Environmental Management at the Fujitsu Group

The Fujitsu Group is well aware of its mission as a global ICT organization. We are dedicated to sustainable growth and progress with our customers and society as we seek more ways to reduce our impact on the environment.

Leveraging the power of ICT to contribute to sustainable growth

Significant global warming and declining biodiversity are just two of many serious environmental issues that continue to escalate on a global scale. Furthermore, with the world's population now more than 7 billion, there are rising concerns about a shortage of food, water, energy and other resources. The Fujitsu Group is determined to play a role in achieving a prosperous society that is capable of sustainable growth. Enacting the necessary reforms will be impossible without the power of ICT.

Since its inception in 1935, the Fujitsu Group has placed priority on actively protecting the environment based on the principle of "operating in harmony with nature." Today, environmental problems are more serious than ever. Dealing with these issues will require reducing our own environmental impact as well as greatly lowering the burden on the environment from society as a whole. This is why we are extensively pursuing business operations that have an even smaller environmental impact. In addition, we will be supplying eco-friendly products and ICT solutions that can make a large contribution to making the activities of our customers and society more environmentally compatible. Basically, this stance entails incorporating the use of Green ICT at an even faster pace.

Green ICT consists of two elements. The first is using ICT solutions to reduce the impact on the environment. These solutions offer benefits that include using energy more efficiently, producing and consuming goods more efficiently, reducing movements of people and goods, and using sensors to measure and predict changes in the environment. The second is reducing the environmental impact of ICT devices. This is why we focus on supplying environmental products that use less energy and fewer resources. Developing and building highly energy-efficient datacenters is another part of this aspect of Green ICT.

The Fujitsu Group is committed to leveraging its expertise in creating technologies to help resolve global environmental issues through the power of ICT. By doing so, we want to contribute to sustainable growth and progress for our customers and the world.

Environmental Management Based on the FUJITSU Way

The Fujitsu Group implements environmental management in a systematic and sustained manner. Our efforts reflect the goal of "in all our actions, we protect the environment and contribute to society." This commitment is part of the Corporate Values enshrined in the FUJITSU Way, a corporate philosophy with guiding principles for the Company and its employees.



Fujitsu Group Environmental Management

We have established an environmental concept called Green Policy 21 for the purpose of making everyone at the Fujitsu Group aware of our stance regarding environmental activities and to promote this stance in our daily business practices. Global environmental activities called Green Policy Earth are the core of this environmental concept. Initiatives to accomplish our goals are Green Policy Products, Green Policy Factories and Green Policy Solutions. Furthermore, we position Green Policy Management as the mechanism that supports all of these activities.

• Environmental Concept "Green Policy 21"

Green Policy 2020 is a medium-term environmental vision that defines the roles and objectives of the Fujitsu Group between now and 2020. There are three goals: to benefit our customers and society as a whole, to pursue internal reforms, and to preserve biodiversity. We will create technologies and solutions while cooperating with many other organizations and reform our own activities to make Fujitsu a low-carbon corporate group, which is another objective of this policy. By implementing such measures, we will play a part in achieving a prosperous, low-carbon society.

Three Green Policy 2020 Goals

Benefit our customers and society as a whole
 It is the goal of the Fujitsu Group to reduce carbon emissions in Japan by 30 million tons annually by 2020 through the
 provision of advanced, energy-efficient technologies and solutions, thus contributing to lowering worldwide greenhouse gas
 emissions, which need to peak by 2020 at the latest in order to achieve the 2050 goal declared by the G8.

By 2020, Fujitsu seeks to offer world-class overall energy efficiency in all of its business areas (software and services, hardware, electronic devices, others). Fujitsu will also set up a new organization to promote low-carbon initiatives.

3. Preserve biodiversity

Fujitsu plans to address every area of the Leadership Declaration of the Business and Biodiversity Initiative, with specific initiatives to get underway before 2020.

Medium-Term Environmental Vision "Green Policy 2020"

As one step toward reaching the goals of this medium-term environmental vision, the Fujitsu Group established the Fujitsu Group Environmental Protection Program (Stage VI) that covers the three-year period from FY 2010 to FY 2012. We are also making progress with Green Policy Innovation, a project that aims to lower the environmental burden of our customers' activities through the provision of Green ICT. The goal of this project is to contribute to cutting global CO2 emissions by at least 15 million tons during the four-year period from FY 2009 to FY 2012.

