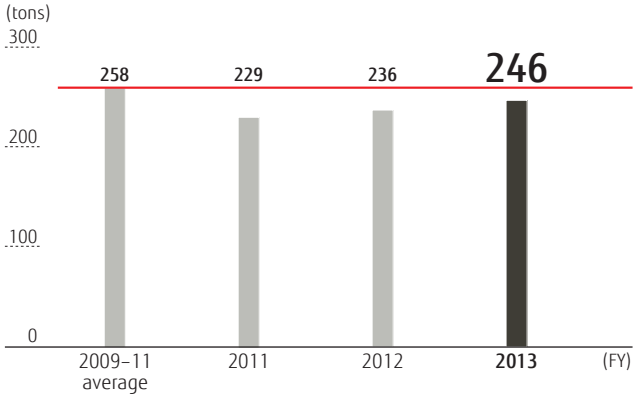
Continue to Limit PRTR Substance and VOC Emissions

We will continue holding the Fujitsu Group-wide emissions of chemical substances below the average from FY 2009-2011 in Japan. In particular, we plan to review new reduction measures for plating processes, which involve high emissions of chemical substances.

Trends in PRTR Substance Emissions in Japan



Trends in VOC Emissions in Japan



Limiting Amounts of Waste Generated

Our Approach

The Fujitsu Group sees waste as a valuable resource and continuously works to recover resources from our waste, or to use that waste as an energy source. In Japan, we have been reducing our final disposal amounts every year. However, given the difficulty of building new disposal sites, and the limited lifespans of existing sites, the environment surrounding our waste disposal is as challenging as ever. By proactively installing equipment and reusing waste, we are working to follow the stipulations in Japan's Fundamental Law for Establishing a Sound Material-Cycle Society to 1) reduce waste generated, 2) reuse waste, 3) recycle waste, and 4) recover heat from waste. We do this in order to reduce the amounts of waste acid, waste alkali, and sludge generated in our production of semiconductors and printed circuit boards.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)

Reduce the amount of waste to less than the average level of FY 2007–2011

(amount of waste: **31,134 tons**)

Keep Zero Emission in factories in Japan.

FY 2013 Key Performance

Waste generated: **23,522 tons**

Achieved **Zero Emissions** at domestic business sites.

FY 2013 Performance and Results

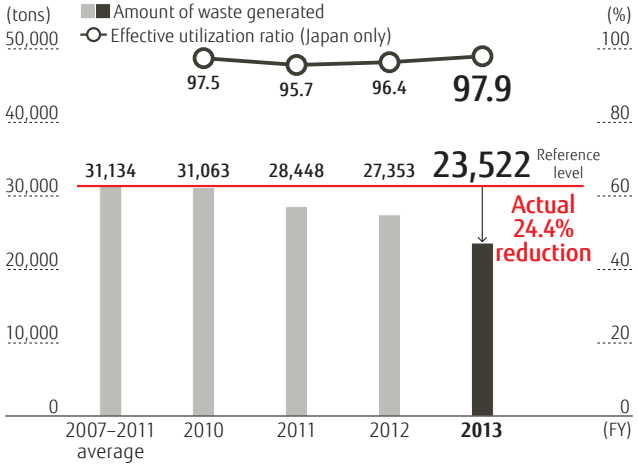
Installed Equipment, Treated Waste In-House, and Converted Waste to Value-Added Material

We implemented measures including installing vacuum dehydration dryers at our Nagano Plant to reduce (by 595 tons) electroless copper plating wastewater, using in-house treatment at Shinko Electric Industries to reduce alkali wastewater (by 300 tons), and converting sulfuric acid waste (228 tons), used at Fujitsu Semiconductor Technology, Inc. in the cleaning steps of the semiconductor manufacturing process, into value-added material.

Achieved Zero Emissions at All Business Sites

We were able to meet our target by holding waste generation to 23,522 tons (generation rate per unit of sales: 0.49 tons/100 mill. yen). Additionally, we were able to achieve zero emissions at all of our domestic business sites by bringing a portion of business sites that had not achieved zero emissions by FY 2012, up to zero emission levels.

Trends in Amount of Waste Generated and Effective Utilization Ratio



Breakdown of Waste Generated, Effective Utilization, and Final Disposal

(tons)

Waste Type	Waste Generated	Effective Utilization	Final Disposal
Sludge	4,750	4,544	206
Waste oil	1,670	1,503	167
Waste acid	2,832	2,831	1
Waste alkali	3,516	3,514	2
Waste plastic	3,720	3,637	83
Waste wood	1,228	1,228	0
Waste metal	570	568	2
Glass/ceramic waste	371	371	0
Other*	4,865	3,492	1,373
Total	23,522	21,688	1,834

* Other includes general waste, paper waste, septic tank sludge, residue, rubble, textile waste, animal and plant residue, and infectious waste.

FY 2014 Targets and Plans

Continue to Limit Waste Generation

We will strive to "Reduce the amount of waste to less than 31,134 tons," and "Keep Zero Emissions in factories in Japan" as we work to limit waste generation by continuously installing equipment and reusing resources.

Main Activities in FY 2013

Separating Heavy Metals from Electroless Copper Wastewater with Vacuum Dehydration Dryers

At our Nagano Plant, the conventional wastewater processing technology faced difficulties in separating solids from liquids through chemical processing of electroless copper wastewater.

In response, Fujitsu Facilities Limited started working on a vacuum dehydration dryer that can separate solids from distilled water, regardless of the ingredients of the wastewater, by utilizing a principle whereby depressurized (approximately -0.1 MPa) water reaches a boiling state around 50ºC. Expecting that this technology could be applied to electroless copper wastewater, tests were carried out on actual wastewater. Results showed that the solid constituents, such as heavy metals, etc., contained in electroless copper wastewater could be separated. We decided that the system, which also had the benefit of low daily maintenance needs due to its simple design, would be adopted at the Nagano Plant.

When installing the system, we incorporated some operational upgrades and customizations so that raw wastewater, from wastewater tanks in each building, and distilled water are automatically transferred. In addition, we added features that measured the solids, automatically notified when drums needed changing, simplified the way drums are moved, and simplified the transportation of the solids. Installing this equipment has brought annual industrial waste reductions of 595 tons.

Vacuum Dehydration Dryer


External view


Recovered solids


Wastewater | Solids 10% | Distilled water 90%

Reusing Sulfuric Acid for the Neutralization Treatment of Wastewater

Fujitsu Semiconductor Technology, Inc. uses sulfuric acid in the cleaning steps of semiconductor manufacturing at its main plant.

Since there are high concentrations of hydrogen peroxide in the sulfuric acid drained from the first cleaning line, we have, up to now, treated this as an industrial waste product and outsourced processing to an external company. At the same time, we were using industrial-grade sulfuric acid in the neutralizer of our wastewater treatment facility.

As a result of examining whether we could reuse the drained sulfuric acid as a neutralizer in the wastewater treatment facility, we found that it was indeed possible, however, the hydrogen peroxide caused ill effects (corrosion) in the facility and pipes. We realized that further measures were needed. In response, in FY 2012, we switched wastewater treatment facilities and pipes, etc. to components with high chemical resistance, in order to combat the corrosion. After running tests and checks, we began reusing the drained sulfuric acid, repurposed as the neutralizer, from April 2013. As a result, we were able to achieve reductions of 228 tons annually in both the amount of waste generated we emitted and the industrial sulfuric acid we purchased.

Product Recycling

Our Approach

The Fujitsu Group's product recycling programs are based on our belief in Extended Producer Responsibility (EPR) and Individual Producer Responsibility (IPR). EPR holds that producers bear responsibility for products not only at the design and manufacturing stages, but also at the disposal and recycling stages, while IPR holds that producers bear responsibility for their own products. IPR is a major challenge for the Fujitsu Group in expanding our business globally, but we believe that responding to this challenge, and that of EPR, in collaboration with industry associations and governments will enable us to help create a recycling-minded society in which the requirements and demands of all stakeholders are met.

Given this understanding, the Fujitsu Group carries out recycling programs that comply with the waste disposal and recycling laws and regulations of the various countries in which it operates. As an authorized operator under the Industrial Waste Wide-Area Recycling Designation System based on Japan's Act for Promotion of Effective Utilization of Resources, Fujitsu accepts industrial waste for appropriate processing at Fujitsu recycling centers across Japan. Furthermore, following our belief in IPR, we also try to do as much collection, reuse and recycling as we can, even in countries where recycling is not obligatory.

Summary of FY 2013 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)

Maintain over **90%** resource reuse rate of business ICT equipment at Fujitsu recycling centers.

FY 2013 Key Performance

Achieved resource reuse rate of business ICT equipment at Fujitsu recycling centers

92.7% [Japan 91.3% / overseas 95.3%]

FY 2013 Performance and Results

Promoted Recycling of ICT Products in Each Country

The Fujitsu Group carries out recycling in Japan, EMEA (Europe, the Middle East, Africa), the Americas (the United States, Canada, and Brazil), and Asia (Singapore, the Philippines, Australia, Hong Kong, Taiwan and South Korea). In Japan, we have built a recycling system that covers the entire country. While ensuring thorough traceability and security, we are steadfastly implementing Extended Producer Responsibility by providing safe and secure services that achieve high resource reuse rates. We also partner with recycling companies near our hubs outside Japan to promote recycling of ICT products.

Achieved a 90% or Higher Reuse Rate

We processed 5,035 tons of recycled ICT products (used ICT products for business applications) from corporate customers and achieved a resource reuse rate of 91.3%. Also, we have now collected a total of 98,549 end-of-life PCs from individual customers.

Trends in Resource Reuse Rates of End-of-Life Business ICT Products

FY	2010	2011	2012	2013
Resource reuse rate* (%)	90.6	90.9	91.5	91.3
Amount processed (tons)	6,406	5,487	5,297	5,035

* Weight percent ratio of recycled parts and materials to end-of-life products

Trends in Numbers of End-of-Life PCs Collected from Individual Customers

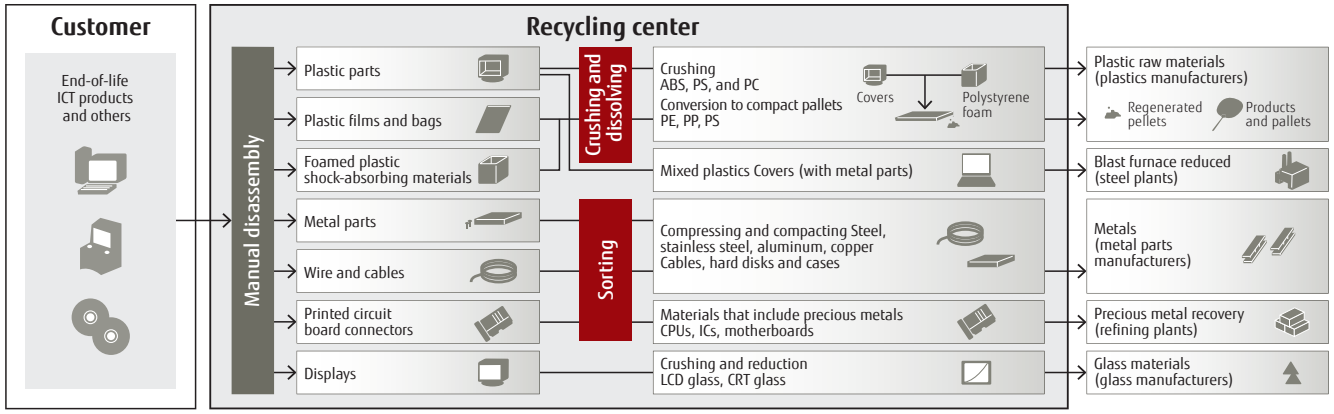
FY	2010	2011	2012	2013
End-of-life PCs collected (units)	74,231	83,358	85,381	98,549

FY 2014 Targets and Plans

Strive to Continually Achieve Our Targets

Going forward, we will strive to maintain a 90% or higher resource reuse rate for business ICT equipment at our Fujitsu recycling centers, and will drive forward our domestic and overseas recycling programs.

Fujitsu Integrated Recycling Process



Environmental Management

Since our founding in 1935, the Fujitsu Group has made the principle of "operating in harmony with nature".
We have now set "In all our action, we protect the environment and contribute to society" as our corporate value under the FUJITSU Way.
Contributing to the sustainability of the planet is a social responsibility of the Fujitsu Group and a reason for our existence.
We will build relationships of trust with a wide range of stakeholders and will work to preserve the environment throughout our value chain.

P.42	Environmental Management	Endeavoring to make sustainable improvements to environmental management systems based on ISO14001, the Group is promoting unified environmental management.
P.44	Green Procurement	To provide customers with products and services that have a light environmental footprint, we are implementing green procurement in concert with our business partners.
P.46	Initiatives to Minimize Environmental Risk	To minimize the risk of polluting the environment and disrupting ecosystems, the Group is continuing such initiatives as setting voluntary control values that are tougher than those designated by laws and regulations.
P.47	In-House Environmental Educational and Enlightenment Activities	We carry out various forms of environmental education and enlightenment training based on the belief that, "to promote environmental management, it is essential to raise the environmental awareness of each and every employee and to take proactive measures."
P.48	Communication with Society	The Fujitsu Group works to communicate with our customers, employees, business partners, shareholders, investors, local and international communities, and all of our diverse stakeholders.

Evaluation by Outside Institutions

The Fujitsu Group has earned praise from outside institutions for its active promotion of environmental and social initiatives, and has been included among Socially Responsible Investment (SRI) brands.

Climate Performance Leadership Index (CPLI)

Climate Disclosure Leadership Index (CDLI)

FTSE4 Good Global Indexes

Ethibel Sustainability Index (ESI) (Excellence Register)

Dow Jones Sustainability Index (DJSI) World Index

UN Global Compact 100 (Stock Index)

Environmental Management

Endeavoring to make sustainable improvements to environmental management systems based on ISO14001, the Group is promoting unified environmental management.

