

## Environmental Management

We are continuously working to improve our ISO 14001<sup>\*1</sup>-based environmental management systems and to promote group-wide environmental management.

\*1 ISO 14001:

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, the Fujitsu Group has further strengthened its global governance. This also allows the Group to promote even more efficient and highly effective environmental activities; not only grasping our achievement status for the Fujitsu Group Environmental Action Plan 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 2012, Fujitsu has acquired global integrated ISO 14001 certification for a total of 82 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.

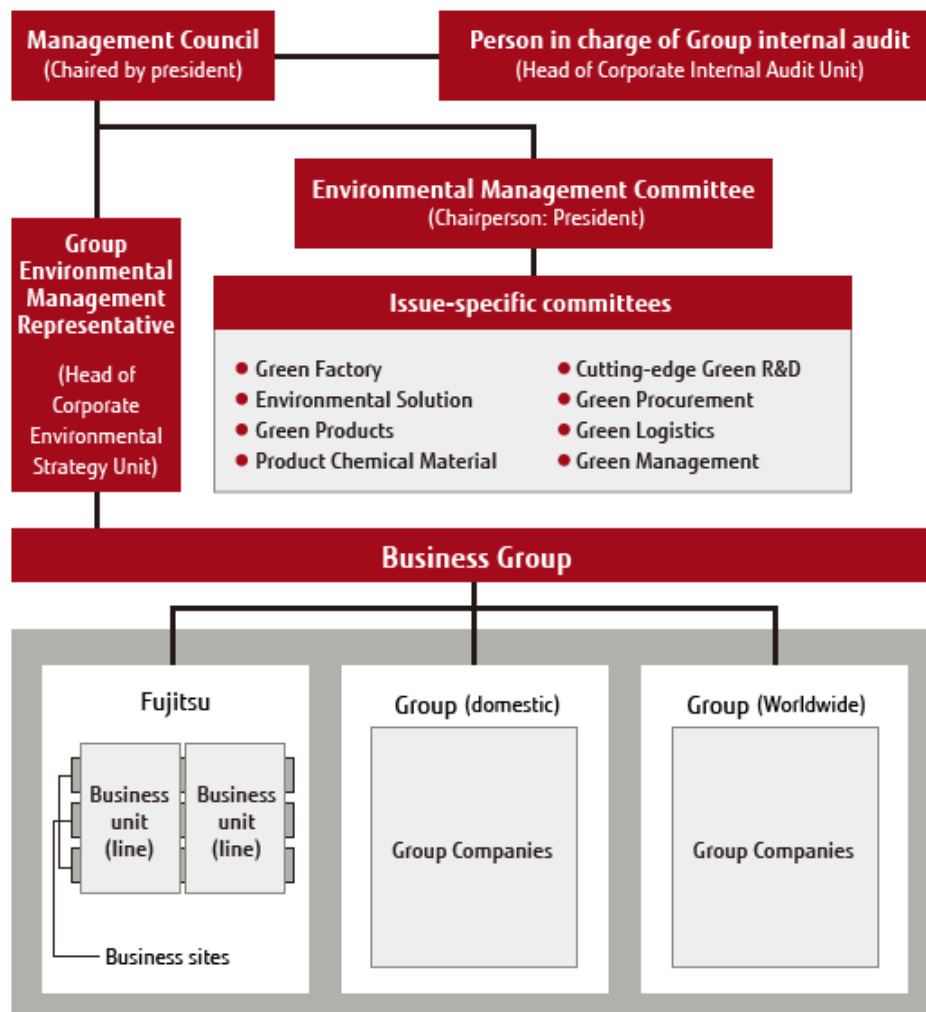
#### Environmental Promotion Structure

The final decisions on environmental management are taken at meetings of the Management Council, chaired by the president. The Environmental Management Committee, which also is chaired by the president, discusses all manner of issues related to environmental management. Its purpose is to strengthen the Fujitsu Group's environment-related governance, raise the level of the Group's environmental management, and consider medium-to-long term issues.

Under the Environmental Management Committee, we form issue-specific committees depending on the importance of the environmental issues at hand. These committees make it possible to deal with issues in a manner that enables both the swift uptake of action approaches throughout the Group, and achievement of efficiency and speed improvements.

The Environmental Management 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.