- Targets and Results for the Fujitsu Group Environmental Protection Program (Stage VI)
- Environmental Burden Reduction Project by Green IT, Green Policy Innovation

The Green Policy Innovation Logo

The Fujitsu Group started its Green ICT project, called Green Policy Innovation, in December 2007. We began using the Green Policy Innovation Logo in November 2008 so that customers can easily identify products that are part of this project.



conservation, environmentally responsible materials and other criteria. Another is "Super Green" products, which achieve the highest levels of environmentally compatible characteristics among all Fujitsu Group products. We

also use this symbol for Environmentally Conscious Solutions that can lower customers' CO2 emissions by at least 15%.

Environmental Emblem

This Environmental Emblem symbolizing the stance of the Fujitsu Group with respect to the environment was unveiled in November 1994. The emblem consists of the Earth, a pair of eyes, and an infinity symbol, which is used as part of the Fujitsu Logo. The meaning is that the Fujitsu Group will always conduct its business caring for the Earth.

The Environmental Emblem can be found, among other places, on Fujitsu Group Sustainability Reports and in association with Group environmental and social contribution activities.

First IT Services Company to Garner "Eco-First" Credentials

In September 2010, Fujitsu became the first IT services company to be certified under Japan's Ministry of the Environment's "Eco-First Program." Under the program, industry-leading companies pledge to fulfill their environmental commitments in areas such as countering global warming and protecting biodiversity to the Minister of the Environment as a way to further promote their environmental preservation initiatives.

We care for the Earth.

Environmental Emblem

First IT Services Company to Garner "Eco-First" Credentials



The Green Policy Innovation Logo

35

Reinforcing Environmental Management by Utilizing ICT

Fujitsu has made environmental management even more powerful by building an Environmental Management Dashboard, a centralized display of information derived from the collection and analysis of data from a variety of sources.

Establishment and Use of the Environmental Management Dashboard

As demands for protecting the environment continue to rise, companies are faced with the increasingly significant task of achieving environmental management that can support both the growth of business activities and reduce the environmental impact of such activities. The Fujitsu Group has established an Environmental Management Dashboard to function as a support base for environmental management. Its centralized portal screen displays information derived from the collection and analysis of a multitude of environmental data in real time. Senior executives, department managers and site managers, depending on their needs, can use the dashboard to access this information and utilize it in making their own decisions. We believe this single, integrated display provides for stronger environmental management.

The dashboard can show data ranging from the entire Fujitsu Group to individual business sites, departments, buildings and floors. Users can access visualized data for the types and amounts of energy used, total CO2 emissions, CO2 emissions per employee or unit of floor area, year-on-year comparisons broken down by month, and various other information on a real-time basis. Examples of other capabilities are monthly performance reports in relation to the Fujitsu Group Environmental Protection Program (Stage VI) and an alert function. Information on the dashboard is valuable in enabling executives and managers in charge of energy management to make decisions and judgments. The dashboard is also an effective tool for encouraging all employees to take action following their own autonomous initiatives to protect the environment.

In response to the Great East Japan Earthquake, the Japanese government has asked large electric power users to reduce their consumption. By utilizing the Environmental Management Dashboard, the Fujitsu Group succeeded in cutting electricity use to well below the target level. We are using this system for more than our own environmental management-the dashboard is intended to serve as an environmental reference model that enables customers to incorporate our know-how into their own environmental management. We plan to use this model to provide our customers with a variety of environmental solutions.



A sample Environmental Management Dashboard screen display

Looking Back on FY 2010 Environmental Activities

The global population has topped 7 billion, and concerns about resource depletion and growing environmental stress continue to spread. At the same time, ICT has come a long way, with impressive computing power and high-speed networks, and its applications know no bounds. The Fujitsu Group looks to wield the power of ICT to help solve global environmental problems.

The Great East Japan Earthquake in 2011 sharply changed energy awareness and values in Japan, and caused companies and households to work hard to conserve energy. The Fujitsu Group also deployed measures to save electricity throughout its domestic locations. We achieved our conservation targets by using the Environmental Management Dashboard, a tool developed in-house, to ascertain real-time electricity use.



Corporate Executive Advisor (Environmental Strategy) Strategy Unit Atsuhisa Takahashi

Head of Unit, Corporate Environmental Minoru Takeno

As for the Fujitsu Group Environmental Protection Program (Stage VI), we met all of the targets for the program's second year, FY 2011, including the four items we upwardly revised. We will work to ensure that Fujitsu also achieves the goals for the program's final year, FY 2012.