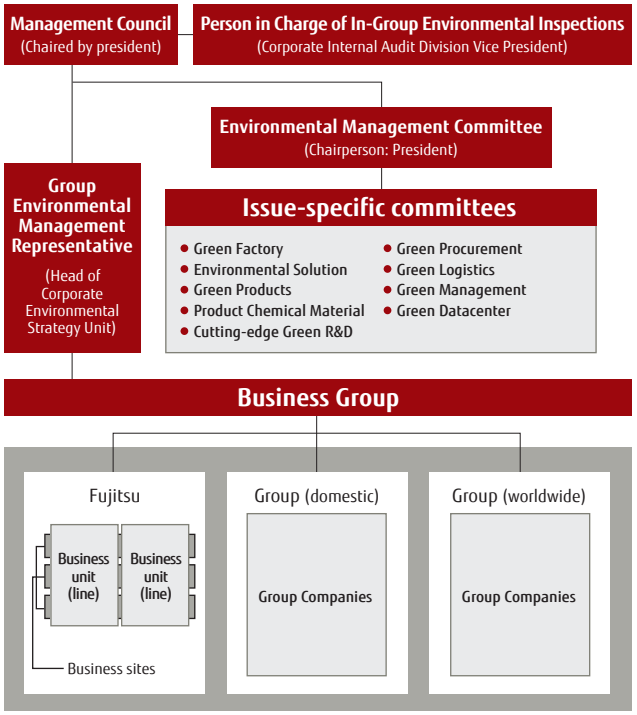
Environmental Management Framework

To conduct a comprehensive discussion of the Fujitsu Group's environmental management, we have established an Environmental Management Committee chaired by the president. This committee is considering medium-term issues and implementing policy decisions with the aim of raising the level of the group's environmental management and strengthening its governance. Based on that, final decisions on environmental management at the Fujitsu Group are made at meetings of the Management Council.

Subordinate to the Environmental Management Committee, we have organized environmental issue-specific committees composed of concerned parties that go beyond the framework of business groups and headquarters. Through this promotion structure, we are making it possible to quickly diffuse initiatives on these issues throughout the group.

We have also established an Environmental Management Working Group subordinate to the Green Management Committee that is working to unify global information transmission and strengthen environmental management systems (EMS) activities.

Environmental Management Framework (as of March 2014)



Configuration and Operation of Environmental Management Systems

The Fujitsu Group has constructed environmental management systems (EMS) based on the ISO 14001 international standard and is promoting environmental improvement activities across the Group. By EMS construction worldwide, the Fujitsu Group further strengthened its Group governance. This also allows the Group to promote even more efficient and highly effective environmental activities, including understanding the state of activities, legal compliance and emergency response.

As of the end of FY 2013, the Fujitsu Group has acquired global integrated ISO 14001 certification for a total of 82 companies of Fujitsu and its domestic group companies, as well as for 10 overseas Group companies. Our 19 overseas consolidated subsidiaries that are not production base sites have constructed and are operating an EMS in line with Fujitsu Group environmental policies. In this way, we have established an environmental management structure across the whole Group.

Internal Audit Implementation and Results

The Fujitsu Group is carrying out internal audits, a requirement of ISO 14001. To ensure their objectivity and independence of internal audits, the Corporate Internal Audit Division, which is unaffiliated with any line organization, takes the lead, allocating internal auditors who belong to Fujitsu or Fujitsu Group companies to carry out internal audits.

In FY 2013, we carried out internal audits for factories, offices, and other facilities at 392 sites in Japan and 16 overseas. For this audit, we scrutinized the results of the FY 2012 internal audit and external audit and found five major focal points: (1) compliance, (2) environmental objectives and targets, (3) operational control, (4) education and training, and (5) proprietary EMS operational organization. As a result of these internal audits, we discovered 218 findings, 59 fewer than in FY 2012. The fact that the ratio of findings to audits

Environmental management systems operational status

		FY 2011	FY 2012	FY 2013
Internal audit	Findings	347	277	218
External audit	Findings	16	6	3
	Opportunities for improvement	77	67	70
Environmental compliance	Violations of environmental laws	17	7	3

declines every year suggests that our environmental management system has taken hold.

Domestically, 50 percent of findings involved legal compliance and operational control. Many of the findings for the former were related to industrial waste disposal and for the latter many were related to chemical substances.

And overseas, receiving cooperation from external organizations and experts thoroughly knowledgeable in local laws and regulations and operation, we carried out internal audits with the objective of strengthening compliance. As a result, incidences of nonconformity decreased 50 percent over FY 2012, a great improvement. Regarding the content of the findings, some 40 percent related to "legal and other requirements" and "operational control."

Onsite internal audit

External Audit and Results

To maintain our ISO 14001 certification, we are carrying out external audits by a certifying body. In FY 2013, we were audited in Japan by the Japan Audit and Certification Organization for Environment and Quality (JACO). Outside Japan, we were audited by DNV Business Assurance Japan K.K. DNV.

As a result, 70 areas with opportunities for improvement were pointed out for our organizations in Japan, and for our overseas Group companies, three minor nonconformities and 21 observations were identified. We have completed corrective actions against these matters as of the end of FY 2013. Moreover, external audit findings were shared throughout the Group, and we plan to confirm the status of these matters in the FY 2014 internal audit.

These audits were carried out, and as a result of the judgment of the two certifying bodies, we were granted maintenance of our ISO 14001 certification.

Status of Environmental Compliance

While the Fujitsu Group committed no major violations of environmental laws and caused no accidents that had any major impact on the environment in FY 2013, there were three events in which laws were violated. They consisted of one violation related to industrial waste processing manifests and two deficiencies in notification documents.

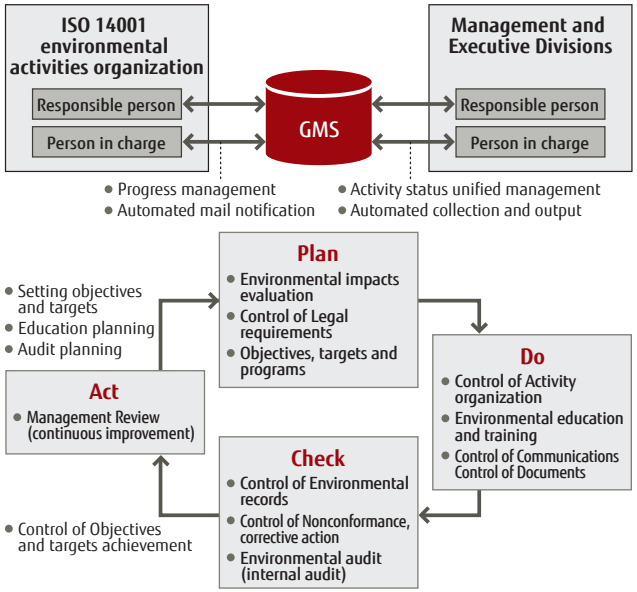
Legal violations were reduced through the horizontal sharing of information on findings and through training targeting personnel responsible for industrial waste. But we will aim to make our self-checks even more thorough and bring the number of violations to zero. Also, with regard to industrial waste, we will select outstanding waste processors while configuring a structure to eliminate administrative violations related to waste from offices.

Use of the ISO 14001 Green Management System

The ISO 14001 Green Management System (GMS) is used to exercise unified control over the operational status of the EMS, and to monitor the situation involving improvements to, and legal compliance with: nonconformance issues notified at environmental audits, communications activities, direct and indirect effects and risk/countermeasure levels identified in environmental impact assessments, and the setting of environmental management objectives and targets.

This enables corrective measures and objectives to be soundly managed, and effectively ensures continual improvement of the activities with reduced risks.

ISO 14001 Green Management System



Green Procurement

To provide customers with products and services that have a light environmental footprint, we are implementing green procurement in concert with our business partners.

Procurement Activities Based on Green Procurement Direction

The Fujitsu Group summarized what it asks of its business partners when purchasing green parts, material and products in the "Fujitsu Group Green Procurement Direction" and is promoting green procurement activities with domestic and international business partners. We have five requirements (table below) for our business partners and promote procurement from business partners that fulfill these requirements.

Using an original Environmental Survey for business partners, we investigate the situation with regard to business partners' EMS construction, CO_2 emission control/reduction, biodiversity preservation and water resource preservation activity, and ask them to take appropriate measures.

Green procurement requirements for business partners

	Requirements	Materials/parts business partners*	Non-materials/parts business partners
①	Establishment of environmental management systems (EMS)	○	○
②	Compliance with regulations for Fujitsu Group specified chemical substances	○	—
③	Establishment of chemical substance management systems (CMS)	○	—
④	CO_2 emission control/reduction initiatives	○	○
⑤	Biodiversity preservation initiatives	○	○

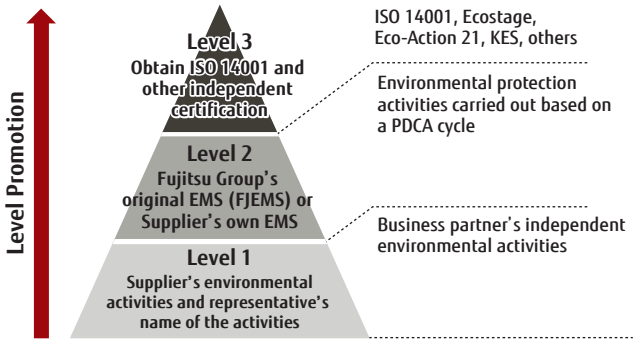
* Materials/parts business partners: Business partners who supply components of Fujitsu Group products or OEM/ODM products

Establishment of Environmental Management Systems

We request our business partners to establish an environmental management systems (EMS) to ensure that they continuously implement environmental burden reduction activities. We also conduct regular surveys to determine their EMS level (refer to the following diagram). For business partners whose survey responses indicate a level 1 EMS, we will provide the Fujitsu Group's original EMS (FJEMS*1) and support efforts to bring the business partner's EMS up to the third-party-certified EMS (level 3).

*1 FJEMS: The Fujitsu Group's own EMS, which has requirements drawn from ISO 14001 requirements and aims to promote environmental protection activities based on a PDCA cycle.

Establishment of EMSs for Green Procurement



CO_2 Emission Control/Reduction Initiatives

We have made CO_2 emission reduction, an important issue in environmental conservation, a requirement for green procurement from our business partners, and we ask them to carry out CO_2 emission reduction and control activities with target amounts. (See Page 33.)

TOPICS Hosting a Green Suppliers' Day

The Fujitsu Group hosts a *satoyama* (mountain forest) preservation activity called Green Suppliers' Day as a program to help boost business partners' awareness of environmental conservation.

The program, attended by the employees and family members of business partners, allows first-time participants as well as children to enjoyably partake in cutting back a variety of bamboo grass, thinning out konara oak trees, as well as biodiversity preservation lectures that incorporate nature observations. In addition, all of the participants have a lunch after the activities sitting round a table. The program, which has received a positive reception from participants who are able to engage in a variety of interaction different from our typical business activities, has proven to be useful for strengthening communication with business partners.

FY 2013 marked the third Green Suppliers' Day, backed by demand from our business partners. Repeat participants increased and we received favorable comments such as, "It was a fun, refreshing opportunity and a chance to become aware of activities that I do not normally have the chance to experience," and, "I would like to participate again in this worthwhile activity." Going forward, we would like to continue activities throughout our value chain that will help vitalize environmental activities across society.

Acquiring Information on Chemical Substances Contained in Products

From the viewpoints of environmental and consumer protection, laws and regulations relating to chemical substances contained in products have been enacted in various countries, and they are expected to spread even further internationally and become more rigid. For this reason the Fujitsu Group is sharing with business partners information about the importance of obeying regulations on chemical substances contained in products, and we are investigating information on chemical substances contained in products through AIS *1 and MSDSplus *2 offered by JAMP *3. The investigations take place when products are designed, designs are changed or business partners are changed, and information provided by business partners is shared within the Fujitsu Group through our internal chemical substance information management system.

Because it is necessary to address chemical substance management through the value chain as a whole, we plan to appeal to not only primary business partners, but also those further up the value chain.

Also, we will promote investigation optimization by proactively participating in activities to standardize investigations related to green procurement promoted by such industry groups as JAMP.

*1 AIS (Article Information Sheet): Information transmission sheet for conveying information on chemical substances in molded products.
*2 MSDSplus (Material Safety Data Sheet plus): Information transmission sheet for conveying information on chemical substances in chemicals and preparations.
*3 JAMP: Joint Article Management Promotion-consortium

TOPICS

Holding AIS Creation Seminars in China and Taiwan

In February 2014, we held an AIS creation seminar for 38 business partners in China (Shenzhen and Dongguan) and Taiwan. It was the second such seminar held in Greater China, coming after one in 2011. At the seminar, we explained the latest trends in chemical substance laws and regulations and lectured on methods of creating AIS answers through a PC-based training format. One business partner who participated commented, "I recognized the importance of a quick response to laws and regulations on chemical substances and how to create an AIS."

Also, through the joint sponsorship of our local staff, we established a business partner support system made up of local staff. This has made it possible for us to avoid misapprehensions and insufficient understanding due to language differences and to respond rapidly to the inquiries and requests of Chinese business partners.

AIS creation seminar in Taiwan

Establishment of a Chemical Substance Management System (CMS) for Chemical Substances Contained in Products

To secure compliance with laws and regulations relating to chemical substances contained in products, the Fujitsu Group asks its business partners to establish a chemical substances management system (CMS) based on JAMP guidelines on management of chemical substances contained in products. And to check if they establish their CMS correctly and operate them properly, we carry out CMS audits. Through our CMS audits, Fujitsu's auditors directly confirm the operational status at the business partner's manufacturing bases, and if the system established is inadequate, they make requests for corrections and provide support. Through periodic audits after the establishment of the system, we regularly confirm the system state and its operational status.

With the understanding of our business partners, the Fujitsu Group will continue carrying out management of chemical substances included in products.