## Environmental Management Framework (as of March 2013)

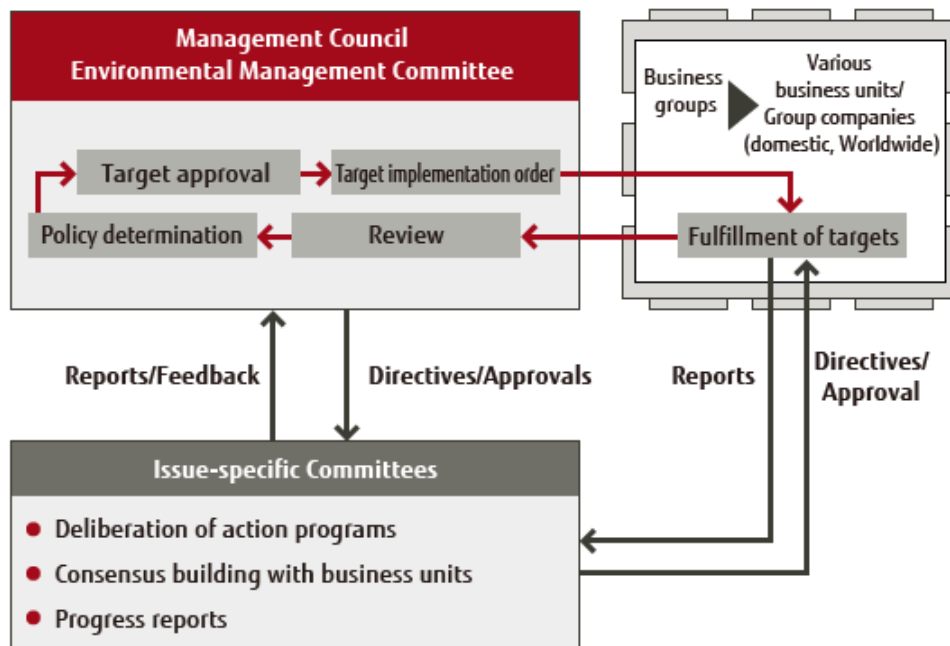


## Activity Flow

The Environmental Management Committee proposes, deliberates, and decides upon environmental matters relating to all Group companies. It determines the directions to be taken for energy usage volume, CO2 emissions reductions, ways to address environmental risk, and other medium-to-long term matters important to environmental management at an overall level. The Environmental Management Committee also conducts environmental management reviews and has approval authority for the Fujitsu Group Environmental Action Plan.

The issue-specific committees are subcommittees set up by the Environmental Management Committee to make a dedicated response to specific issues. Their main role is to discuss targets for the Environmental Action Plan 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 Management Committee.

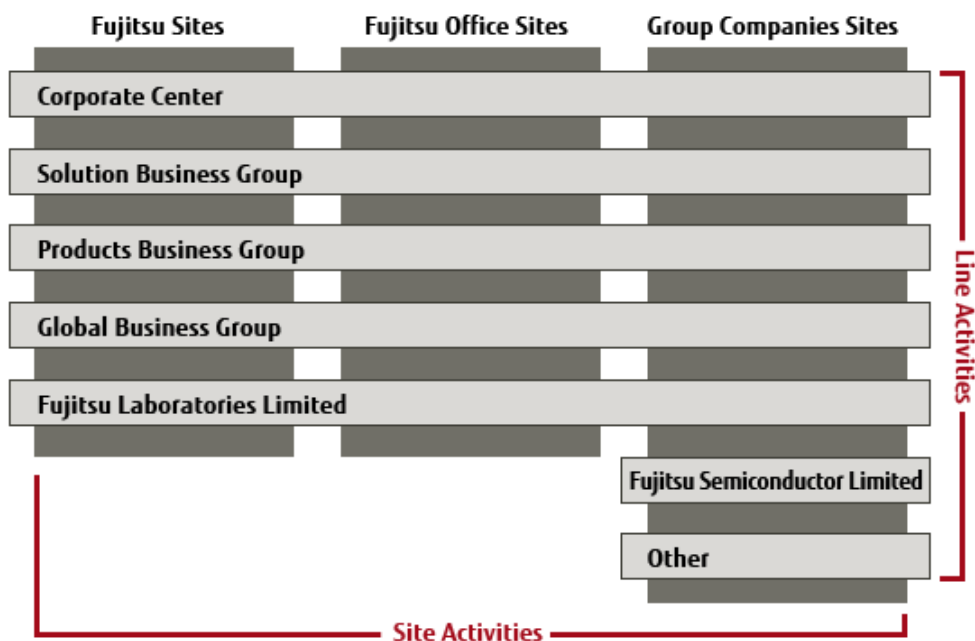
### Activity Flow



## Management Based on the Line/Site Matrix Structure

The Fujitsu Group carries out its environmental management along the same 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 eco-friendly product development and the expansion of environmental contribution 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.



