Environmental Management

We are continuously working to improve our ISO 14001*1-based environmental management systems and to promote group-wide environmental management

*1 ISO:
Environmental Management Systems (EMS) standard determined by the International Organization for Standardization (ISO). Certification is granted to environmentally aware organizations that develop systems for ongoing reductions in their environmental footprint.

Fujitsu Group's Environmental Management Systems

Fujitsu has constructed environmental management systems (EMS) based on the ISO 14001 international standard and is promoting environmental improvement activities across the Group. After acquiring ISO 14001 certification for Japanese consolidated subsidiaries at the end of FY 2004, we expanded this effort to include overseas subsidiaries and acquired global integrated certification in FY 2005.

By constructing EMS along with a global supply chain, Fujitsu has further strengthened its global governance. This also allows Fujitsu to promote even more efficient and highly effective environmental activities; not only grasping our achievement status for the Fujitsu Group Environmental Protection Program (Stage VI), but also collecting a wide variety of information from all Group companies, such as legal compliance, emergency response, environmental communication and preservation activities, and conducting management reviews.

EMS Implementation and Operational Status

As of the end of FY 2011, Fujitsu has acquired global integrated ISO 14001 certification for a total of 91 companies, including 12 overseas Group companies. In addition, our 25 overseas companies which are not production base sites are constructing and operating an EMS in line with Fujitsu Group environmental policies. In this way, we have established an environmental management structure across the whole Group.

Environmental Promotion Structure

The final decisions on environmental management are taken at meetings of the Management Council, chaired by the president. Fujitsu has two directly controlled organizations under the Management Council. One is the Environmental Committee, which reports to the Management Council and controls a wide variety of discussions related to improvements in the Environmental Protection Program, EMS, and other areas. The other is the Low Carbon Committee, which is made up of executives from business groups and studies companywide policies, such as emissions reductions associated with business activities for global warming prevention.

The Environmental Committee sets up subcommittees to handle specific environmental issues by people from across business groups and units. In FY 2010, we inaugurated the Advanced Green R&D Committee as a new subcommittee to strengthen R&D on revolutionary green ICT that will contribute to achieving a low-carbon society. This new committee promotes the development of advanced technologies that will boost the efficiency of ICT products and improve the environmental load reduction effects of solutions.

The Environmental Committee's deliberations are also shared with the whole group and we have created a Global Environment Management Working Group (WG) under the Green Management Committee as an organization to strengthen our EMS activities through promoting an understanding of the results of the committee to encourage proactive actions. In the Global Environment Management WG, we assemble people from across the various business groups and inform them of items that we request be handled by the various divisions and group companies to unify our global information sharing.

Structure for Environmental Activities
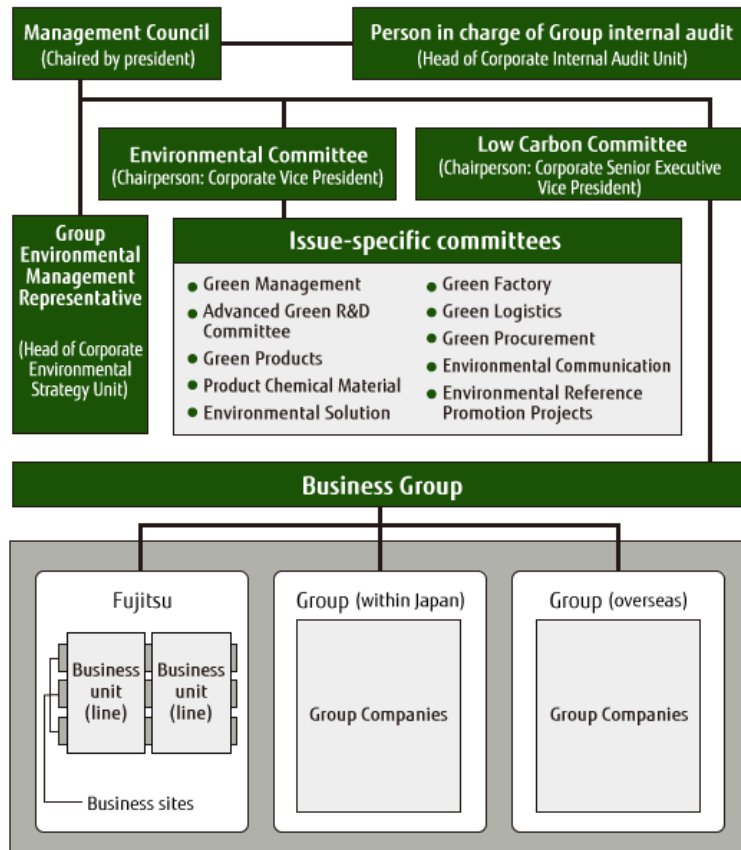
Activity Flow