Seminar held in Japan

Initiatives to Minimize Environmental Risk

To minimize the risk of polluting the environment and disrupting ecosystems, the Fujitsu Group is continuing such initiatives as setting voluntary control values that are tougher than those designated by laws and regulations throughout the entire value chain.

Preventing Air Pollution

We have set voluntary control values that are more stringent than emissions standards under related laws and ordinances in order to prevent air pollution and limit acid rain. Regular measurement and monitoring is conducted based on these controls. Efforts are made to appropriately process dust and soot, sulfur oxide, nitrogen oxide and other harmful substances and reduce emissions through measures such as controlling incineration at facilities that emit smoke, using fuels with low sulfur content, and managing operations at exhaust gas processing facilities. Furthermore, an absorption system using activated charcoal has been introduced to reduce the atmospheric discharge of organic solvent vapors containing substances like VOCs. In addition, emission of dioxins has been prevented by suspending use of (completely phasing out) all in-house incineration facilities as of January 2000.

Preventing Water Pollution

In order to preserve the water quality of surrounding waterways, including rivers, groundwater and sewers, we have set voluntary controls that are even tougher than related laws and ordinances and conduct regular measurement and monitoring on this basis. We separately recover and recycle chemicals used in production processes, instead of discharging them into wastewater. And we are working to appropriately manage harmful substances and other regulated substances (COD, BOD, etc.) and reduce discharges of them by ensuring appropriate chemical use, preventing chemical leaks and permeation, and properly managing the operations of water treatment and purification facilities, among other measures.

Preventing Pollution of Soil and Groundwater

We have established rules for soil and groundwater surveys, measures and disclosure. We review these in accordance with changes in the law and social circumstances, and respond based on these rules. We systematically examine soil and groundwater, based on the rules, and if pollution is confirmed, we carry out cleanup and countermeasures at each plant according to the situation, while disclosing information in concert with administrative agencies.

In FY 2013, survey results showed that two business sites had groundwater pollution. Authorities with jurisdiction over the areas were informed of the matter and of measures to handle the pollution going forward. As of FY 2013, there are eight business sites where soil and groundwater pollution from prior business activities have been confirmed. At those business sites, we have installed observation wells to observe effects outside the site due to groundwater pollution, while also working on purification measures through water-lifting aeration, etc.

Chemical Substance Control

To prevent pollution of the natural environment or damage to health due to the use of harmful chemical substances, we are controlling the use of some 1,300 substances using the original Chemical Information System called "FACE" and working to appropriately control and reduce emissions at our business sites. (See Page 37.)

On the other hand, with regard to chemical substances included in products, we have determined banned substances based on regulations inside and outside Japan and are working to thoroughly control them, including both inside the company and of course with business partners who supply components and manufactured goods. (See Page 45.)

Appropriately Processing Waste

In order to confirm that subcontractors are appropriately handling the waste processing tasks we entrust to them, we regularly carry out on-site audits. In addition, with regard to polychlorinated biphenyl (PCB) waste (transformers and condensers) processing, we have registered with the Japan Environmental Safety Corporation (JESCO), which carries out PCB waste disposal under government supervision, and are carefully carrying out processing based on JESCO plans.

Concerving Biodiversity

In FY 2009, we settled on the Fujitsu Group Biodiversity Action Principles, and promote them based on the two pillars of reducing the impact on biodiversity of our business activities and contribution to the creation of a society that concerves biodiversity. We constructed the Fujitsu Group Biodiversity (BD) Integration Index in FY 2010 and have been evaluating the degrees to which our main business areas impact biodiversity. As a result, we learned that our waste disposal and use of energy resources and chemical substances have a large effect. Thereafter, we have been taking continuous measures to reduce these effects.

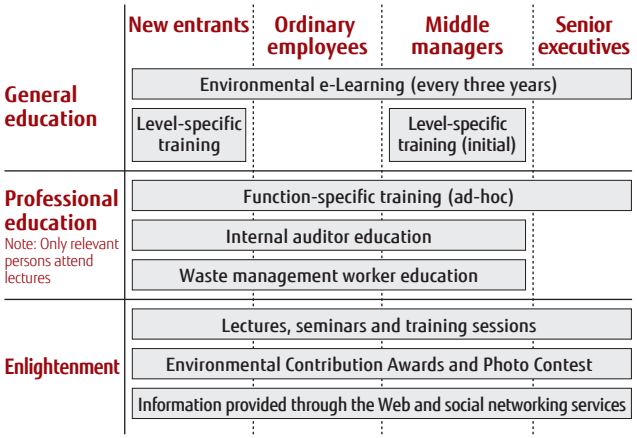
In-House Environmental Educational and Enlightenment Activities

We carry out various forms of environmental education and enlightenment training based on the belief that, "to promote environmental management, it is essential to raise the environmental awareness of each and every employee and to take proactive measures."

Carrying Out Comprehensive Environmental Education

At the Fujitsu Group, every three years we have all of our employees undertake e-Learning to acquire a basic understanding of environmental management. In addition, education is provided to meet the needs of each level of employee from new entrants to managers, as well as those of departments including design development, sales and systems engineering. We are also implementing internal auditor, waste management and other training as professional education for employees in charge of work related to the environment.

Fujitsu's Environmental Education System



Environmental e-Learning for All Group Employees

To help ensure that individual employees understand the Fujitsu Group's thinking on environmental management and encourage them to engage in environmentally conscious initiatives, and to facilitate the practice of environmental management, we conduct environmental e-Learning for all Group employees.

A new version of environmental e-Learning was created with contents in six languages to help their understanding of the background and the details of the Fujitsu Group Environmental Action Plan(Stage VII) in FY 2013, the first year of the plan and about 100,000 employees completed the course in Japan and abroad.

Environmental e-Learning program screenshot

Raising Awareness Through an In-House Award Scheme

To raise the environmental awareness of employees at all Fujitsu Group companies, we have operated an Environmental Contribution Awards scheme and conducted an Environmental Photo Contest, open to all employees, every year since 1995.

Numerous entries were put forth for the FY 2013 Environmental Contribution Awards. Among them were efforts in three areas like "Environmental contribution by our products and services", "Reducing the negative environmental impact of our business activities", and "Social contribution activities/ Corporate image improvement activities". In the end, however, the FY 2013 Environmental Contribution Awards went to three entries, including "Touchless vein sensor-world's smallest/lightest".

For the Environmental Photo Contest, 503 entries were received from Fujitsu Group employees across the globe. This contest, through the solicitation of entries and voting for winners, encourages employees to think of environmental problems from a global perspective.

Environmental Photo Contest Top Prize Winner - "Papa. Beautiful sands are being spoiled."

Communication with Society

The Fujitsu Group works to communicate with our customers, employees, business partners, shareholders, investors, local and international communities, and all of our diverse stakeholders.

Environmental Dialogues with Experts

To solve global environmental problems, build collaborative relationships with a wide range of stakeholders, and promote environmental management that reflects the changes and needs of society, we feel that it is vital to have many occasions for dialogue with society.

At the Fujitsu Group, we began environmental dialogues from FY 2011, and have since held a total of 14 gatherings as of the end of FY 2013. Over 30 experts have been invited in far ranging fields, including representatives of NPOs, universities, and corporations, as well as journalists. Each gathering has had specific themes around which the interactions are carried out. This dialogue allows us to understand the expectations and demands placed on Fujitsu, and leads to improvements and reinforcements of our environmental management.

FY 2013 Themes

1st dialogue	Discussing the materiality of Fujitsu
2nd dialogue	Initiatives regarding the resources used in Fujitsu products
3rd dialogue	Considerations regarding collaboration between corporate business sites (plants, etc.) and cities
4th dialogue	New frameworks for the continuous development of communities (satochi-satoyama*)
5th dialogue	The conditions of governance that strengthens environmental management
6th dialogue	Global warming adaptation measures

* Satochi-satoyama: Rural landscape and community-managed natural area.

Resource Initiatives: Discussing Evaluation Methods and Approach Measures

In order for the Fujitsu Group to gauge the level of impact on the environment from the use and disposal of resources indispensable for product development, we have formulated a new index called the "resource efficiency" (see Page 20). We actively exchanged opinions with researchers and experts in regards to devising this index, as well as understanding evaluation methods for recycling, etc.

Some of the input we received included comments such as, "Many corporations are struggling to devise such an index, but we hope you continue your leading efforts;" "Please consider what comprises the largest environmental impacts, from a resource perspective, among Fujitsu's products, and devise an index able to assess this;" "It is necessary to disclose information on the areas of your supply chain that require assessment. It should be possible to leverage ICT to manage this information at the production and usage stages, which are stages when risks arise."

Going forward, we plan to give due consideration to this input as we review ways to improve the content of the index, assess the future direction of our activities, and contribute to the efficient use of resources society-wide while leveraging ICT and increasing our resource efficiency.

Creating a New Project by Exchanging Information on Collaboration with Communities

We exchanged opinions on the challenges and future developments in conserving woodlands and satochi-satoyama, which are representative social contribution activities for corporations.

Some of the input we received included comments such as, "Rather than taking the one-dimensional approach to forestation that thinks "just improving forests is enough," it is important to take an approach that includes vitalization of the entire ecosystem and the surrounding regions in your perspective;" "Forestation takes time. In order to build solid relationships of trust, instead of planting trees and stopping at that, it's necessary to consider what is required all the way to the end, including maintenance;" "It would be even better if Fujitsu went beyond volunteer work and made itself part of the business model so that the economy of the mountain forest areas could gain more momentum."

In light of these opinions, we have begun forest revitalization activity in Miyako City, Iwate Prefecture, aiming to contribute to the community and build a long-term relationship (see Page 25).

A Facilitator's Comment

I have participated as a facilitator in each of the environmental dialogues. As we face a time of increasing environmental and other problems that a single corporation is hard pressed to solve on its own, a stance in which corporations align themselves with society in order to address the problems is mandatory. I feel that taking the concrete step of arranging dialogues for this is extremely important. I commonly see examples of one-off dialogues arranged for CSR reports. Fujitsu, however, deserves praise for its on-going dialogues with society, carried out from multiple angles.

I feel that the dialogues have allowed experts to convey their expectations of Fujitsu in terms of technology, etc., and that the dialogues have been a forum for deepening trust between Fujitsu and society by displaying the company's willingness to address issues with parties outside Fujitsu. The experts, in turn, get insight into the challenges Fujitsu faces and receive the benefit of increasing and strengthening their own knowledge and pursuits. There have been numerous examples of this interaction, both dialogue and networking, leading to positive contributions to subsequent endeavors.

I have high hopes for the environmental dialogues to continue in the future so that Fujitsu's environmental initiatives and environmental management can advance forward without resting on their laurels.

Junko Edahiro
President, Institute for Studies in Happiness, Economy and Society

Communication through Exhibitions and Events

The Fujitsu Group provides information on our initiatives toward solving global environmental issues by using exhibitions and events inside and outside Japan as a means for communicating with customers and residents of regional communities.

Main Exhibitions and Events Attended in FY 2013

- ITU Green Standard Week / Madrid, Spain / September 2013
- Kawasaki International Eco-Tech Fair / Kanagawa, Japan / February 2014
- Eco-Products 2013 / Tokyo, Japan / December 2013
- CEATEC / Chiba, Japan / October 2013
- Eco-Products International 2014 / Taipei, Taiwan / March 2014

An Environmental lesson held at Eco-Products 2013

Tie-ups with External Organizations in order to Spread Green ICT and a Sustainable Society

By actively participating in external organizations inside and outside Japan, the Fujitsu Group is endeavoring to promote and spread green ICT solutions for realizing a sustainable society.

Major Participating Organizations

ISO TC286 SC1 (Smart Urban Infrastructure Metrics): building infrastructure assessment methods and promoting efforts to clarify the role of ICT in smart communities
World Business Council for Sustainable Development (WBCSD): reviewing assessment indices in traffic and transportation fields, and promoting concrete solutions in various categories
The ITU-T's ICT and Climate Change Group (SG5 WP3): spreading and expanding green ICT
The Steering Committee for the ICT Sector Guidance to the GHG Protocol Product Life Cycle Accounting and Reporting Standard: assessing ICT life cycle environmental effects
The Green Grid: reviewing definitions for improving ICT equipment resource efficiency, datacenter indices, etc.
JEITA Green IT Committee: contributing to the establishment of a method for evaluating the contributions of products and services
Global Taskforce on Harmonizing Global Metrics for Data Center Energy Efficiency: promoting environmental consciousness of datacenters
Uptime Institute Network: taking part in surveys and meetings for improving data center performance and efficiency

Data Overview

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Environmental Accounting

FY 2013 Breakdown of Results (Capital investment, expense , economic benefits)

Item		Main areas covered	Cost		Economic benefits (billion yen)
			Capital investment (billion yen)	Expenses (billion yen)	
Business area costs/ benefits	Pollution prevention costs/benefits	Air/water pollution prevention, etc.	2.03 (+1.63)	4.62 (+0.33)	6.82 (+0.11)
	Global environmental conservation costs/benefits	Global warming prevention, saving energy, etc.	0.56 (-0.30)	3.18 (+0.07)	1.89 (+0.12)
	Resource circulation costs/benefits	Waste disposal, efficient utilization of resources, etc.	0.00 (-0.05)	2.49 (-0.04)	12.64 (+1.69)
Upstream/downstream costs/benefits		Collection, recycling, reuse, and proper disposal of products, etc.	0.02 (0.02)	0.84 (+0.01)	0.47 (+0.01)
Administration costs/benefits		Provision and operation of environmental management systems, environmental education of employees, etc.	0.02 (-0.10)	3.12 (-0.14)	0.61 (+0.12)
R&D costs/benefits		R&D on products and solutions that contribute to environmental protection, etc.	0.18 (-0.34)	30.64 (+6.57)	55.86 (+3.75)
Social activity costs		Donations to, and support for, environmental groups, etc.	0.00 (±0.00)	0.03 (±0.00)	—
Environmental remediation costs/benefits		Restoration and other measures related to soil and groundwater contamination, etc.	0.05 (+0.01)	0.58 (+0.43)	0.00 (-0.40)
Total			**2.86 (+0.87)**	**45.50 (+7.23)**	**78.29 (+5.40)**

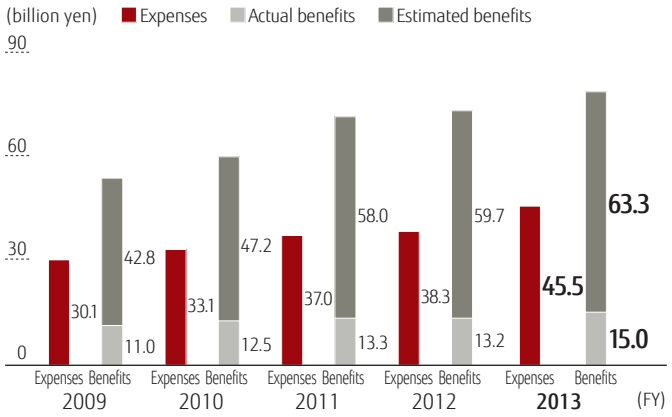
* Numbers in parentheses indicate increases or decreases in comparison with the previous year.
* Due to rounding, figures in columns may not add up to the totals shown.
* Items shown as "0.00" include items for which the value was smaller than the display units used.