Further, we are taking on the challenge of deploying ICT in new fields, with an eye to a sustainable global environment. Our wide-ranging activities include employing multi-sensing network technology to conserve biodiversity and help revitalize agriculture and contributing to the creation of environmentally friendly cities.

The Fujitsu Group will continue efforts to resolve resource, energy, and other global environmental problems through our cutting-edge Green ICT.

Setting Up an Action Plan and Targets for the Period from FY 2010 through 2012

In April 2010, we created the Fujitsu Group Environmental Protection Program (Stage VI) to run from FY 2010 to the fiscal year ending March 31, 2013 (FY 2012).

The program is based on the three targets established in the Green Policy 2020 and defines six key areas: strengthening advanced green ICT R&D, improving the environmental value of products and services and strengthening the development and provision of green ICT, strengthening efforts to reduce the environmental burden from the Group itself, strengthening our foundation for environmental management, promoting activities that make environmental contributions to society, and promoting activities that conserve biodiversity. Moreover, we have established a further 18 items to serve as specific program targets.

All FY 2011 Targets Achieved

We achieved all of the targets set in the Fujitsu Group Environmental Protection Program (Stage VI) for FY 2011. And, we achieved our planned targets for areas where we had revised targets upward for FY 2011; namely, advanced green ICT R&D, environmental efficiency factors, renewable energy, and CO2 reduction in distribution and transportation. Going forward, we will continue to use the PDCA cycle and work toward achieving our FY 2012 targets as well, which are our final fiscal-yearly targets for Stage VI of the program.

Benefitting customers and society

Category	Performance (FY 2010)	Targets (FY 2011)	Performance (FY 2011)	Targets (FY 2012)
Strengthening advanced green ICT R&D				
Develop technologies for next-generation datacenters and networking that will at least double overall efficiency of ICT products by end of FY 2012.	1.3 times	1.5 times	1.5 times	2 times
By end of FY 2012, more than 70% of all technology developed will be solutions for reducing burden on the environment.	58%	60%	61%	70%

Strengthening advanced green ICT R&D

Improving environmental value of products and services, and enhancing development and delivery of green ICT

Category	Performance (FY 2010)	Targets (FY 2011)	Performance (FY 2011)	Targets (FY 2012)
Develop and deliver green ICT to contribute to custor	ners and society			
Provide green ICT that will reduce cumulative CO2 emissions by 15 million tons or more over the FY 2009- 12 period.	5.60 million tons	9.55 million tons	9.98 million tons	15 million tons or more
Develop and provide eco-friendly products (Super Gr	een products)			
With respect to newly developed green products in all departments, Super Green products that contribute to reduced environmental footprints through low energy and resource demands must comprise 30% by end of FY 2012.	17%	20% or more	33%	30% or more
Develop and provide eco-friendly products (environm	Develop and provide eco-friendly products (environmental efficiency factors)			
With respect to newly developed green products in all departments, the environmental efficiency must be raised to 4.0 times FY 2008 value by end of FY 2012.*1	Raise to 3.2	Raise to 3.5	Raise to 4.1	Raise to 4.0
Promote product recycling				
Sustain 90% resource reuse rate of business ICT equipment globally at Fujitsu recycling centers.	93.3%	Sustain 90%	94.1%	Sustain 90%
Develop and provide environmental solutions				
Promote development and provision of environmental solutions in all areas, including industry, transport, business, households, and energy conversion sectors.	Departmental and regional coverage rate: 78%	Departmental and regional coverage rate: 85%	Departmental and regional coverage rate: 89%	Departmental and regional coverage rate: 100%
Expand provision of environmental solutions in major regions, including Japan, Europe, the Americas, and Asia-Pacific.				