The Environmental Committee is the highest body for proposing, deliberating, and deciding upon environmental matters relating to all Group companies. The committee's main duties are to discuss the Fujitsu Group's environmental policies and the environmental objectives of all Group companies, and check on the status and results of environmental management activities, making corrections if necessary.

The issue-specific committees are subcommittees set up by the Environmental Committee to make a dedicated response to specific issues. Their main role is to discuss targets for the Environmental Protection Program, check on the progress being made for each target and promote further activity toward achieving them. Issue-specific committees' progress reports are approved and directed by the Environmental Committee.

Action Implementation Flow
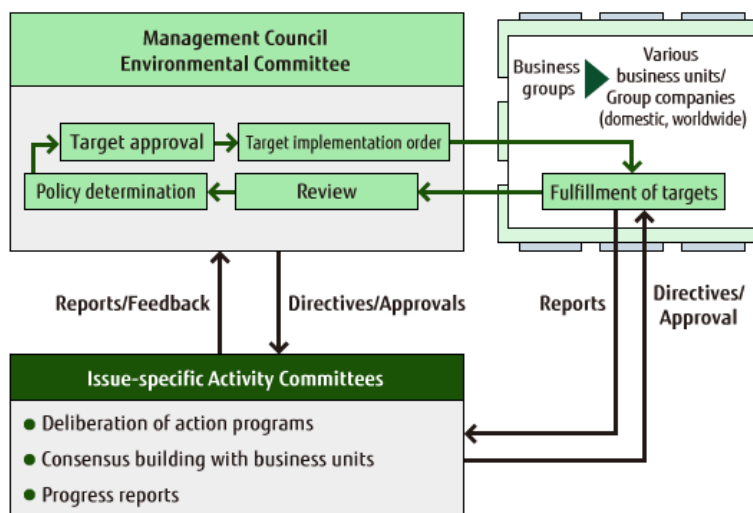
Management Based on the Line/Site Matrix Structure

The Fujitsu Group carries out its environmental management along the same framework lines as its corporate management. To this end, we are pursuing environmental management within a matrix structure combining (1) "line activities" directly tied to the business operations of various divisions and companies (including Super Green Product development and the development and sales expansion of Environmentally Conscious Solutions) and (2) "site activities" to tackle common themes affecting each factory or business location (such as energy conservation and waste reduction).

In this way, along with minimizing the environmental burden of our own business activities, we promote reductions in environmental burdens more generally through the sale of our products and services.
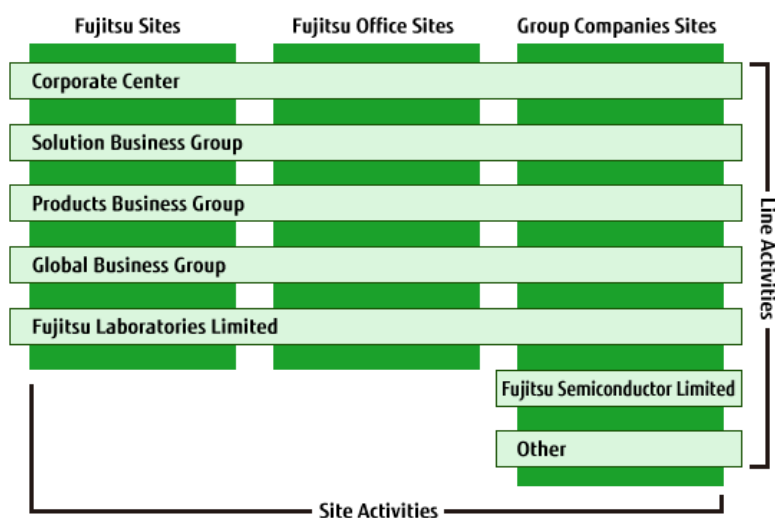
Case Study