Costs and Economic Benefits in FY 2013

The results of this accounting for FY 2013 showed expense of 45.5 billion yen (a 18.9% increase from the previous year) and the economic benefits were 78.29 billion yen (a 7.4% increase from the previous year). Thus both costs and benefits increased. Also, our capital investment was 2.86 billion yen (a 43.1% increase from the previous year).

Driving forward our R&D on products and solutions to contribute to environmental conservation for customers and society led to broad increases in R&D costs and economic benefits (calculated by our own method for estimating economic benefits).

Trends in Expense and Economic Benefits

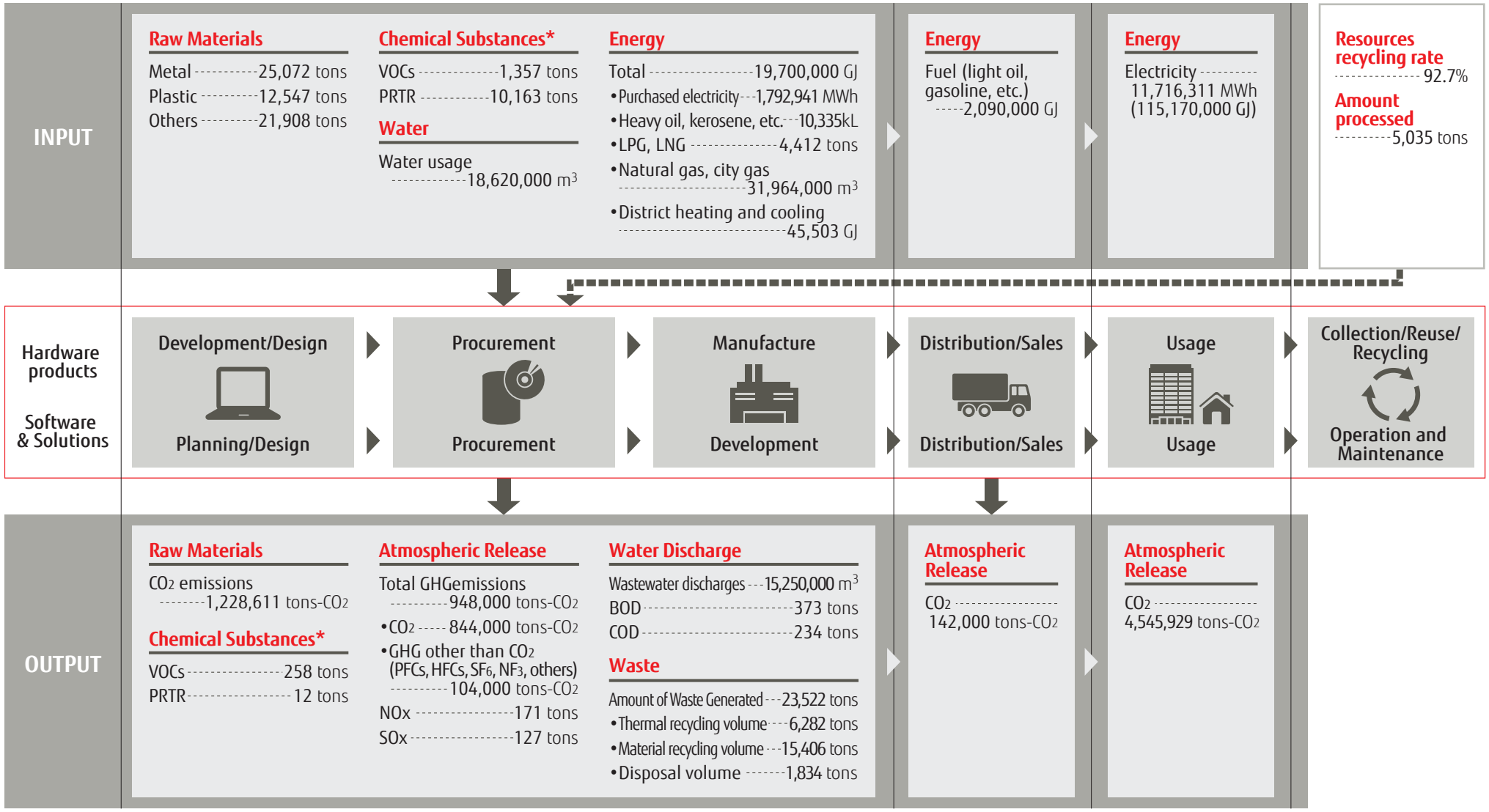


Environmental Liabilities

The Fujitsu Group, in properly forecasting expected future environmental liabilities and communicating our soundness and stance of not deferring environmental liabilities, has recorded a liability of 10.87 billion yen in soil-pollution cleanup costs, high-level polychlorinated biphenyl (PCB) waste disposal costs, and asbestos processing costs during facilities demolition. This total is the amount we calculate, as of the end of FY 2013, to be necessary for the Fujitsu Group in Japan to carry out these tasks in the next FY and beyond.

Material Balance

FY 2013 Key Performance



*Substances that qualify as both a PRTR targeted chemical and a VOC are included under "VOCs" only.

GHG Emissions Report based on GHG Protocol Standards

Materials purchase ▶ Transportation initiated by Fujitsu ▶ Production ▶ Value chain transportation ▶ Waste

Scope 3 Upstream

- **Purchased goods and services** — Materials, components, etc. — 2,507,000 tons
- **Capital goods** — Building construction — 35,000 tons
- **Fuel- and energy-related** — Not included in Scopes 1 and 2 — 74,000 tons
- **Transportation and distribution** (Upstream) — Product distribution, etc. — 142,000 tons
- **Waste generated in operations** — Industrial waste treatment, etc. — 10,000 tons
- **Business travel** — Use of public transportation
- **Employee commuting**
- **Leased assets** (Upstream) — Building use — 119,000 tons

Scopes 1,2 Reporting company

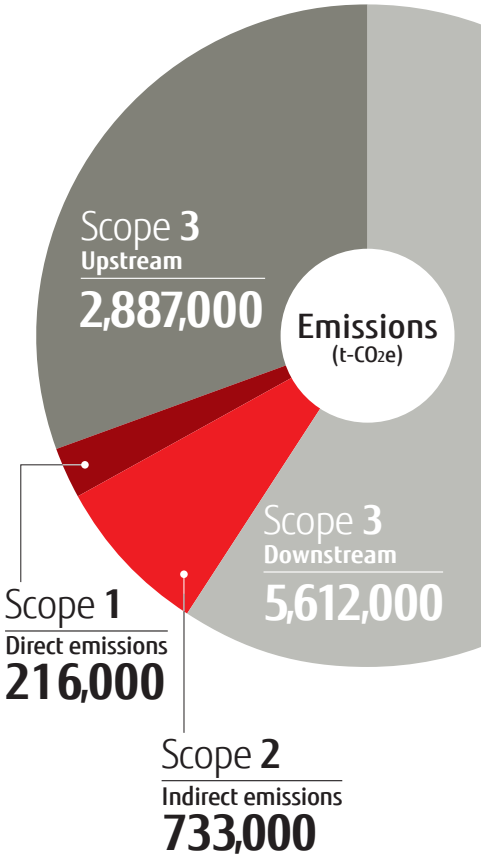
Scope 1
Direct emissions
Burning, etc. of fossil fuels
216,000 tons

Scope 2
Indirect emissions from energy sources
Use of purchased electricity
Use, etc. of purchased steam
733,000 tons

Scope 3 Downstream

- **Transportation and distribution** (Downstream)
- **Processing of sold products**
- **Use of sold products** — Products' electricity consumption — 5,611,000 tons
- **End-of-life treatment of sold products** — PC recycling (and other) — 1,000 tons
- **Leased assets** (Downstream)
- **Franchises**
- **Investment**

Covered
Not covered



Supplementary Data

Business Sites Where Soil or Groundwater Contamination Has Been Found

Site Name (Location)	Cleanup and Countermeasure status	Monitoring Well Maximum Value (mg/L)		Regulated Level (mg/L)
		Substance	Measured Value	
Kawasaki Plant (Kawasaki City, Kanagawa Prefecture)	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	4.3	0.04
Oyama Plant (Oyama City, Tochigi Prefecture)	We are continuing to clean up VOCs by pumping and aeration.	1, 2-dichloroethylene	9.237	0.04
		Trichloroethylene	0.228	0.03
		1,1- dichloroethylene	0.032	0.02*1
Nagano Plant (Nagano City, Nagano Prefecture)	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	0.076	0.04
Suzaka Plant (Suzaka City, Nagano Prefecture)	We have begun construction of an underground impervious wall and facilities for processing pumped water.	Polychlorinated biphenyl	0.0038	Must not be detected
Fujitsu Interconnect Technologies Kurohime Office (Formerly Shinetsu Fujitsu) (Shinano machi, Kamiminochi Gun, Nagano Prefecture)	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	0.10	0.04
Fujitsu Optical Components (Oyama City, Tochigi Prefecture)	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	0.097	0.04
		Trichloroethylene	0.188	0.03
		1,1- dichloroethylene	0.036	0.02*1
FDK Sanyo plant (Sanyo-Onoda City, Yamaguchi Prefecture)	We are continuing to clean up VOCs by pumping and aeration.	1, 2-dichloroethylene*2	0.045	0.04
		Trichloroethylene	0.084	0.03
FDK Energy (Formerly the FDK Washizu Plant) (Kosai City, Shizuoka Prefecture)	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	0.59	0.04
		Trichloroethylene	0.41	0.03
		Tetrachloroethylene	0.055	0.01

*1 From March 20, 2014, the environmental quality standards for soil contamination was changed from 0.02 to 0.1 mg/L.
*2 1, 2-dichloroethylene: The analysis item was changed from "Cis-1, 2-dichloroethylene" to "1, 2-dichloroethylene" in accordance with the guidance of the administrative agency in October 2012.

Energy Usage (Scope 1 and Scope 2)

Category	Energy use
Total	19.7 million GJ (413.66 GJ/100 million yen)
Scope 1	2.03 million GJ
Scope 2	17.67 million GJ

Response to Environmental Complaints (FY 2013)

Complaint	Cases	Response
Noise (abnormal noise generated due to machinery breakdown)	3	• Machinery repaired or replaced; elimination of abnormal noise generationconfirmed. • Explanations given to local residents.

Fujitsu Group Profile

Company Name: Fujitsu Limited

Addresses:
- Kawasaki Main Office
  4-1-1 Kamikodanaka, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, Japan
- Headquarters
  Shiodome City Center 1-5-2 Higashi-Shimbashi, Minato-ku, Tokyo 105-7123, Japan

President: Masami Yamamoto

Established: June 20, 1935

Main Business Activities:
Manufacture and sale of communications systems, information processing systems, and electronic devices, and the provision of services related to those products

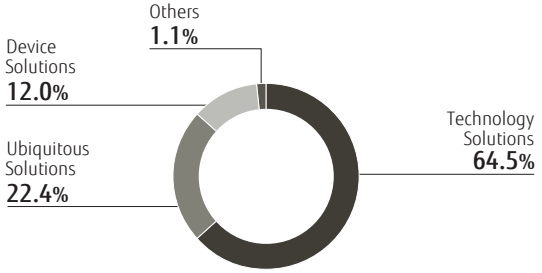
Capital: ¥324.6 billion

Net sales: ¥2,145.051 billion (Fujitsu only), ¥4,762.445 billion (consolidated)

Employees: 162,000 (as of March 31, 2014)

Directors: 11

FY 2013 Consolidated Net Sales by Business Segment



Environmental Performance Data Calculation Standards

Subject Period: April 1, 2013 – March 31, 2014
Scope: Fujitsu and the Fujitsu Group (For details, refer to the List of Companies Covered by the Report on Environmental Activities.)
Note: All amounts shown in tons in this Report refer to metric tons.

Chapter I Contribution to Society (Fujitsu Group Environmental Action Plan (Stage VII) "Our Society")

Target Item	Indicator	Unit	Calculation Method
Reduce greenhouse gas emissions for our customer and society over 26million tons.	Reduce greenhouse gas (GHG) emissions through the provision of ICT	Tons	Calculated by multiplying annual sales of each solution category by a conversion factor of CO_2e (carbon dioxide equivalent) savings per unit of sales, which is based on around 300 case studies of Environmentally Conscious Solutions in Japan.
Achieve top-level energy efficiency of more than 50% of the newly developed products.	The percentage of new products that are top-level energy efficient	%	The percentage of top-levelenergy efficient*1 products with respect to the number of product series that are expected to be developed. *1 Top-level energy efficiency: Achieve more than 25% of the market benchmark in energy efficiency, on a par with "top-runner" products (first in the world or industry, top of the world or industry).
Increase resource efficiency of newly developed products by 20% compared to 2011.	Rate of improvement of resource efficiency of new products	%	The average rate of improvement of resource efficiency*1 (versus FY 2011) of products. *1 Hardware products, under the Fujitsu brand, newly developed in FY 2013–15. Excludes products not designed by Fujitsu (OEM products) and products designed under customer specifications. **Note:** Refer to "Improving the resource efficiency of products" for the resource efficiency calculation method.
With society, support our employees to volunteer in social activities	Hours of social contribution activities by employees	Hours	Overall contribution hours = Σ participants*1 x activity hours *1 For events organized by the Fujitsu Group, participants also include employee families, stakeholders, etc.