Pursuing internal reforms

Enhancing efforts to reduce the Fujitsu Group's environmental footprint

Category	Performance (FY 2010)	Targets (FY 2011)	Performance (FY 2011)	Targets (FY 2012)
Reduce greenhouse gas emissions				
Reduce total greenhouse gas emissions associated with manufacturing globally to 6% below FY 1990 levels by end of FY 2012 (CO2: 5% reduction, other greenhouse gases: 20% reduction).	11.7% reduction	3% reduction	18.2% reduction	6% reduction
Reduce greenhouse gas emissions (renewable energ	y)			
Increase use of renewable energy sources to 10 times FY 2007 levels by end of FY 2012.*1	4.8 times	10 times 11 times		10 times
Reduce CO2 in transport and distribution				
Reduce CO2 emissions from domestic transport to 15% below FY 2008 levels by end of FY 2012.*1	18% reduction	16% reduction	24% reduction	15% reduction
Promote business partners' greenhouse gas reductio	Promote business partners' greenhouse gas reduction			
Promote procurement from business partners that limit or reduce greenhouse gas emissions.	62.7%	80%	98.4%	100%
Factory improvements (chemicals)				
Reduce output of priority chemicals to 10% below FY 2007 levels by end of FY 2012.	48% reduction	7% reduction	60% reduction	10% reduction
Factory improvements (waste)				
Reduce waste generation to 20% below FY 2007 levels by end of FY 2012.	20.1% reduction	13% reduction	27% reduction	20% reduction
Maintain zero waste emissions at factories in Japan.	Status maintained	Status maintained	Status maintained	Status maintained
Office improvements				
Achieve four-star rating or better under the Green Office plan for every office by end of FY 2012.	Japan: Trials using new standard Internationally: Field survey (completed)	Japan: 70% Internationally: Draft evaluation standards	Japan: 80% Internationally: completed draft evaluation standards	Japan: 100% Internationally: Trial implementation

Strengthening environmental governance

Category	Performance (FY 2010)	Targets (FY 2011)	Performance (FY 2011)	Targets (FY 2012)
Continuously improve globally integrated environment	ntal management sys	stems		
Promote further ICT deployment for environmental management, build smart environmental management systems.	Trial implementation	Block application rate: 50%	Block application rate: 60%	Block application rate: 75%
To improve environmental performance, by end of FY 2012 we intend to apply a framework of assessments for the extent of target achievement and a compliance situation of 100% in regard to the Group's main domestic production companies.	Performance assessment procedures established	Trial implementation	Trial implementation	Expand as far as domestic manufacturing group companies
Promote environmental management through commu	inications with stake	holders		
Promote environmental communication at all levels to improve environmental management	Both internal and external information dissemination improved	Improved communication of environmental information	Both internal and external information dissemination improved	Improved communication of environmental information

Promoting environmental contributions to society

Category	Performance (FY 2010)	Targets (FY 2011)	Performance (FY 2011)	Targets (FY 2012)
Increase environmental awareness among all staff the	rough community-ba	sed environmental a	ctions	
Launch Act-Local-System by end of FY 2010 to globally share information on social contribution activities around the world.	Network implementation	Management of the domestic network Management of the international network	Management of the domestic network Management of the international network	Management of the domestic network Management of the international network
Sustain environmental social contributions activities around the world and promote activities that will contribute more to local communities through utilizing Act-Local-System.	Japan: Implemented at all business sites Internationally: Implemented at 54% of business sites	Japan: Once a year Internationally: Once every three years	Japan: Implemented at all business sites Internationally: Implemented at 65% of business sites	Japan: Once a year Internationally: Once every three years

Preserving biodiversity

Promoting efforts to preserve biodiversity

Category	Performance (FY 2010)	Targets (FY 2011)	Performance (FY 2011)	Targets (FY 2012)
Reduce impact of company's operations on biodivers	sity			
Develop numerical indicators to measure impact of operations on biodiversity and build system to expand contribution of ICT to reducing that impact.	Completion of numerical indicator development	1.5% reduction in level of impact (in main business areas) compared to FY 2009 as evaluated by BD integration index	4.6% reduction in level of impact (in main business areas) compared to FY 2009 as evaluated by BD integration index	3% reduction in level of impact (in main business areas) compared to FY 2009 as evaluated by BD integration index
Promote procurement from business partners that work to preserve biodiversity.	60.9%	80%	99.2%	100%
Contribute to community-building that conserves bio	diversity			
Build case studies that contribute to biodiversity through ICT in all major offices by end of FY 2012.	Survey implementation	Pilot project based on survey results	Pilot project based on survey results	Development at main business sites
Conduct biodiversity preservation/education programs in all offices by end of FY 2012.	Japan: Implemented at all business sites Internationally: Implemented at 30% of business sites	Japan: Once a year Internationally: Once every three years	Japan: Implemented at all business sites Internationally: Implemented at 41% of business sites	Japan: Once a year Internationally: Once every three years

*1: Target revised upward from FY 2011

Green Policy Innovation-Achievements in Reducing CO2 Emissions

Since FY 2007, the Fujitsu Group has been promoting Green Policy Innovation, a project to reduce environmental burden through Green ICT. In FY 2009, Fujitsu set a global target of cutting CO2 emissions by more than 15 million tons over a four-year period from FY 2009 to 2012. By FY 2011, we exceeded our targets and contributed to a total CO2 reduction of 9.98 million tons in aggregate, comprising 2.11 million tons from offering Green Policy Products (eco-friendly ICT infrastructure products), and 7.87 million tons from providing Green Policy Solutions, which are ICT solutions that contribute to reducing environmental burdens.