Banksia Environmental Award Won by Fujitsu Australia and New Zealand

In November 2011, Fujitsu Australia and New Zealand (FANZ), a leading provider of green ICT solutions in Australia, won the "Banksia Environmental Award for Leading in Sustainability - Setting the Standard for Large Organizations" award, widely considered Australia's most prestigious environmental award. In bestowing this honor, the Banksia Environmental Foundation has acknowledged FANZ's contribution to sustainability over the years. Established as an NPO in 1989, the foundation promotes awareness of the importance of the environment and sustainability through its awards and related activities. The award judges commented that: "This was an extremely impressive entry, with compelling evidence that supports the integration of sustainability principles into the corporate culture. The breadth and scale of the FANZ program is comprehensive with results being reflected both internally and externally. FANZ has strong environmental credentials with the potential to influence significant energy and greenhouse gas reduction with customers."

Continuous Improvements to Environmental Management Systems

Constructing Smart EMS

Fujitsu has developed original environmental management tools such as Global Environment Database System and ISO 14001 Green Management System. The Global Environment Database System enables Fujitsu to consolidate a wide variety of information such as plans, performance and measures of environmental load. And ISO 14001 Green Management System consolidates risk and environmental information such as compliance to enhance and visualize our environmental management. We also utilize a Web-based conferencing system, a global communications platform being promoted throughout Fujitsu, for remote communication in EMS operations.

Efforts to Improve Environmental Performance

Fujitsu has been working on creating a system to evaluate the status of target achievement, compliance and operating management to improve environmental performance at factories.

We continuously make efforts to strengthen environmental governance by promoting the Fujitsu Group Environmental Protection Program (Stage VI), adopting ICT for smart EMS construction, and forming systems to improve environmental performance.

Implementing Environmental Audits

Internal Audit Implementation and Results

Internal audits are directed by the Corporate Internal Audit Unit, which is unaffiliated with any line organization, to ensure that our internal audits are fully objective and independent. The Corporate Internal Audit Unit allocates internal auditors who belong to Fujitsu or Fujitsu Group companies.

In FY 2011, we carried out internal audits for factories, offices, and other facilities at 449 locations both in Japan and overseas from June to December 2011. For this audit, we scrutinized the trends and results with the FY 2010 internal audit and the external audit and found four major points to be focused on: (1) adherence to compliance, (2) the status of efforts for the Fujitsu Group Environmental Protection Program (Stage VI), (3) the setting of environmental targets linked to our core business, and (4) human resources development plans and implementation status. Also, we continuously implement mutual audits between different sites and divisions, a program we have been working on since FY 2009. This promotes invigoration by reflecting other division's findings on our own activities.

As a result of these internal audits, we discovered 347 indicated matters, of which none were classified as major, 25 as minor, and 322 were observations.

The number of indicated matters decreased by 62 from the previous year. In terms of content, 55% involved adherence to compliance, operational control, and environmental objectives and targets. The matters concerning compliance with various laws involved industrial waste. Matters related to operational control involved failure to fully implement, or a lack of in some cases, voluntary rules. Matters related to environmental objectives and targets involved inconsistencies with upper-level policy.

External Audit and Results

In FY 2011 an external audit was carried out from September 2011 through January 2012. In Japan, we were audited by the Japan Audit and Certification Organization for Environment and Quality (JACO). JACO identified no matters for the Fujitsu Group as a whole. In addition, JACO made 77 observations for individual Group companies. Outside Japan, we were audited by DNV BUSINESS ASSURANCE JAPAN K.K. DNV also identified no matters for the Fujitsu Group as a whole, but they identified 16 minor matters and 41 observations. We have completed remedying these matters as of the end of FY 2011. Audit findings were shared throughout the Group, and we are confirming the status of these matters in the FY 2012 internal audit. ISO 14001 recertification, conducted every three years, also took place in FY 2011. Recertification was granted in March 2012.