- [Environmental Management : Case Study Archives](#)

## Continuous Improvements to Environmental Management Systems

### Efforts to Improve Environmental Performance

To improve our environmental management performance, we are implementing performance evaluations (ISO14031-compliant). Performance evaluations provide comprehensive feedback on matters such as progress in achieving targets, compliance with laws and regulations, and operating and management conditions. In FY 2012, we completed evaluations of all 23 of the Fujitsu Group's principal production sites.

## 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 2012, we carried out internal audits for factories, offices, and other facilities at 405 locations in Japan and 16 overseas from June 2012 to January 2013. For this audit, we scrutinized the trends and results with the FY 2011 internal audit and the external audit and found four major points to be focused on: (1) adherence to compliance, (2) achievement of environmental objectives and targets, (3) complete and thorough operational control and (4) confirmation of the status of activities being carried out by the organization that has created and operates the EMS tailored to the purpose of fulfilling all requirements of the ISO14001 standard. Also, we continuously implement mutual audits between different sites, a program we have been working on since FY 2009 to share experience among different divisions and, thereby, invigorate environmental activities.

As a result of these internal audits, we discovered 277 findings, of which none were classified as major, 26 as minor, and 251 were observations.

The number of findings decreased by 70 from the previous year. And the fact that the number of findings per audit is declining year-by-year suggests that our environmental management system has taken hold. In terms of content, 45% involved adherence to compliance, operational control, environmental objectives, targets and programs. The matters concerning compliance with various laws involved deficiencies in notifications and outsourcing agreements concerning industrial waste, and omissions from industrial waste manifests. Matters related to operational control involved deficiencies in control of waste and chemical substances. Matters related to environmental objectives and targets involved deficiencies in programs and progress management charts.

To enhance environmental activities in overseas locations, we conducted internal audits at 13 sites, including all production sites, in FY 2012. Among the indicated matters, 50% were related to "Emergency preparedness and response", "Control of documents", and "Objectives, targets and programs". At a more specific level, "Emergency preparedness and response" refers to the lack of procedures for determining what aspects of an emergency situation are clearly environmental and a lack of records of training. "Control of documents" refers to the lack of clear indications of the degrees to which prior fiscal year objectives and targets were achieved. There were also findings of an unclear separation between objectives/targets and operational control. Enhancement of local internal audit functions, however, reduced by 62.5% the number of non-conformities detected by external audits, a marked improvement from prior results.

To further enhance environmental management at overseas business sites, we conducted internal auditor training for employees responsible for advancing environmental matters. This training was held at 13 sites, for approximately 180 participants.



Internal audit being performed at an overseas site



Training for internal auditors

## External Audit and Results

In FY 2012 an external audit was carried out from September 2012 through January 2013. 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 67 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 1 major non-conformity and 5 minor non-conformities, and made 25 observations. We have completed remedying these matters as of the end of FY 2012. Audit findings were shared throughout the Group, and we are confirming the status of these matters in the FY 2013 internal audit.

An ISO 14001 regular post-certification surveillance audit was conducted in FY 2012 and approval for maintenance of our certification was granted in February 2013.

## 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 2012, there were 6 events in which laws were violated. Most of these were (1) violations related to industrial waste processing manifests or outsourcing contracts, or (2) deficiencies in notification documents.

Legal violations were greatly reduced through the horizontal sharing of information on FY 2011 findings and through training targeting personnel responsible for industrial waste. But there we still had violations, so we will move forward with thorough self-checks. With regard to industrial waste, in particular, we are developing a new approach and will select outstanding waste processors to eliminate administrative violations related to waste from offices.