CO₂ Reduction Targets and Achievements under Green Policy Innovation

ICT infrastructure ICT solutions

*Cumulative from FY 2009

Operating Activities and Environmental Load (FY2011)

We promote environmentally friendly business activities through overall quantitative assessment of our environmental burden.

FY 2011 Performance



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

Calculation Methods

Calculation Methods (INPUT)

	Raw Materials	Material inputs to our major products <u>*1</u> shipped in FY 2011 (raw materials per unit for each product times the number of units shipped in FY 2011)		
Development/Planning & Design Procurement Manufacturing/Development	Chemical Substances	PRTR: Volume of PRTR-targeted substances handled by plants/sites in FY 2011 VOC: Volume of substances subject to VOC emissions restrictions stipulated by the four electric and electronics associations handled by plants/sites in FY 2011		
	Water	olume used by plants/sites in FY 2011		
	Energy	Electricity, oil and gas consumed by plants/sites in FY 2011		
Distribution / Sales	Energy	Energy consumption in transportation in FY 2011		
Usage Energy		Electricity consumption by major products <u>1</u> shipped in FY 2011 (Assumed hours of use per product x age-based electricity consumption x the number of units shipped in FY 2011)		
Collection / Reuse / Recycling		The weight ratio of recycled parts and resources with respect to the processing volume of post-use products in Japan is calculated according to the method of the Japan Electronics and Information Technology Industries Association. It excludes collected waste other than post-use electronic products.		

Calculation Methods (OUTPUT)

	Raw Materials	Material inputs to our major products <u>*1</u> shipped in FY 2011 (per-unit volume of CO2 emitted from mining the resource until it becomes a raw material for each product times the number of units shipped in FY 2011)
Development/Planning & Design Procurement Manufacturing/Development	Chemical Substances	PRTR: Volume of PRTR-targeted substances discharged in FY2011. Calculated by measuring the concentration of substances passing through plants' drains and exhaust ports in FY 2011 and multiplying the total volume discharged (nickel compounds, manganese compounds, etc.) or total volume emitted (xylene, toluene, etc.), or calculated based on the chemical substance balance (xylene and toluene). VOC: Emission amounts of the substances subject to VOC emissions restrictions stipulated by the four electric and electronics associations for factories and business sites for FY 2011
	Atmospheric Release	CO2: CO2 discharge volume associated with energy consumption by plants/sites in FY 2011 (Energy consumption times CO2 conversion factor) NOx, SOx: Calculated from concentrations in gases discharged from vents (boilers, etc.) by plants/offices in FY 2011 Greenhouse gases other than CO2: Discharge volume of process gases used in four semiconductor plants in FY 2011 (Calculated by formulas such as <volume gas="" of="" used=""> x <ratio consumed="" in="" reactions=""> x <detoxification ratio="">)</detoxification></ratio></volume>
	Water Discharge	Wastewater volume discharged by plants/sites into sewerage or rivers in FY 2011 BOD: A measure of the emission volume of organic pollution of water discharged by businesses employing the volume of oxygen consumed when organic matter in water is removed by microbial activity. COD: A measure of the emission volume of organic pollution of water discharged by businesses employing the volume of oxygen consumed when organic matter in water is removed chemically by oxidation.
	Waste	Quantity of Waste Generated: amount of waste generated by plants/sites in FY 2011 Volume of Waste Disposal: The volume of landfill disposal and simple incineration by plants/sites in FY 2011 (including waste which is not a zero emission target)
Distribution/Sales	Atmospheric Release	The total volume of CO2 emissions in FY 2011, including both fuel consumption by our shipping business in Japan when measurable, and shipping distance x freight weight x coefficient when the freight of companies other than Fujitsu is included, as in mixed load transportation
Usage	Atmospheric Release	The volume of CO2 emissions during use of major products <u>1</u> shipped in FY 2011 (Amount of energy consumed x CO2 conversion coefficient. The amount of energy consumed is calculated by multiplying the quantity of electricity used during the estimated time of use of each product unit by the number of units shipped in FY 2011)

*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.