Fujitsu started discussions with audit organizations in September 2008 about the introduction of an Environmental Performance Evaluation (ISO 14031) in our internal audit to improve the quality of our environmental activities. In FY 2011, this performance evaluation was applied on a trial basis at 13 production sites, and in FY 2012 will be extended to major manufacturing Group companies in Japan.

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 2011, there were14 events in which laws were violated and our own standards were not met and delays in appointing a person to be in charge. Most of these were (1) violations related to solid waste processing manifests or outsourcing contracts, or (2) water quality standard values being exceeded (BOD*2 excess in factory effluents).

Going forward, Fujitsu will strengthen reeducation efforts and its monitoring structure pertaining to solid waste to avoid any possible legal violations. In parallel, we will increase the number of official inspectors. Efforts around water quality will also be standardized, resulting in stricter voluntary targets at more business sites.

*2 BOD:
Biochemical oxygen demand.

Environmental Management Information Systems

To improve the efficiency and visibility of environmental management, the Fujitsu Group makes aggressive use of unique environmental management tools that take full advantage if ICT.

Use of the Global Environment Database System

The Fujitsu Group uses the Global Environment Database System (GEDS) to collect the environmental burden (performance) information for the Fujitsu Group companies and business sites worldwide and to manage plans, results, and policy information uniformly.

Global Environment Database System
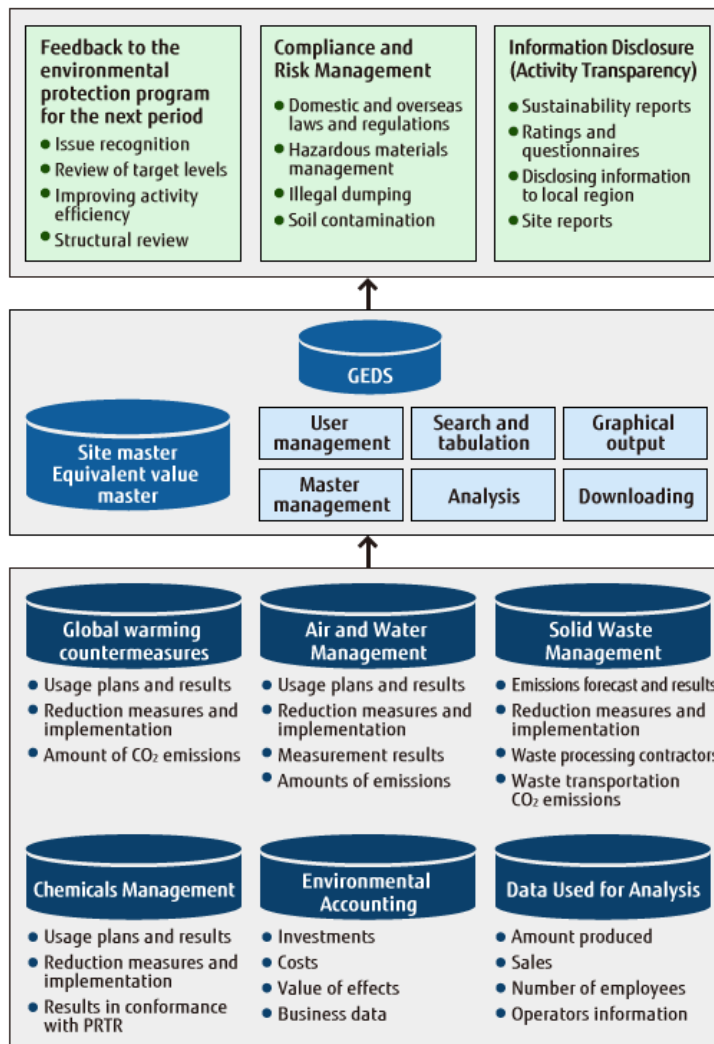
## Use of the ISO 14001 Green Management System

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; the setting of environmental management goals and objectives; and the implementation of the environmental management program itself.