Chapter II Reducing Our Environmental Burden (Fujitsu Group Environmental Action Plan (Stage VII) "Our Business" "Continuous targets")

Target Item	Indicator	Unit	Calculation Method
Reduce greenhouse gas emissions in our business facilities by 20 % compared to 1990.	GHG emissions	Tons CO_2	CO_2 emissions: ∑{(Electricity, fuel oil, gas, and district heating and cooling annual usage) × CO_2 conversion factor for each type of energy*1} *1 CO_2 conversion factor: The factor is based on sources including an energy and industrial process subcommittee report (related to fuel) issued under the auspices of an investigative committee on greenhouse gas emissions conversion calculation methods organized by the Japanese Ministry of the Environment in FY 2002. In FY 2002 and thereafter, the conversion factor for electricity is 0.407 tons CO_2/MWh (fixed). The conversion factor for district heating and cooling is 0.061 tons CO_2/GJ.
			GHG emissions other than CO_2: Annual emissions of HFCs, PFCs, SF_6, and NF_3 at three semiconductor plants (Fujitsu Semiconductor Limited (Aizuwakamatsu Plant and Mie Plant) and Fujitsu Semiconductor Technology, Inc.). ∑{Annual emissions for each type of gas*1 × Global warming potential for each gas*2} *1 Based on the calculation method used by the industries of electrical and electronics: Amount of each gas used (or purchased) × Reactant consumption rate × Removal efficiency, etc. *2 Global Warming Potential (GWP): IPCC (Intergovernmental Panel on Climate Change) Third Assessment Report "Climate Change 2001."
	Percentage reduction in total greenhouse gas emissions	%	(Total GHG emissions in FY 1990 – Total GHG emissions in FY 2013) / Total GHG emissions in FY 1990 × 100

Target Item	Indicator	Unit	Calculation Method
Improve energy intensity in our business facilities over 1% each year.	Improve energy intensity	%	The improvement rate, year on year, for each business site's energy intensity is a weighted average of the proportion to the site's overall energy usage. These values are added to calculate our total improvement rate. Σ{% improvement rate year-on-year in each business site's energy intensity x wt% proportion of overall energy usage} Target business sites: Japan (energy management plants specified under the Act on the Rational Use of Energy), UK and Australia offices
Reduce CO_2 emissions from transport per sales by 4% or more compared to FY 2011.	CO_2 emissions per sales from transport	Tons/100 million yen	Transport CO_2 emissions/sales (100 million yen)
	Reduction rate of CO_2 emissions to FY 2011	%	(FY 2011 transport CO_2 emissions per sales - FY 2015 transport CO_2 emissions per sales) / FY 2011 transport CO_2 emissions per sales x 100
Expand activities reducing CO_2 emissions to business partners in all fields.	The proportion of business partners at or above stage 2 activities (the implementation of CO_2 reduction and minimization activities with numerical targets)	%	The proportion, with respect to all major business partners, of business partners implementing activities at or above stage 2
Increase generation capacity and procurement of renewable energy.	Installated new solar power generation facilities	kW	Total rated capacity of solar power generation facilities installed at business sites
	Purchased green power	kWh	Amount of green power purchased for exhibitions and events, such as the Fujitsu Forum, the Annual Shareholders' Meeting, etc.
Continue efforts for efficient use of water, e.g. water recycling and water saving.	Water usage	m^3	Annual use of clean water, industrial water, and groundwater (Not including groundwater for melting snow and groundwater extracted for purification)
	Amount of recycled water	m^3	Annual amount of water used for manufacturing and other purposes, then recovered, processed, and used again for manufacturing and other processes
Reduce chemical emissions to less than the average level of 2009-2011 (PRTR: 21t, VOC: 258t)	Volume of substances subject to VOC emissions restrictions	Tons	For the 20 VOCs (Volatile Organic Compounds) specified in the environmental voluntary action plans of four electrical and electronic business organizations,*1 total amounts released are provided for those substances handled in quantities exceeding 100 kg annually at individual business sites.
	Volume of PRTR-targeted substances	Tons	For the substances covered by the PRTR law (Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof), total amounts released are provided for those substances handled in quantities exceeding 100 kg annually per business site.
Reduce the amount of waste to less than average level of 2007-2011 (amount of waste: 31,134t).	Amount of Waste Generated	Tons	Total amount for industrial waste and general waste generated by factories and offices (Thermal recycling volume + Material recycling volume + Disposal volume)
	Effective utilization ratio (Japan only)	%	(Amount of effective utilization(Thermal recycling volume and Material recycling volume) / Amount of Waste generated) × 100
Maintain over 90% resource reuse rate of business ICT equipment at Fujitsu recycling centers.	Resource reuse rate of business ICT equipment	%	Based on the calculation method provided by JEITA, recycled components and resources as a percentage of the weight of used products processed in Japan. Excludes collected waste other than used electronic products.

*1 **Four electrical and electronic business organizations:** The Japan Electrical Manufactures' Association (JEMA), Japan Electronics and Information Technology Industries Association (JEITA), Communications and Information Network Association of Japan (CIAJ), and Japan Business Machine and Information System Industries Association (JBMIA)

Environmental Liabilities

Indicator	Unit	Calculation Method
Cost for environmental liabilities	Yen	1. Asset retirement obligation (Only asbestos removal cost related to facility disposal) 2. Cost for soil contamination measures 3. Disposal processing cost for waste with high concentrations of PCB (polychlorinated biphenyl)

GHG Emissions Report based on GHG Protocol Standards

Indicator		Unit	Calculation Method
Upstream (Scope 3)	Purchased goods and services	Tons	Components purchased during the fiscal year × Emissions per unit of purchases (Source: Embodied Energy and Emission Intensity Data (3EID) published by the National Institute for Environ mental Studies Center for Global Environmental Research)
	Capital goods	Tons	Monetary value of capital X Emissions value per unit of capital value (Source: Embodied Energy and Emission Intensity Data (3EID) published by the National Institute for Environmental Studies Center for Global Environmental Research)
	Fuel and energy – related activities not included in Scopes 1 and 2	Tons	Annual amounts of fuel oil and gas, electricity and heat purchased (consumed) mainly at business sites owned by Fujitsu × Emissions per unit (Source: Basic Guidelines for Calculating Greenhouse Gas Emissions Via Supply Chains and the Carbon Footprint Communication Program Basic Database Ver. 1 published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry)
	Transportation and distribution (upstream)	Tons	Transportation of goods within Japan: CO_2 emissions related to the transportation of goods within Japan by the Fujitsu Group. CO_2 emissions related to domestic transportation by the Fujitsu Group, based on the Act on the Rational Use of Energy. The fuel economy method (for some vehicles) or the improved ton-kilometer method (vehicle, rail, air, ship).
		Tons	International transport/overseas local transport: transportation ton-kilometers x emission per unit (source: GHG protocol emissions coefficient database)
	Waste generated in operations	Tons	Annual amounts of waste (discharged mainly by business sites owned by Fujitsu) processed or recycled, by type and processing method × Emissions per unit of annual amount of waste processed or recycled (Source: Basic Guidelines for Calculating Greenhouse Gas Emissions Via Supply Chains published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry)
	Leased assets (Upstream)	Tons	Annual amounts of fuel oil, gas, electricity, and heat consumed mainly at leased business sites in Japan × Emissions per unit of fuel oil, gas, electricity, and heat consumed (Source: Act on Promotion of Global Warming Countermeasures - GHG Emissions Accounting, Reporting, and Disclosure System)
Reporting company (Scopes 1, 2)	Direct emissions	Tons	Amount of CO_2 emissions from the consumption of fuel oil and gas (burning of fuel), and GHG emissions, other than CO_2 mainly at business sites owned by Fujitsu *For the calculation method, see page 55, "Greenhouse gas emissions (CO_2 emissions) from business sites" in the Environmental Action Plan (Stage VII).
	Indirect emissions from energy sources	Tons	CO_2 emissions from the consumption (purchase) of electricity and heat mainly at business sites owned by Fujitsu *For the calculation method, see page 55, "Greenhouse gas emissions (GHG emissions other than CO_2) at business sites" in the Environmental Action Plan (Stage VII).
Downstream (Scope 3)	Use of sold products	Tons	Electricity consumption during product use × Emissions per unit of electricity (Source: Daily averages for FY 2004 – 2008 from the Summary of Electrify Demand and Supply published by the Ministry of Economy, Trade and Industry, Agency for Natural Resources and Energy, Electricity and Gas Industry Department) Electricity consumption during product use is calculated as electricity usage for the anticipated usage time per product unit × Units shipped for the subject fiscal year. Electricity usage for the anticipated usage time per product unit is calculated as electricity consumed (kw) X Time used (h) / Days X Number of days used / Year X Number of years used. Time used (h), number of days used per year, and number of years used are set according to Fujitsu's internal scenarios.
	End-of-life treatment of sold products	Tons	(Weight of all sold products / Weight of products processed at Fujitsu's recycling centers during the year) × Electricity used at Fujitsu's recycling centers during the year × Emissions per unit of electricity (Source: Electric Power Enterprise (FY 2002 average for 10 electric power companies in Japan, receiving end)

Supplementary Data

Indicator	Unit	Calculation Method
Measured value of groundwater pollution	mg/L	The highest FY 2013 measurements for substances detected at levels exceeding regulated levels set in the Soil Contamination Countermeasures Act etc. at monitoring wells at the boundaries of sites where past business activities have resulted in soil contamination.

Operating Activities and Environmental Load (Material Balance)

Indicator			Unit	Calculation Method
INPUT				
Development & Design/Planning & Design Procurement Manufacturing Development	Raw Materials		Tons	Material inputs to our major products*1 shipped in FY 2013 (raw materials per unit for each product x the number of units shipped in FY 2013)
	Chemical Substances	Volume of substances subject to VOC emissions restrictions	Tons	For the 20 VOCs (Volatile Organic Compounds) specified in the environmental voluntary action plans of four electrical and electronic business organizations,*2 total amounts handled are provided for those substances handled in quantities exceeding 100 kg annually at individual business sites, including overseas sites. Substances subject to VOC emissions controls that are also covered by the PRTR law are included in the section on substances subject to VOC emissions controls
		Volume of PRTR-targeted substances	Tons	For the substances covered by the PRTR law (Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof), total amounts handled are provided for those substances handled in quantities exceeding 100 kg annually per business site, including overseas sites.
	Water usage		m^3	* For the calculation method, see page 55, "Water usage" in the Environmental Action Plan (Stage VII).
	Energy consumption (calorie basis)		GJ	∑{(Electricity, fuel oil, gas, and district heating and cooling annual usage) × Thermal conversion factor for each type of energy*1} *1 Thermal conversion factor (Heating value unit): Based on sources including a table of standard heating values for specific energy sources published in February 2012 by the Agency for Natural Resources and Energy. Conversion factors of 9.83 GJ /MWh for electricity, and 46.1 GJ/1,000m^3 for city gas were used.
		Purchased electricity	MWh	Annual electricity usage
		Bunker A, fuel oil, light oil, benzin , gasoline	kL	Annual fuel oil usage (or purchases)
		Natural gas	m^3	Annual natural gas usage (or purchases)
		City gas	m^3	Annual city gas usage (or purchases)
		LPG	Tons	Annual LPG usage (or purchases)
		LNG	Tons	Annual LNG usage (or purchases)
		District heating and cooling	GJ	Annual district heating and cooling (cold and hot water for cooling and heating) usage (or purchases)
Transportation and delivery	Energy consumed for transport		GJ	Total value of transport energy consumption for Fujitsu*1 and Fujitsu Group companies*2 *1 Fujitsu (domestic transport): Energy consumption related to domestic transport by the Fujitsu Group, based on the Act on the Rational Use of Energy "Logistics." *2 Fujitsu Group Companies: Calculated from the transport CO_2 emissions from OUTPUT (distribution and sales) using the ratio of Fujitsu (domestic transport) transport energy consumption to transport CO_2 emissions.
Usage	Energy	Electricity	MWh	Electricity consumed in connection with major products*1 shipped during FY 2013 (Amount of electricity used for time estimated per product unit × units shipped in FY 2013)
			GJ	
Collection / Reuse / Recycling Operation and Maintenance	Resource recycling rate		%	Based on the calculation method provided by JEITA, recycled components and resources as a percentage of the weight of used products processed in Japan. Excludes collected waste other than used electronic products.
	Processed volume		Tons	