## ICT-based EMS

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

## EMS Applying ICT

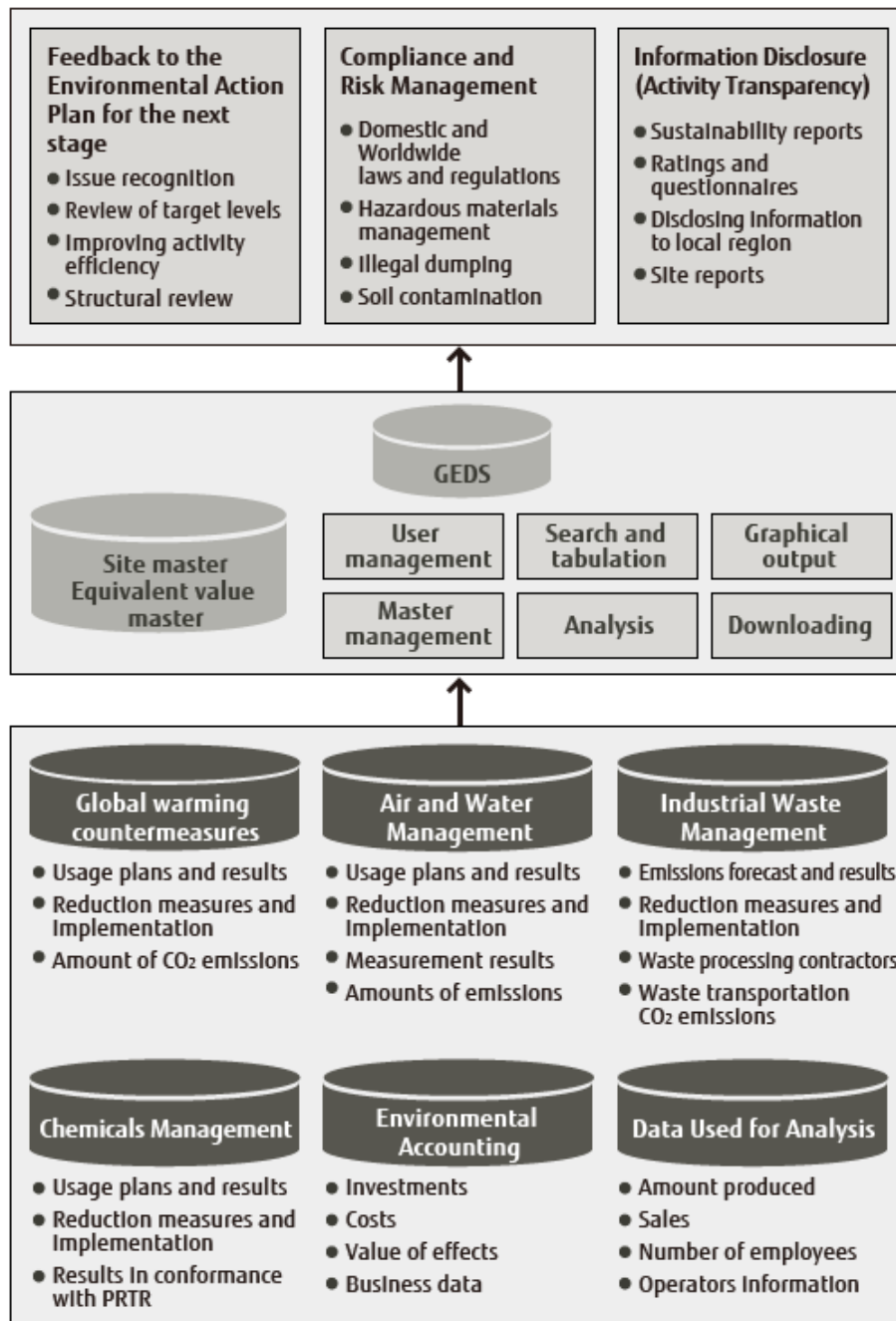
The Fujitsu Group uses proprietary environmental management tools that make the most of ICT. For example, we use the Global Environment Database System (GEDS), which can centrally manage data on plans, results, implementation status, and other matters for Fujitsu Group business sites throughout the world, and the ISO 14001 Green Management System (GMS), which supports EMS operation by centrally managing data on compliance and risk management conditions, to make environmental management efforts more efficient and visible.

In addition, the communications platforms of all Fujitsu Group companies are used for EMS operations. Video conference systems, for example, are used for regional seminars and other forms of smart communication for EMS operation.

## 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 Fujitsu Group companies and business sites and to manage plans, results, and policy information uniformly.