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
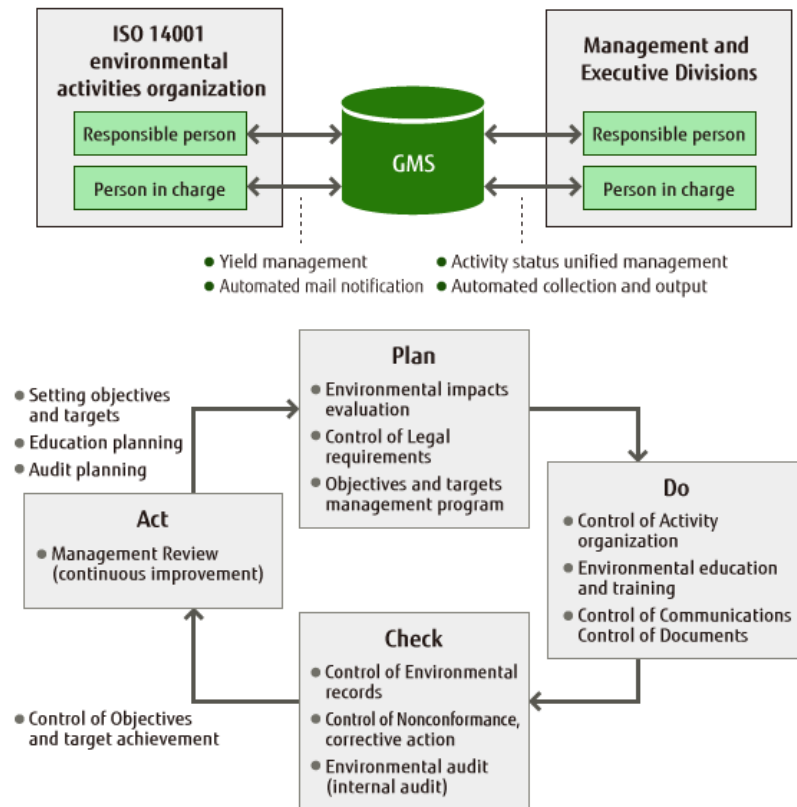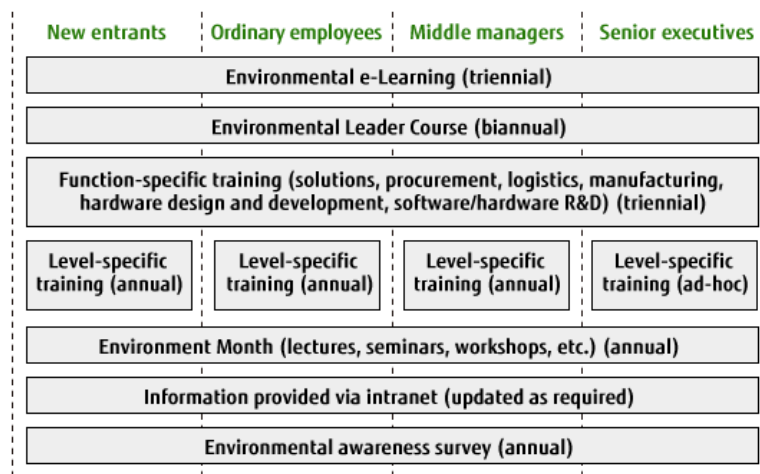
In-House Educational and Enlightenment Activities

The Fujitsu Group is implementing a wide range of environmental education and enlightenment efforts for employees in all divisions.

Our Environmental Education System

To ensure that our environmental activities take firm root through the participation of all employees, the Fujitsu Group believes it essential to inculcate and raise the environmental awareness of each and every employee to a point where it links to actual practice. Based on this belief, the Group has been carrying out environmental education and enlightenment training since 1995, based on the system described below.

In addition to having all of our employees undertake environmental e-learning once every three years to acquire a basic understanding of environmental issues, environmental education also forms a part of the general training given to new entrants when they join the company and employees at each level, including ordinary employees, middle managers and senior executives whenever they are promoted. On top of this, customized environmental training is also delivered to individual areas of the business such as sales, systems engineering (SE), software development, procurement, logistics, manufacturing, hardware design and development, and hardware and software R&D. We are implementing facilities management education and internal auditor education as professional education for employees in charge of work related to the environment.