FY 2011 Environmental Accounting Results (As of July 31, 2012)

To promote environmental management, the Fujitsu Group introduced environmental accounting in FY 1998. We evaluate the efficiency of our environmental protection activities by monitoring the required costs and benefits of these activities. Through this process, we have clarified issues and promoted sharing of the results.

Purpose of Introducing an Environmental Accounting System

- To clarify our corporate stance through disclosure of information to stakeholders
- · To implement long-term, continuous environmental measures
- · To raise the efficiency of investment in environmental protection measures
- To energize environmental protection activities

Basic Environmental Accounting Elements

- Applicable period April 1, 2011 to March 31, 2012
- Accounting coverage
 Fujitsu and its major consolidated subsidiaries worldwide <u>*1</u>
- · Calculation basis for environmental protection costs
 - Accounting method for depreciation and amortization: Depreciation and amortization expenses for investments are included in expenses using straight line depreciation (with no residual value) based on a useful life of 5 years. The useful life of five years was chosen based on the average length of the actual period from the introduction of environmental facilities to the implementation of repairs and upgrades.
 - Basis for recording composite costs: In regard to composite costs in which environmental protection costs are coupled with other costs, the Fujitsu Group records only the portion corresponding to environmental protection in conformance with the Environmental Accounting Guidelines 2005 issued by the Ministry of Environment.
- · Calculation basis for the economic benefits of environmental protection measures
 - Scope of benefits in environmental accounting: The Fujitsu Group records the actual benefits and estimated benefits (risk avoidance benefit and deemed benefit) of reducing environmental impact related to the following items.
 - Benefit of reducing the environmental impact related to resource usage in business activities
 - Benefit of reducing the environmental impact related to environmental loads and waste emissions resulting from business activities
 - Benefit of reducing the environmental impact related to goods and services produced by business activities
 - Benefit of reducing the environmental impact related to transportation and other activities
 - Investment benefit materialization period and basis: The accounting period for actual economic benefits has been aligned with the depreciation and amortization period for investments (60 months). However, the accounting period for economic benefits derived from reducing personnel costs related to the environmental management system is 12 months, in line with the main thrust of the environmental management system, which is reviewed every year. With regard to estimated economic benefits, the accounting period for economic benefits derived from capital investment is the same as the depreciation and amortization period (60 months) for actual economic benefits. Benefits corresponding to a given fiscal year, such as the amount of contribution to environmental protection and the avoidance of operational losses, are recorded only for that fiscal year. The basis for accounting for economic benefits is as follows.
 - Contribution of environmental protection activities to added value derived from production activities
 The Fujitsu Group recognizes support provided by environmental protection activities to production activities as an economic benefit. Accordingly, the amount of contribution is determined by multiplying the added value derived from production activities by the ratio of the maintenance and operation cost for environmental protection facilities to the total facility cost of each site.
 Contribution = Added value x Maintenance and operation cost for environmental protection facilities / total facility cost
 - Avoidance of operational loss at business sites due to non-compliance with laws and regulations
 The Fujitsu Group recognizes the avoidance of operational loss as the amount of loss that is avoided in the event of the
 materialization of risk arising from neglect to make upfront investments needed to comply with laws and regulations. The
 number of operational loss days is determined based on the size of investment related to the environment, but shall not exceed
 three days.

Benefit = Added value / Operational days x Operational loss days

Benefit of public relations activities

This benefit is calculated by converting publicity efforts related to environmental protection activities in newspapers, magazines and TV into an advertising cost.

Benefit=Advertising cost of newspapers, magazines and TV x Number of advertisements ran and programs broadcast

R&D benefit

The Fujitsu Group calculates the amount of additional earnings resulting from the contribution of R&D achievements for environmental protection purposes, such as Super Green Products and environmental solutions.