Indicator			Unit	Calculation Method
OUTPUT				
Development & Design/ Planning & Design Procurement Manufacturing Development	Raw Materials	CO_2 emissions	Tons	CO_2 emissions related to all stages from resource extraction through processing into raw materials (CO_2 emissions equivalent for raw materials used per product unit × Units shipped in FY 2013) for the raw materials used in major products*1 shipped in FY 2013.
	Chemical Substances	Volume of substances subject to VOC emissions restrictions	Tons	For the 20 VOCs (Volatile Organic Compounds) specified in the environmental voluntary action plans of four electrical and electronic business organizations,*2 total amounts released are provided for those substances handled in quantities exceeding 100 kg annually at individual business sites, including overseas sites. Substances subject to VOC emissions controls that are also covered by the PRTR law are included in the section on substances subject to VOC emissions controls
		Volume of PRTR-targeted substances	Tons	For the substances covered by the PRTR law (Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof), total amounts released are provided for those substances handled in quantities exceeding 100 kg annually per business site, including overseas sites.
	Atmospheric Release	CO_2 emissions	Tons CO_2	* For the calculation method, see page 55, "Greenhouse gas emissions (CO_2 emissions) from business sites" in the Environmental Action Plan (Stage VII).
		GHG emissions other than CO_2	Tons CO_2	* For the calculation method, see page 55, "Greenhouse gas emissions (GHG emissions other than CO_2) at business sites" in the Environmental Action Plan (Stage VII).
		NOx emissions	Tons	NOx concentration (ppm)×10^{-6} × Dry gas emissions (m^3N/hr) × Operating time (hr/yr) × 46/22.4×10^{-3}
		SOx emissions	Tons	SOx concentration (ppm)×10^{-6} × Dry gas emissions (m^3N/hr) × Operating time (hr/yr) × 64/22.4×10^{-3}
	Water Discharge	Wastewater discharges	m^3	Annual water discharges into public waterways and sewers (Not including groundwater used for melting snow)
		BOD emissions	Tons	BOD concentration (mg/l) × Water discharges (m^3/yr)×10^{-6}
		COD emissions	Tons	COD concentration (mg/l) × Water discharges(m^3/yr)×10^{-6}
	Waste	Amount of Waste Generated	Tons	* For the calculation method, see page 55, "Waste generated."
		Thermal recycling volume	Tons	Among all types of waste put to effective use, the total volume used in thermal recycling * Thermal recycling: Recovery and use of the heat energy generated by incinerating waste.
		Material recycling volume	Tons	Among all types of waste put to effective use, the total volume used in material recycling * Material recycling: Processing of waste to facilitate its re-use, and re-use of processed waste as material or raw materials for new products.
		Disposal volume	Tons	Volume of industrial and general waste processed by, for example, landfilling or simple incineration
Distribution / Sales	Transport CO_2 emissions		Tons CO_2	* For the calculation method, see "Transportation and distribution (upstream)" in the GHG Emissions Report based on GHG Protocol Standards.
Usage	Atmospheric Release		Tons CO_2	Electricity consumption by major products*1 shipped in FY 2013 (Electricity consumed for the assumed hours of use per product x Number of units shipped in FY 2013)

*1 Major products: Personal computers, mobile phones, servers, workstations, storage systems, printers, scanners, financial terminals, retail terminals, routers, LAN access equipment, access network products, mobile phone base stations, and electronic devices.

*2 **Four electrical and electronic business organizations:** The Japan Electrical Manufactures' Association (JEMA), Japan Electronics and Information Technology Industries Association (JEITA), Communications and Information Network Association of Japan (CIAJ), and Japan Business Machine and Information System Industries Association (JBMIA).

List of Organizations Covered by the Report on Environmental Activities

No.	Company name	Environmental burden	Logistics	Environmental Accounting	EMS*
1	Fujitsu Limited	✓	✓	✓	✓
	Fujitsu Group companies in Japan (82 companies)				
1	Fujitsu Advanced Printing & Publishing Co., Ltd.		✓		✓
2	FUJITSU HOME & OFFICE SERVICES LIMITED				✓
3	Fujitsu University				✓
4	Kawasaki Frontale Limited				✓
5	Fujitsu Refre Limited				✓
6	Fujitsu Travelance Ltd.				✓
7	Fujitsu Human Resource Professionals Limited				✓
8	Fujitsu Techno Research Limited				✓
9	Fujitsu CIT Limited				✓
10	Toyama Fujitsu Limited	✓			✓
11	Fujitsu Facilities Limited				✓
12	OKINAWA FUJITSU SYSTEMS ENGINEERING LIMITED.				✓
13	DIGITAL PROCESS LTD.				✓
14	PFU LIMITED	✓	✓	✓	✓
15	FUJITSU BANKING SOLUTIONS LIMITED				✓
16	SHIGA FUJITSU SOFTWARE LIMITED				✓
17	FUJITSU BROAD SOLUTION & CONSULTING Inc.				✓
18	FUJITSU SOCIAL SCIENCE LABORATORY LIMITED				✓
19	FUJITSU MISSION CRITICALSYSTEMS LIMITED				✓
20	FUJITSU YFC LIMITED				✓
21	FUJITSU NIIGATA SYSTEMS LIMITED				✓
22	FUJITSU HOKURIKU SYSTEMS LIMITED				✓
23	FUJITSU KYUSHU SYSTEMS LIMITED				✓
24	FUJITSU KAGOSHIMA INFORNET LIMITED.				✓
25	FUJITSU FIP CORPORATION	✓			✓
26	NIFTY Corporation				✓
27	G-Search Limited				✓
28	FUJITSU FSAS INC.		✓		✓

No.	Company name	Environmental burden	Logistics	Environmental Accounting	EMS*
29	FUJITSU COMMUNICATION SERVICES LIMITED				✓
30	FUJITSU NETWORK SOLUTIONS LIMITED				✓
31	Fujitsu Frontech Limited	✓	✓	✓	✓
32	FUJITSU SYSTEM INTEGRATION LABORATORIES LIMITED				✓
33	FUJITSU TOKKI SYSTEMS LIMITED				✓
34	FUJITSU DEFENSE SYSTEMS ENGINEERING LIMITED				✓
35	Fujitsu Applications,Ltd.				✓
36	FUJITSU LEARNING MEDIA LIMITED				✓
37	FUJITSU RESEARCH INSTITUTE				✓
38	FUJITSU Marketing LIMITED		✓		✓
39	FUJITSU FOM LIMITED		✓		✓
40	FUJITSU CoWorCo LIMITED		✓		✓
41	TWO-ONE LIMITED				✓
42	FUJITSU I-NETWORK SYSTEMS LIMITED	✓	✓	✓	✓
43	ECOLITY SERVICE LIMITED			✓	✓
44	FUJITSU ADVANCED ENGINEERING LIMITED				✓
45	Fujitsu Software Technologies Limited				✓
46	FUJITSU MIDDLEWARE LIMITED				✓
47	Fujitsu Kyushu Network Technologies Limited				✓
48	FUJITSU TELECOM NETWORKS LIMITED	✓	✓	✓	✓
49	FUJITSU WIRELESS SYSTEMS LIMITED	✓	✓	✓	✓
50	FUJITSU COMPUTER TECHNOLOGIES LIMITED				✓
51	FUJITSU IT PRODUCTS LIMITED	✓	✓	✓	✓
52	Fujitsu Isotec Limited	✓	✓	✓	✓
53	FUJITSU PERIPHERALS LIMITED	✓	✓	✓	✓
54	FUJITSU PERSONAL SYSTEM LIMITED		✓		✓
55	Shimane Fujitsu Limited	✓	✓	✓	✓
56	FUJITSU KASEI LIMIED	✓	✓	✓	✓
57	Fujitsu Integrated Microtechnologies Limited	✓	✓	✓	✓
58	FUJITSU QUALITY LABORATORY LIMITED				✓
59	Fujitsu Optical Components Limited	✓	✓	✓	✓

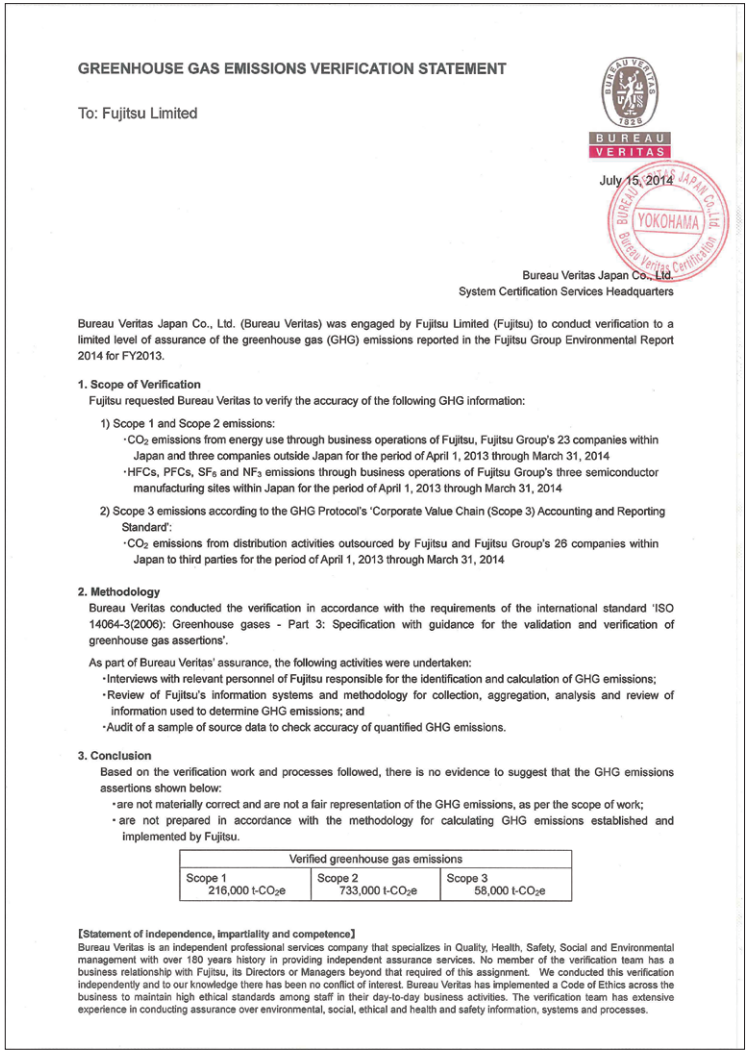
No.	Company name	Environmental burden	Logistics	Environmental Accounting	EMS*
60	FUJITSU KANSAI-CHUBU NET-TECH LIMITED				✓
61	Fujitsu Mobile-phone Products Limited	✓	✓	✓	✓
62	Fujitsu Mission Critical Software LTD.				✓
63	FDK CORPORATION	✓	✓	✓	✓
64	FUJITSU COMPONENT LIMITED	✓	✓	✓	✓
65	Transtron Inc.		✓	✓	✓
66	FUJITSU ELECTRONICS INC.		✓		✓
67	FUJITSU VLSI LIMITED	✓		✓	✓
68	Fujitsu Semiconductor IT Systems Ltd.				✓
69	FUJITSU FACILITIES ENGINEERING LIMITED				✓
70	FUJITSU Microelectronics Solutions Limited				✓
71	FUJITSU SEMICONDUCTOR TECHNOLOGY INC.	✓		✓	✓
72	SHINKO ELECTRIC INDUSTRIES CO. LTD.	✓	✓	✓	✓
73	FUJITSU TEN LIMITED	✓	✓	✓	✓
74	FUJITSU LABORATORIES LTD	✓		✓	✓
75	FUJITSU SEMICONDUCTOR LIMITED	✓	✓	✓	✓
76	Fujitsu Design Limited				✓
77	Fujitsu Advanced Technologies Limited				✓
78	FUJITSU TEN MANUFACTURING LIMITED			✓	
79	FUJITSU MOBILE COMMUNICATIONS LIMITED				✓
80	Fujitsu Systems West Limited				✓
81	Fujitsu Systems East Limited				✓
82	FUJITSU CAPITAL LIMITED				✓

Fujitsu Group companies in worldwide (31 companies)					
1	FUJITSU COMPUTER PRODUCTS OF VIETNAM	✓		✓	✓
2	Jiangsu Fujitsu Telecommunications Technology Co., Ltd.				✓
3	Fujitsu Semiconductor Pacific Asia Limited				✓
4	Fujitsu Semiconductor (Shanghai) Co., Ltd.				✓
5	FUJITSU HONG KONG LIMITED				✓
6	FUJITSU DO BRASIL LIMITADA				✓
7	FUJITSU ASIA PTE.LTD				✓
8	FUJITSU NETWORK COMMUNICATIONS INC.	✓	✓	✓	✓
9	Fujitsu America, Inc.		✓		✓
10	Fujitsu Systems Business (Thailand) Ltd.				✓
11	Fujitsu PC Asia Pacific Pte Ltd.		✓		✓
12	FUJITSU AUSTRALIA LTD.		✓		✓
13	Fujitsu Technology Solutions	✓	✓	✓	✓
14	Fujitsu Semiconductor Europe GmbH				✓
15	Nanjing Fujitsu Nanda Software Technology Co., Ltd.				✓
16	FUJITSU SERVICES HOLDINGS PLC		✓		✓
17	FUJITSU KOREA LTD.				✓
18	FUJITSU TAIWAN LIMITED				✓
19	Fujitsu Telecomunication Asia Sdn. Bhd.				✓
20	FUJITSU (CHINA) HOLDINGS CO., LTD				✓
21	Fujitsu Management Services of America, Inc.				✓
22	FUJITSU (XI'AN) SYSTEM ENGINEERING CO., LTD.				✓
23	Beijing Fujitsu System Engineering Co., LTD.				✓
24	GLOVIA International,Inc.				✓
25	FUJITSU AUSTRALIA SOFTWARE TECHNOLOGY PTY. LTD.				✓
26	FUJITSU Enabling Software Technology GmbH				✓
27	Fujitsu Semiconductor America, Inc.				✓
28	Fujitsu Semiconductor Korea Limited				✓
29	Fujitsu Research and Development Center Co., LTD.				✓
30	Fujitsu Computer Products of America		✓		
31	Fujitsu Frontec North America		✓		

*EMS: Environmental Management System

Third Party Verification

In order to ensure the reliability of the content of the Fujitsu Group Environmental Report 2014 and the Fujitsu Group CSR Report 2014 (Detailed Version), we ask a third party, Bureau Veritas Japan, to examine and post a review of the reports.



GREENHOUSE GAS EMISSIONS VERIFICATION STATEMENT

To: Fujitsu Limited

July 15, 2014

Bureau Veritas Japan Co., Ltd.
System Certification Services Headquarters

Bureau Veritas Japan Co., Ltd. (Bureau Veritas) was engaged by Fujitsu Limited (Fujitsu) to conduct verification to a limited level of assurance of the greenhouse gas (GHG) emissions reported in the Fujitsu Group Environmental Report 2014 for FY2013.