Fujitsu's Environmental Education System

New entrants	Ordinary employees	Middle managers	Senior executives
Environmental e-Learning (triennial)			
Environmental Leader Course (biannual)			
Function-specific training (solutions, procurement, logistics, manufacturing, hardware design and development, software/hardware R&D) (triennial)			
Level-specific training (annual)	Level-specific training (annual)	Level-specific training (annual)	Level-specific training (ad-hoc)
Environment Month (lectures, seminars, workshops, etc.) (annual)			
Information provided via intranet (updated as required)			
Environmental awareness survey (annual)			

Environmental e-Learning for All Group Employees

At the same time as promoting proactive efforts for environmental protection activities by every one of our employees in our main business, in 2010 we also implemented an environmental e-Learning program for all Group employees to support the implementation of environmental protection activities that conform to the ISO 14001 international standard as well as informing of, making understood, and implementing the Fujitsu Group Environmental Protection Program (Stage VI).

The Basic Course, in which all Group employees participate, is available in 11 languages. Through it, employees learn about the Fujitsu Group Biodiversity Action Principles and the Group's efforts in the area of biodiversity conservation. In addition to the Basic Course, we have also implemented six other function-specific courses to encourage employees to engage in environmental actions appropriate to their duties as well as biodiversity conservation activities based on the Fujitsu Group Biodiversity Guidelines.

Environmental e-Learning program screenshot

Note that by implementing this education in an e-Learning format, we calculate that this will also have the effect of reducing CO2 emissions by about 6,500 tons compared to earlier concentrated education formats.

Overview of Environmental e-Learning

1. Objective

- Publicizing, understanding, and practicing the Fujitsu Group Environmental Protection Program (Stage VI)

- Encouraging every employee to make proactive efforts toward environmental protection in the course of their own work

2. Targets and Content

The program is composed of the Basic Course, in which all employees worldwide participate, and six function-specific courses. Tests are implemented after the courses to determine how well employees have understood the material, and courses are completed by earning a certain number of points on that test.

Target participants for the Basic Course: All employees and executives of Fujitsu Group at home and abroad

The course covers the relationship between our daily lives and global environmental issues, what each of us can do at work or in our day-to-day lives, trends in global environmental issues and the Fujitsu Group's efforts to address environmental issues including the Fujitsu Group Environmental Protection Program (Stage VI) and other activities, and contributions to building a society in which conserving biodiversity becomes a reality.
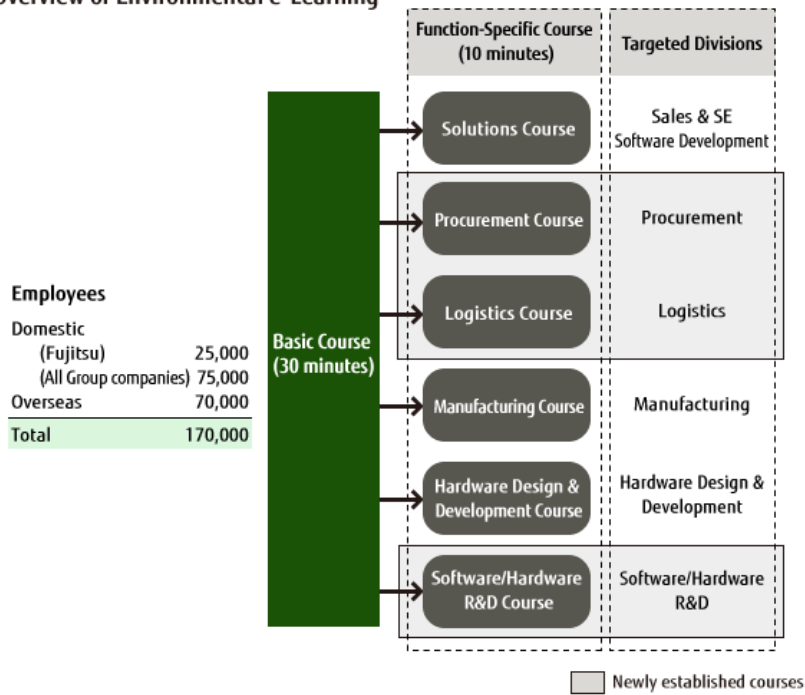
Target participants for the function-specific courses: All employees and executives of the Fujitsu Group in Japan

1. Solutions Course: Domestic sales and SE divisions, software development divisions
   Looks at providing green ICT that contributes to our customers and society, green solutions, promoting recycling of ICT products, etc.