*1 Fujitsu's major consolidated subsidiaries worldwide:

Fujitsu Isotec Limited, FUJITSU IT PRODUCTS LIMITED, FUJITSU I-NETWORK SYSTEMS LIMITED, Fujitsu Integrated Microtechnologies Limited., FUJITSU INTERCONECT TECHNOLOGIES LIMITED, FUJITSU VLSI LIMITED, ECOLITY SERVICE LIMITED, FDK CORPORATION, Fujitsu Optical Components Limited, FUJITSU KASEI LIMIED, FUJITSU LABORATORIES LTD., FUJITSU COMPONENT LIMITED, Shimane Fujitsu Limited, FUJITSU PERIPHERALS LIMITED, SHIN-ETSU FUJITSU LIMITED, SHINKO ELECTRIC INDUSTRIES CO. LTD., FUJITSU SEMICONDUCTOR LIMITED, FUJITSU SEMICONDUCTOR TECHNOLOGY INC., FUJITSU TELECOM NETWORKS LIMITED, FUJITSU TEN LIMITED, TOCHIGI FUJITSU TEN LIMITED, Transtron Inc., PFU LIMITED, Fujitsu Frontech Limited, Fujitsu Mobile-phone Products Limited, FUJITSU WIRELESS SYSTEMS LIMITED, FUJITSU COMPUTER PRODUCTS OF VIETNAM, INC., Fujitsu Network Communications, Inc., Fujitsu Telecommunications Europe Limited, FUJITSU TECHNOLOGY SOLUTIONS (HOLDING) B.V.

The Fujitsu Group also aggregates data on R&D costs and benefits related to environmental solutions from subsidiaries other than those shown above. However, the data is aggregated solely for environmental solution costs and benefits, so the relevant subsidiaries are not included in the scope of disclosure for major consolidated subsidiaries.

Fiscal 2011 Environmental Accounting Results

Breakdown of Results (Investment and costs) [billion yen]

Item		Main areas covered	Capital investment (billion yen)	Costs (billion yen)	Economic benefits (billion yen)
	Pollution prevention costs/benefits	Air/water pollution prevention, etc.	0.79(-0.30)	4.74(-0.08)	7.11(-0.07)
Business area costs/benefits	Global environmental conservation costs/benefits	Global warming prevention, saving energy, etc.	1.76(+0.06)	3.13(+0.29)	1.72(+0.34)
	Resource circulation costs/benefits	Waste disposal, efficient utilization of resources, etc.	0.09(+0.07)	2.82(-0.05)	11.05(+0.41)
Upstream/downstream costs/benefits		Collection, recycling, reuse, and proper disposal of products, etc.	0.02(+0.02)	0.92(+0.10)	0.50(+0.06)
Administration costs/benefits		Provision and operation of environmental management systems, environmental education of employees, etc.	0.62(-0.20)	4.27(+0.76)	1.54(+0.61)
R&D costs/benefits		Research and development on products and solutions that contribute to environmental protection, etc.	0.35(-0.50)	20.94(+3.79)	49.14(+10.00)
Social activity costs		Donations to, and support for, environmental groups, etc.	0.00(±0.00)	0.03(-0.03)	-
Environmental remediation costs/benefits		Restoration and other measures related to soil and groundwater contamination, etc.	0.04(-0.04)	0.13(-0.90)	0.20(+0.20)
Total			3.66(-0.91)	36.99(+3.88)	71.25(+11.54)

Fiscal 2011 Environmental Accounting Results - Breakdown of Results (Capital investment, costs, economic benefits)

• 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 "0.0" include items for which the value was smaller than the display units used.

Costs and Economic Benefits in FY 2011

The results of this accounting for FY 2011 showed costs of 36.99 billion yen (an 11.7% increase from the previous year) and the economic benefits were 71.25 billion yen (a 19.3% increase from the previous year). Thus both costs and benefits increased. Also, our capital investment was 3.66 billion yen (a 19.9% decrease from the previous year).

Reasons for Changes in Costs and Economic Benefits

Costs increased by about 3.9 billion yen compared to the previous year. This was due to increases of about 0.8 billion yen in management activities costs, and about 3.8 billion yen in R&D costs, although environmental remediation costs fell by about 0.9 billion yen. Environmental remediation costs decreased because soil and groundwater clean-up work was completed in FY 2010. Management activities costs increased as a result of a review of applicable cost items for environmental advertising. R&D costs grew substantially as a result of promoting R&D on products and solutions that contribute to environmental protection in line with "Benefiting Customers and Society" which is a major goal of the Fujitsu Group's medium-term environmental vision Green Policy 2020.