1. Scope of Verification

Fujitsu requested Bureau Veritas to verify the accuracy of the following GHG information:

1) Scope 1 and Scope 2 emissions:
- CO_2 emissions from energy use through business operations of Fujitsu, Fujitsu Group's 23 companies within Japan and three companies outside Japan for the period of April 1, 2013 through March 31, 2014
- HFCs, PFCs, SF_6 and NF_3 emissions through business operations of Fujitsu Group's three semiconductor manufacturing sites within Japan for the period of April 1, 2013 through March 31, 2014

2) Scope 3 emissions according to the GHG Protocol's 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard':
- CO_2 emissions from distribution activities outsourced by Fujitsu and Fujitsu Group's 26 companies within Japan to third parties for the period of April 1, 2013 through March 31, 2014

2. Methodology

Bureau Veritas conducted the verification in accordance with the requirements of the international standard 'ISO 14064-3(2006): Greenhouse gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions'.

As part of Bureau Veritas' assurance, the following activities were undertaken:
- Interviews with relevant personnel of Fujitsu responsible for the identification and calculation of GHG emissions;
- Review of Fujitsu's information systems and methodology for collection, aggregation, analysis and review of information used to determine GHG emissions; and
- Audit of a sample of source data to check accuracy of quantified GHG emissions.

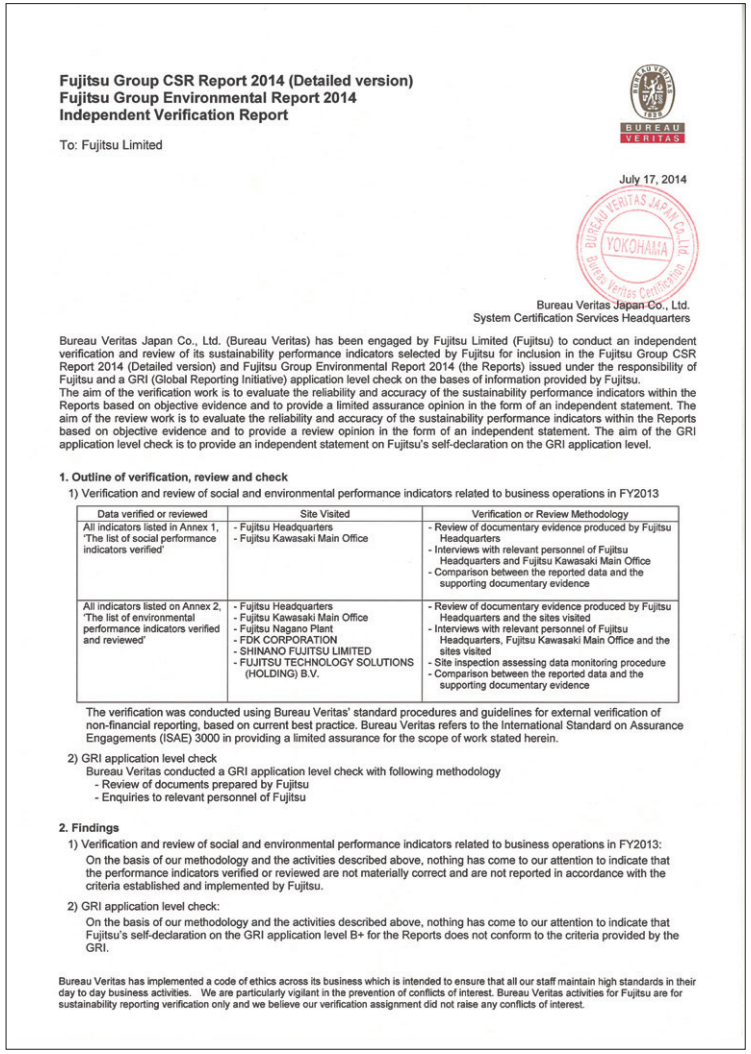
3. Conclusion

Based on the verification work and processes followed, there is no evidence to suggest that the GHG emissions assertions shown below:
- are not materially correct and are not a fair representation of the GHG emissions, as per the scope of work;
- are not prepared in accordance with the methodology for calculating GHG emissions established and implemented by Fujitsu.

Verified greenhouse gas emissions		
Scope 1	Scope 2	Scope 3
216,000 t-CO_2e	733,000 t-CO_2e	58,000 t-CO_2e

[Statement of independence, impartiality and competence]

Bureau Veritas is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with over 180 years history in providing independent assurance services. No member of the verification team has a business relationship with Fujitsu, its Directors or Managers beyond that required of this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest. Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities. The verification team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes.



Fujitsu Group CSR Report 2014 (Detailed version)
Fujitsu Group Environmental Report 2014
Independent Verification Report

To: Fujitsu Limited

July 17, 2014

Bureau Veritas Japan Co., Ltd.
System Certification Services Headquarters

Bureau Veritas Japan Co., Ltd. (Bureau Veritas) has been engaged by Fujitsu Limited (Fujitsu) to conduct an independent verification and review of its sustainability performance indicators selected by Fujitsu for inclusion in the Fujitsu Group CSR Report 2014 (Detailed version) and Fujitsu Group Environmental Report 2014 (the Reports) issued under the responsibility of Fujitsu and a GRI (Global Reporting Initiative) application level check on the bases of information provided by Fujitsu.
The aim of the verification work is to evaluate the reliability and accuracy of the sustainability performance indicators within the Reports based on objective evidence and to provide a limited assurance opinion in the form of an independent statement. The aim of the review work is to evaluate the reliability and accuracy of the sustainability performance indicators within the Reports based on objective evidence and to provide a review opinion in the form of an independent statement. The aim of the GRI application level check is to provide an independent statement on Fujitsu's self-declaration on the GRI application level.

1. Outline of verification, review and check

1) Verification and review of social and environmental performance indicators related to business operations in FY2013

Data verified or reviewed	Site Visited	Verification or Review Methodology
All indicators listed in Annex 1, 'The list of social performance indicators verified'	- Fujitsu Headquarters - Fujitsu Kawasaki Main Office	- Review of documentary evidence produced by Fujitsu Headquarters - Interviews with relevant personnel of Fujitsu Headquarters and Fujitsu Kawasaki Main Office - Comparison between the reported data and the supporting documentary evidence
All indicators listed on Annex 2, 'The list of environmental performance indicators verified and reviewed'	- Fujitsu Headquarters - Fujitsu Kawasaki Main Office - Fujitsu Nagano Plant - FDK CORPORATION - SHINANO FUJITSU LIMITED - FUJITSU TECHNOLOGY SOLUTIONS (HOLDING) B.V.	- Review of documentary evidence produced by Fujitsu Headquarters and the sites visited - Interviews with relevant personnel of Fujitsu Headquarters, Fujitsu Kawasaki Main Office and the sites visited - Site inspection assessing data monitoring procedure - Comparison between the reported data and the supporting documentary evidence

The verification was conducted using Bureau Veritas' standard procedures and guidelines for external verification of non-financial reporting, based on current best practice. Bureau Veritas refers to the International Standard on Assurance Engagements (ISAE) 3000 in providing a limited assurance for the scope of work stated herein.

2) GRI application level check
Bureau Veritas conducted a GRI application level check with following methodology
- Review of documents prepared by Fujitsu
- Enquiries to relevant personnel of Fujitsu

2. Findings

1) Verification and review of social and environmental performance indicators related to business operations in FY2013:
On the basis of our methodology and the activities described above, nothing has come to our attention to indicate that the performance indicators verified or reviewed are not materially correct and are not reported in accordance with the criteria established and implemented by Fujitsu.

2) GRI application level check:
On the basis of our methodology and the activities described above, nothing has come to our attention to indicate that Fujitsu's self-declaration on the GRI application level B+ for the Reports does not conform to the criteria provided by the GRI.

Bureau Veritas has implemented a code of ethics across its business which is intended to ensure that all our staff maintain high standards in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest. Bureau Veritas activities for Fujitsu are for sustainability reporting verification only and we believe our verification assignment did not raise any conflicts of interest.

Annex 1

The list of social performance indicators verified

Performance indicators verified	Page
CSR activities utilizing ISO26000 The number of group companies which performed survey based on ISO26000	26
The number of attendees of a Female Leaders Training Program	31
Nurturing global business leaders The number of attendee to programs	31
Performance in usage of work systems at Fujitsu The number of employees taking child care leave The number of employees taking paternity leave	31
Rate of women managers	34
Employment rate of people with disabilities	34
Numbers and average ages of employees	35
Hiring of recent college graduates	37
Employees by regeon	37
Average years of service	37
Number of employees using the care leave support system	38
Frequency of industrial accidents	40
The number of opinions of questionnaire on Sustainability Report	43
The number of regular dialogue with neighboring residents in the regions hosting our main business sites	43
The number of internal database records of social contribution activities	43
Promoting socilaly responsible procurement (the number of written surveys to suppliers)	53
Employees, Directors	77

Annex 2

The list of environmental performance indicators verified and reviewed

Performance indicators verified		Page
Percentage of new products that are top-level energy efficient		18
Rate of improvement of resource efficiency of new products		20
Amount of greenhouse gas emissions in our business sites		27
CO_2 emission from transport (Fujitsu and group companies in Japan)		31
Water usage		36
PRTR Substance and VOC Emissions		37
Amount of waste generated		38
Effective utilization ratio		
INPUT (development/design, procurement, manufacturing)	Water	52
	Energy	
OUTPUT (development/design, procurement, manufacturing)	Chemical substances	
	Atmospheric release total GHG emissions	
	Atmospheric release CO_2	
	Atmospheric release GHG other than CO_2	
	Amount of waste generated	
	Thermal and material recycling volume	
	Disposal volume	
OUTPUT (distribution) Atmospheric release CO_2 (Fujitsu and group companies in Japan)		
Scope3 (upstream) Transportation and distribution (Fujitsu and group companies in Japan)		53
Scope1 (reporting company) Direct emissions		
Scope2 (reporting company) Indirect emissions from energy sources		
Energy usage in Scope1 and Scope2		54

Performance indicators reviewed		Page
Amount of contribution to reducing emissions of greenhouse gases (GHG) through the provision of ICT		15
Reduction rate of CO_2 emissions compared to FY 2011		31
CO_2 emission from transport (group companies in worldwide)		
Installed new solar power generation facilities and purchased green power		34
Resource reuse rate of business ICT equipment and amount processed		40
Companies constructed and operating EMS based on ISO14001		42
Internal audit implementation and results		42, 43
Environmental accounting		51
Environmental liabilities		
INPUT (development/design, procurement, manufacturing)	Raw materials	52
	Chemical substances	
INPUT (distribution) Energy		
INPUT (usage) Energy		
INPUT (collection/reuse/recycling)	Resource recycling rate	
	Amount processed	
OUTPUT (development/design, procurement, manufacturing)	Raw material CO_2 emissions	
OUTPUT (distribution) Atmospheric release CO_2 (group companies in worldwide)		
OUTPUT (usage) Atmospheric release CO_2		
Scope3 (upstream) Transportation and distribution (group companies in worldwide)		53

GRI Guidelines Reference Table (G3.1)

Indicator		Relevant page / topic	
1. Strategy and Analysis			
1.1	Statement from the most senior decisionmaker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	4	Top Message
1.2	Description of key impacts, risks, and opportunities	5 46	Interview Initiatives to Minimize Environmental Risk
2. Organizational Profile			
2.1	Name of the organization.	54	Fujitsu Group Profile
2.2	Primary brands, products, and/or services.	54	Fujitsu Group Profile
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.		—
2.4	Location of organization's headquarters.	54	Fujitsu Group Profile
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	58	List of Organizations Covered by the Report on Environmental Activities
2.6	Nature of ownership and legal form.		—
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).		—
2.8	Scale of the reporting organization. • Number of employees; • Number of operations; • Net sales (for private sector organizations) or net revenues (for public sector organizations); • Total capitalization broken down in terms of debt and equity (for private sector organizations); and • Quantity of products or services provided.	54	Fujitsu Group Profile
2.9	Significant changes during the reporting period regarding size, structure, or ownership including: • The location of, or changes in operations, including facility openings, closings, and expansions; and • Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations).	2	Significant Changes in Coverage
2.10	Awards received in the reporting period.	41	Evaluation by Outside Institutions
3. Report Parameters Report Profile			
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	2	Reporting Period
3.2	Date of most recent previous report (if any).	2	Published
3.3	Reporting cycle (annual, biennial, etc.)	2	Published
3.4	Contact point for questions regarding the report or its contents.	2	Editorial Policy

Indicator		Relevant page / topic	
Report Scope and Boundary			
3.5	Process for defining report content, including: • Determining materiality; • Prioritizing topics within the report; and • Identifying stakeholders the organization expects to use the report.	2	Editorial Policy
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	2	Organizations Covered
3.7	State any specific limitations on the scope or boundary of the report.	2 55 58	Organizations Covered Environmental Performance Data Calculation Standards List of Organizations Covered by the Report on Environmental Activities
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	2	Organizations Covered / Significant Changes in Coverage
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	2 55	Guidelines Used and Referenced Environmental Performance Data Calculation Standards
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/ acquisitions, change of base years/periods, nature of business, measurement methods).		—
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	2	Organizations Covered / Significant Changes in Coverage
GRI Content Index			
3.12	Table identifying the location of the Standard Disclosures in the report.	62	GRI Guidelines Reference Table
Assurance			
3.13	Policy and current practice with regard to seeking external assurance for the report.If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided.Also explain the relationship between the reporting organization and the assurance provider(s).	60	Third Party Verification
4. Governance, Commitments, and Engagement Governance			
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	42	Environmental Management
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).	42	Environmental Management