2. Procurement Course: Domestic procurement divisions
   Reduction of CO_2 emissions in cooperation with suppliers, biodiversity conservation activities, etc.

3. Logistics Course: Domestic logistics divisions
   Reduction of CO_2 emissions in the distribution and transport process, lessening of the impact of distribution and transport on biodiversity, etc.

4. Manufacturing Course: Domestic manufacturing divisions
   Approaches and points to focus on in lessening the environmental impact of manufacturing plants (greenhouse gases, chemical substances, waste materials) and in working to lessen their burden on the environment

5. Hardware Design and Development Course: Domestic design and development divisions
   Contributing to customers through environmentally friendly product design, lessening the impact of design and development on biodiversity, etc.

6. Software/Hardware R&D Course: Domestic software/hardware R&D divisions
   Introducing an environmental perspective to the R&D process

3. Schedule / Method of Implementation

- June to December, 2010

- Using the Fujitsu Group's common learning platform "Fujitsu NetCampus," the program was rolled out successively across each company. Progress and results are managed using Fujitsu's "Internet Navigware."

Overview of Environmental e-Learning

	Function-Specific Course (10 minutes)	Targeted Divisions
	Solutions Course	Sales & SE Software Development
Basic Course (30 minutes)	Procurement Course	Procurement
	Logistics Course	Logistics
	Manufacturing Course	Manufacturing
	Hardware Design & Development Course	Hardware Design & Development
	Software/Hardware R&D Course	Software/Hardware R&D

Employees

Domestic		
(Fujitsu)	25,000	
(All Group companies)	75,000	
Overseas	70,000	
Total	170,000	

Newly established courses

Environmental Education for Engineers

The Fujitsu Group carries out a range of environmentally related education, such as equipment-dismantling training for engineers and tours of recycling centers for members of the Sales Division

Promoting Awareness Through Environment Month

The Fujitsu Group holds a number of events to raise environmental awareness among our employees in conjunction with Environment Month (June), which is sponsored by Japan's Ministry of the Environment.

Development of Environmental Learning Materials

In order to share with the outside world the environmental education expertise it has developed for its employees, Fujitsu has teamed up with Fujitsu FOM Limited to create a set of learning materials for environmental education entitled "Global Environmental Issue Keywords," and has been marketing them since May 2008 in the form of books and e-learning materials.

The program incorporates a broad spectrum of issues, including basic knowledge of global environmental issues, the environmental business of other companies, and ICT's contribution to the environment, all from the viewpoint of providing a broad understanding not only to those involved in environment-related businesses, but to all employees in the Fujitsu Group.

Global Environmental Issue Keywords book and e-Learning screenshot display

In-House Award Scheme

Fujitsu presents awards recognizing outstanding Group environmental preservation efforts.

Environmental Contribution Award and Environment Contest

To raise the environmental awareness of employees at all Fujitsu Group companies, we have operated an Environmental Contribution Awards scheme and an Environmental Contest, open to all employees, every year since 1995. Since FY 2002, Fujitsu's president has presented the top Environmental Contribution Award at the Company's founding anniversary celebration held in June every year.

In FY 2011, The top Environmental Contribution Awards were for the introduction of a system for utilizing geothermal heat at the Nagano Plant, an initiative promoting biodiversity conservation through use of multi-sensing networks, and an energy-saving initiative. In the Environmental Contest, the top award went to the project noted below, with awards also going to another 25 proposals selected from among those submitted by Group companies around the world.

Environmental Contest 1st prize - Fujitsu Sponsors a Play Pump

Special Environmental Award

Since FY 2008, the Fujitsu Group has offered a Special Environment Award program, intended to encourage Group sales and SE teams to promote the use of ICT solutions in helping customers reduce their environmental load.

The program originally focused on visualizing the effects of CO_2 reduction through introduction of ICT, and enhancing the solutions business through pursuit of such opportunities. In FY 2011, a new evaluation item was added to assess the ability to achieve customer cost reductions through energy conservation (reductions in electricity consumption). Organizations notable for their activities in these areas were recognized by Fujitsu's president at the Company's April 2012 Solutions Business Expansion Conference.

Awards ceremony

Commemorative photo