Economic benefits increased by about 11.5 billion yen compared to the previous year. Global environmental conservation benefits increased by about 0.3 billion yen, resource circulation benefits rose by about 0.4 billion yen, benefits from management activities increased by about 0.6 billion yen and R&D benefits increased by about 10.0 billion yen. The main reason for the increase in global environmental conservation benefits was higher actual economic benefits resulting from continuous investment in energy-efficient facilities at manufacturing sites. Our benefit from resource circulation increased as a result of reduced water supply usage following increased use of recycled water, and an increase in the gain on sale of used components at a subsidiary. The benefits from our management activities rose because of higher environmental advertising costs due to a review of applicable cost items for environmental advertising, resulting in higher estimated benefits from that environmental advertising. With regards to the benefit from R&D, to contribute to reducing the environmental impacts of our customers and society, we have strengthened our Green ICT lineup, so providing these products to our customers led to an increase in economic benefits as calculated by our proprietary method of calculating these estimated benefits.

Thus R&D costs and benefits both rose significantly in FY 2011. In the future, we will continue to refine environmental management by evaluating our environmental protection activities using environmental accounting.



Trends in Costs and Economic Benefits

Costs 🔲 Estimated benefits 📕 Actual benefits

The History of Fujitsu's Environmental Activities

The History of Fujitsu's Environmental Activities

1935	Park-style design adopted for new Kawasaki Plant at suggestion of Fujitsu's founder, Manjiro Yoshimura.
1938	Kawasaki Plant completed.
1972	Environmental control sections established at each plant.
1987	Ozone Layer Protection Committee established.
1989	Environmental Committee established.
1990	Environmental management evaluation system implemented.
1991	Environmental Engineering Promotion Center established.
1992	Fujitsu's Commitment to the Environment formulated. Use of CFCs and carbon tetrachloride for cleaning eliminated. Energy Saving Committee established.
1993	Product Recycling Committee established. Waste Control Committee established. Fujitsu Environmental Protection Program (Stage I) formulated. Product Environmental Assessment Guidelines formulated. Domestic Affiliated Companies' Environmental Protection Council established. Environmental Information Service (FJ-CUG) inaugurated.
1994	First issue of Eco-Plaza environmental bulletin published. Use of 1,1,1-trichloroethane eliminated. 1st Fujitsu Group Environmental Technology Exhibition held. Fujitsu Environmental Emblem designed. Overseas Environmental Information Network began operations.
1995	Environmental Management System Committee established. Recycling system established and implemented. Fujitsu Group Worldwide Environmental Protection Council established.
1996	Fujitsu Environmental Protection Program (Stage II) formulated. Environmental Engineering Center homepage placed on intranet. Chemical Emissions Reduction Committee established. First Environmental Report published.
1997	Environmental homepage established on Fujitsu website. All domestic manufacturing sites certified ISO14001 compliant.
1998	Reforestation activities started in Thailand. Green Product program launched.
1999	Environmental accounting introduced. Reforestation activities started in Vietnam.
2000	Four development and service sites in Japan certified ISO14001 compliant. Corporate Environmental Affairs Unit established. Desktop PC awarded Eco-mark for first time.

2001	Fujitsu Environmental Protection Program (Stage III) formulated. Calendar using paper from sustainable forest published. Reforestation activities started in Malaysia.
2002	A world's first: Tin-zinc-aluminum lead-free solder developed. A world's first: Biodegradable plastic parts with lower environmental load employed in notebook computers. Fujitsu Group Environmental Policy established. A world's first: Magnesium alloy recycled in-house applied in notebook computers.
2003	Support for reforestation activities employing Rhythm Forest reforestation network game initiated. Zero waste emission achieved by all 13 plants in Japan.
2004	ISO14001 integrated certification acquired by all Fujitsu Limited sites, among largest systems in japan. 100% Green Product ratio achieved for all newly developed products. Fujitsu Group Environmental Protection Program (Stage IV) formulated.
2005	ISO14001 certification acquired by all Group companies in Japan. Supply of Super Green Products began.
2006	ISO14001 globally integrated certification acquired, including overseas Group companies. Established global environmental management framework for the Group as a whole.
2007	Fujitsu Group Environmental Protection Program (Stage V) formulated. Green Policy Innovation project, which reduces our customers' environmental load through green ICT, started.
2008	Green Policy 2020 medium-term environmental vision formulated.
2009	2009 Biodiversity Action Principles formulated.
2010	Fujitsu Group Environmental Protection Program (Stage VI) formulated.
2011	Environmental Management Dashboard operations began full-scale.