Indicator		Relevant page / topic	
4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	—	
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	42	Environmental Management
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	—	
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	—	
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	—	
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	13	Fujitsu Group Environmental Action Plan Stage VII
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	42	Environmental Management
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	42	Environmental Management
Commitments to External Initiatives			
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	46	Initiatives to Minimize Environmental Risk
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	49	Tie-ups with External Organizations in order to Spread Green ICT and a Sustainable Society
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: • Has positions in governance bodies; • Participates in projects or committees; • Provides substantive funding beyond routine membership dues; or • Views membership as strategic.	49 45	Tie-ups with External Organizations in order to Spread Green ICT and a Sustainable Society Acquiring Information on Chemical Substances Contained in Products
Stakeholder Engagement			
4.14	List of stakeholder groups engaged by the organization.	24 48	Collaborating with Communities and Taking Action as a Good Corporate Citizen Environmental Dialogues with Experts
4.15	Basis for identification and selection of stakeholders with whom to engage.	48	Environmental Dialogues with Experts
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	24 47 48	Collaborating with Communities and Taking Action as a Good Corporate Citizen In-House Environmental Educational and Enlightenment Activities Environmental Dialogues with Experts
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	48	Environmental Dialogues with Experts
5. Management Approach and Performance Indicators			
Economic			
*EC3-EC7 are not applicable.			
Disclosure on Management Approach		42	Environmental Management
Aspect: Economic Performance			
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	24	Collaborating with Communities and Taking Action as a Good Corporate Citizen
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	51	Environmental Accounting
Aspect: Indirect Economic Impacts			
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	24	Collaborating with Communities and Taking Action as a Good Corporate Citizen
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	51	Environmental Accounting
Environmental			
Disclosure on Management Approach		42 13	Environmental Management Fujitsu Group Environmental Action Plan Stage VII
Aspect: Materials			
EN1	Materials used by weight or volume.	52	Material Balance
EN2	Percentage of materials used that are recycled input materials.	—	
Aspect: Energy			
EN3	Direct energy consumption by primary energy source.	52	Material Balance
EN4	Indirect energy consumption by primary source.	52	Material Balance
EN5	Energy saved due to conservation and efficiency improvements.	27	Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites

Indicator		Relevant page / topic	
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	17 18	Deploying Sustainability Solutions Development of Top-Level Energy Efficient Products
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	27 29 31 33	Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites Promoting Environmentally Conscious Datacenters Reduce CO_2 Emissions from Logistics and Transportation Promoting CO_2 Emission Reductions with Our Business Partners
Aspect: Water			
EN8	Total water withdrawal by source.	52 36	Material Balance Efficient Use of Water Resources
EN9	Water sources significantly affected by withdrawal of water.		—
EN10	Percentage and total volume of water recycled and reused.	36	Efficient Use of Water Resources
Aspect: Biodiversity			
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.		—
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	24	Collaborating with Communities and Taking Action as a Good Corporate Citizen
EN13	Habitats protected or restored.	24 44	Collaborating with Communities and Taking Action as a Good Corporate Citizen Hosting a Green Suppliers' Day
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	46	Concerving Biodiversity
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.		—
Aspect: Emissions, Effluents, and Waste			
EN16	Total direct and indirect greenhouse gas emissions by weight.	52 27	Material Balance Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites
EN17	Other relevant indirect greenhouse gas emissions by weight.	52 27	Material Balance Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	15 18 27 29 31 33	GHG Emission Reduction through the Provision of ICT Development of Top-Level Energy Efficient Products Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites Promoting Environmentally Conscious Datacenters Reduce CO_2 Emissions from Logistics and Transportation Promoting CO_2 Emission Reductions with Our Business Partners
EN19	Emissions of ozone-depleting substances by weight.		—
EN20	NOx, SOx, and other significant air emissions by type and weight.	52	Material Balance
EN21	Total water discharge by quality and destination.	52	Material Balance
EN22	Total weight of waste by type and disposal method.	52 38	Material Balance Limiting Amounts of Waste Generated
EN23	Total number and volume of significant spills.		—
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.		—
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.		—
Aspect: Products and Services			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	18 20	Development of Top-Level Energy Efficient Products Improving the resource efficiency of products
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	52 40	Material Balance Product Recycling
Aspect: Compliance			
EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	43	Status of Environmental Compliance
Aspect: Transport			
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	52 31	Material Balance Reduce CO_2 Emissions from Logistics and Transportation

Indicator		Relevant page / topic	
Aspect: Overall			
EN30	Total environmental protection expenditures and investments by type.	51	Environmental Accounting / Environmental Liabilities
Labor Practices and Decent Work			
*DMA (Disclosure on Management Approach) and LA1-LA14 are not applicable.			
Human Rights			
*DMA (Disclosure on Management Approach) and HR1-HR11 are not applicable.			
Society			
*DMA (Disclosure on Management Approach) and SO2-SO8 are not applicable.		—	
Aspect: Local Communities			
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	24	Collaborating with Communities and Taking Action as a Good Corporate Citizen
SO9	Operations with significant potential or actual negative impacts on local communities.	46 54	Preventing Pollution of Soil and Groundwater Business Sites Where Soil or Groundwater Contamination Has Been Found
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	46 54	Preventing Pollution of Soil and Groundwater Business Sites Where Soil or Groundwater Contamination Has Been Found
Product Responsibility			
*DMA (Disclosure on Management Approach) and PR2-PR9 are not applicable.		—	
Aspect: Customer Health and Safety			
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	44	Green Procurement

GRI Guidelines Reference Table (G4)

General Standard Disclosures

Indicator		Relevant page / topic	
Strategy and Analysis			
G4-1	Statement from the most senior decision-maker	4	Top Message
G4-2	Key impacts, risks, and opportunities	5 46	Interview Initiatives to Minimize Environmental Risk
Organizational Profile			
G4-3	Name of the organization	54	Fujitsu Group Profile
G4-4	Primary brands, products, and services	54	Fujitsu Group Profile
G4-5	Location of the organization's headquarters	54	Fujitsu Group Profile
G4-6	Number, and names, of countries where the organization operates	58	List of Organizations Covered by the Report on Environmental Activities
G4-7	Nature of ownership and legal form		—
G4-8	Markets served		—
G4-9	Scale of the organization: employees, operations, net sales	54	Fujitsu Group Profile
G4-10	Number of employees by employment contract and gender		—
G4-11	Percentage of employees covered by collective bargaining agreements		—
G4-12	Organization's supply chain		—
G4-13	Significant organizational changes during the reporting period	2	Significant Changes in Coverage
Commitments to External Initiatives			
G4-14	The precautionary approach or principle addressed by the organization	46	Initiatives to Minimize Environmental Risk
G4-15	Initiatives which the organization endorses	49	Tie-ups with External Organizations in order to Spread Green ICT and a Sustainable Society
G4-16	Membership in external associations	49 44	Tie-ups with External Organizations in order to Spread Green ICT and a Sustainable Society Acquiring Information on Chemical Substances Contained in Products
Identified Material Aspects and Boundaries			
G4-17	List of entities included in the organization		—
G4-18	Process for defining the report content and the aspect boundaries	2	Editorial Policy
G4-19	List of specified material aspects	5 13	Interview Fujitsu Group Environmental Action Plan Stage VII
G4-20	Aspect boundary for each material aspect (within the organization)	2 55 58	Organizations Covered Environmental Performance Data Calculation Standards List of Organizations Covered by the Report on Environmental Activities
G4-21	Aspect boundary for each material aspect (outside the organization)		—
G4-22	Reasons for any restatements of information provided in previous reports		—
G4-23	Changes to scope and aspect boundaries	2	Significant Changes in Coverage
Stakeholder Engagement			
G4-24	List of stakeholder groups engaged by the organization	49	Tie-ups with External Organizations in order to Spread Green ICT and a Sustainable Society
G4-25	Basis for identification and selection of stakeholders	48	Environmental Dialogues with Experts
G4-26	Engagement frequency and numerical totals	24 47 48	Collaborating with Communities and Taking Action as a Good Corporate Citizen In-House Environmental Educational and Enlightenment Activities Environmental Dialogues with Experts
G4-27	Key topics and concerns raised through stakeholder engagement	48	Environmental Dialogues with Experts
Report Profile			
G4-28	Reporting period	2	Reporting Period
G4-29	Date of most recent previous report	2	Published
G4-30	Reporting cycle	2	Published
G4-31	Contact point for questions regarding the report	2	Editorial Policy
GRI Content Index			
G4-32	The 'in accordance' option the organization has chosen		—
Assurance			
G4-33	Policy and practice regarding external assurance for the report	60	Third Party Verification
Governance			
*G4-51 to G4-55 are not applicable.			
G4-34	Governance structure	42	Environmental Management
G4-35	Process for delegating authority for economic, environmental and social topics	42	Environmental Management
G4-36	Appointees with responsibility for reporting economic, environmental and social topics	42	Environmental Management

Indicator		Relevant page / topic	
G4-37	Processes for consultation between stakeholders and the highest governance body	42	Environmental Management
G4-38	Composition of the highest governance body	42	Environmental Management
G4-39	Whether the Chair of the highest governance body is also an executive officer	42	Environmental Management
G4-40	Nomination and selection processes		—
G4-41	Processes for avoiding conflicts of interest		—
G4-42	Roles in the development of purpose, policies, and strategies	42	Environmental Management
G4-43	Enhancing knowledge of economic, environmental and social topics		—
G4-44	Evaluation with respect to governance of economic, environmental and social topics	42	Environmental Management
G4-45	Identification of economic, environmental and social impacts, risks, and opportunities	42	Environmental Management
G4-46	Roles in risk management processes for economic, environmental and social topics	42	Environmental Management
G4-47	Review of economic, environmental and social impacts, risks, and opportunities	42	Environmental Management
G4-48	Highest committee or position that approves the report		—
G4-49	Process for communicating critical concerns	42	Environmental Management
G4-50	Nature and number of critical concerns that were communicated		—
Ethics and Integrity			
*G4-56 to G4-58 are not applicable.			

Specific Standard Disclosures: Economic

*G4-EC3 to G4-EC6, G4-EC9 are not applicable.

Indicator		Relevant page / topic	
Economic Performance			
G4-EC1	Direct economic value generated and distributed	24	Collaborating with Communities and Taking Action as a Good Corporate Citizen
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	51	Environmental Accounting
Aspect: Indirect Economic Impacts			
G4-EC7	Development and impact of infrastructure investments and services supported	24	Collaborating with Communities and Taking Action as a Good Corporate Citizen
G4-EC8	Significant indirect economic impacts, including the extent of impacts	51	Environmental Accounting

Specific Standard Disclosures: Environmental

Indicator		Relevant page / topic	
Aspect: Materials			
G4-EN1	Materials used by weight or volume	52	Material Balance
G4-EN2	Percentage of materials used that are recycled input materials		—
Aspect: Energy			
G4-EN3	Energy consumption within the organization	52	Material Balance
G4-EN4	Energy consumption outside of the organization	52	Material Balance
G4-EN5	Energy intensity	54	Energy Usage(Scope 1 and Scope 2)
G4-EN6	Reduction of energy consumption	27 29 31 33	Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites Promoting Environmentally Conscious Datacenters Reduce CO_2 Emissions from Logistics and Transportation Promoting CO_2 Emission Reductions with Our Business Partners
G4-EN7	Reductions in energy requirements of products and services	17 18	Deploying Sustainability Solutions Development of Top-Level Energy Efficient Products
Aspect: Water			
G4-EN8	Total water withdrawal by source		—
G4-EN9	Water sources significantly affected by withdrawal of water		—
G4-EN10	Percentage and total volume of water recycled and reused	36	Efficient Use of Water Resources
Aspect: Biodiversity			
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		—
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	24	Collaborating with Communities and Taking Action as a Good Corporate Citizen
G4-EN13	Habitats protected or restored	24 44	Collaborating with Communities and Taking Action as a Good Corporate Citizen Hosting a Green Suppliers' Day
G4-EN14	Total number of ICUN red list species and national conservation list species with habitats in areas affected by operations, by level of extinction risk		—

Indicator		Relevant page / topic	
Aspect: Emissions			
G4-EN15	Direct greenhouse gas (GHG) emissions (scope 1)	53	GHG Emissions Report based on GHG Protocol Standards
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (scope 2)	53	GHG Emissions Report based on GHG Protocol Standards
G4-EN17	Other indirect greenhouse gas (GHG) emissions (scope 3)	53	GHG Emissions Report based on GHG Protocol Standards
G4-EN18	Greenhouse gas (GHG) emissions intensity	27	Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites
G4-EN19	Reduction of greenhouse gas (GHG) emissions	27	Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites
G4-EN20	Emissions of ozone-depleting substances (ODS)		—
G4-EN21	NOx, SOx, and other significant air emissions	52	Material Balance
Aspect: Effluents and Waste			
G4-EN22	Total water discharge by quality and destination	52	Material Balance
G4-EN23	Total weight of waste by type and disposal method	52 38	Material Balance Limiting Amounts of Waste Generated
G4-EN24	Total number and volume of significant spills		—
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally		—
G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff		—
Aspect: Products and Services			
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	18 20	Development of Top-Level Energy Efficient Products Improving the resource efficiency of products
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	52 40	Material Balance Product Recycling

Indicator		Relevant page / topic	
Aspect: Compliance			
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	43	Status of Environmental Compliance
Aspect: Transport			
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	52 31	Material Balance Reduce CO_2 Emissions from Logistics and Transportation
Aspect: Overall			
G4-EN31	Total environmental protection expenditures and investments by type	51	Environmental Accounting / Environmental Liabilities
Aspect: Supplier Environmental Assessment			
G4-EN32	Percentage of new suppliers that were screened using environmental criteria		—
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken		—
Aspect: Environmental Grievance Mechanisms			
EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	54	Response to Environmental Complaints (FY 2013)

Specific Standard Disclosures: Society

*The subcategories: "Labor Practices and Decent Work", "Human Rights" and "Product Responsibility" are not applicable.

Indicator		Relevant page / topic	
Society			
*G4-SO3 to G4-SO11 are not applicable.			
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	24	Collaborating with Communities and Taking Action as a Good Corporate Citizen
G4-SO2	Operations with significant actual and potential negative impacts on local communities	46 54	Preventing Pollution of Soil and Groundwater Business Sites Where Soil or Groundwater Contamination Has Been Found