### Global Environment Database System

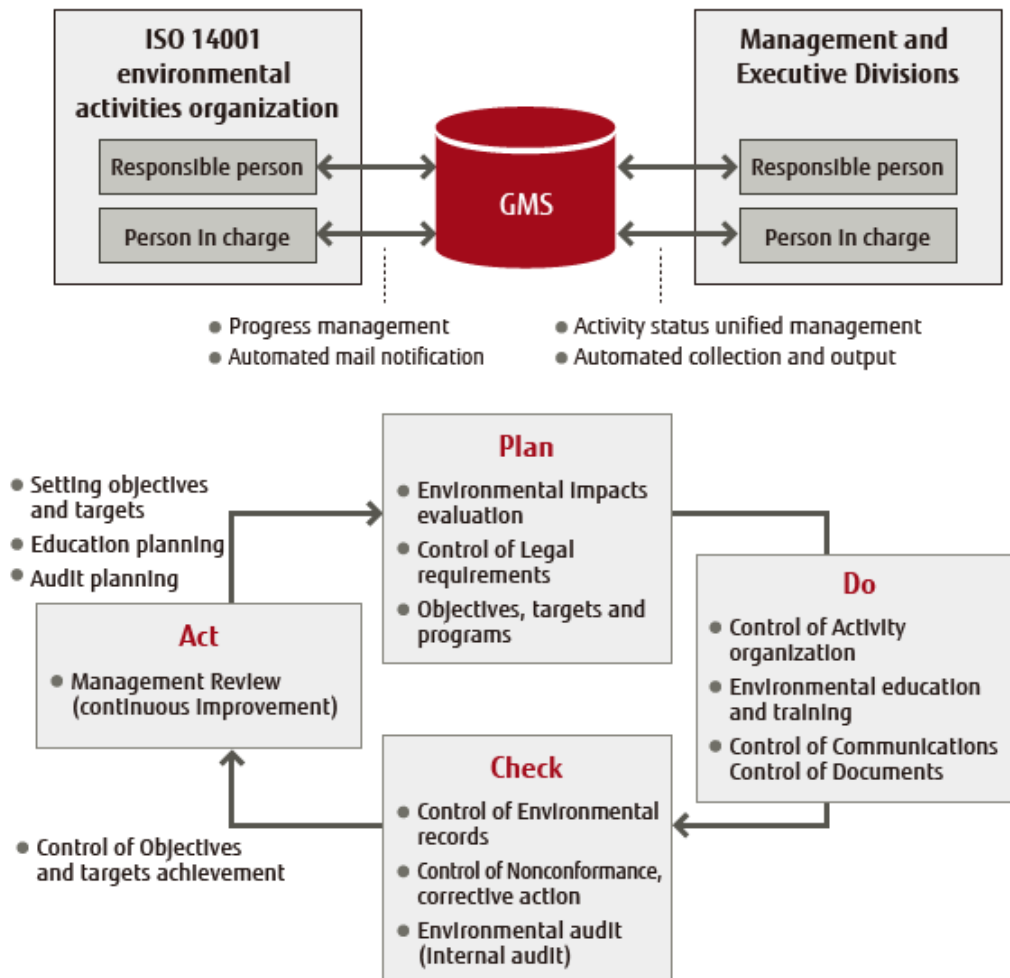


## Use of the ISO 14001 Green Management System

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 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





## In-House Educational and Enlightenment Activities

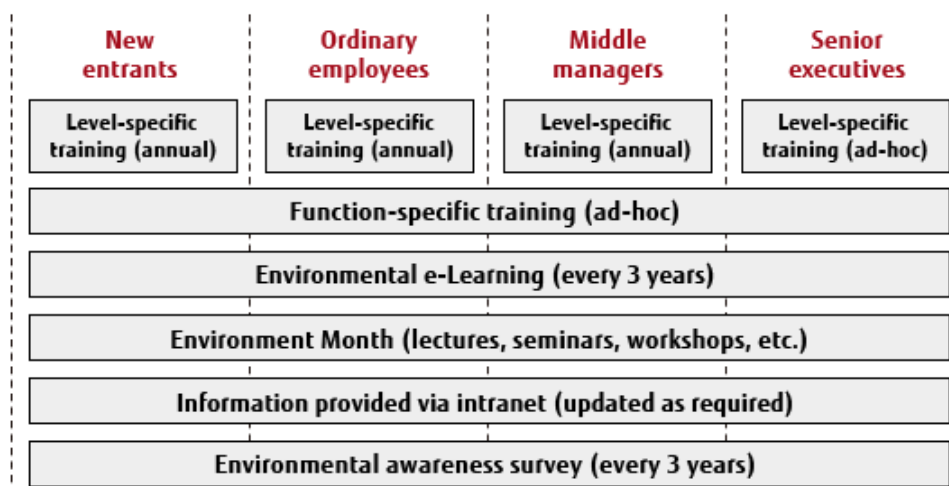
The Fujitsu Group believes heightened awareness, and the initiatives of individual employees are critical to the pursuit of environmental management and, therefore, we implement various forms of environmental education and enlightenment.

### Our Environmental Education System

To ensure that our environmental management takes 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 comprehensive 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 management, we conduct environmental education for new entrants, ordinary employees, middle managers and senior executives, according to their job responsibilities. 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 R&D. We are 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 in their work, and to facilitate our practice of environmental management in conformity with the ISO14001 international standard and promote general knowledge, understanding, and practice of the Fujitsu Group Environmental Action Plan, we conduct environmental e-Learning for all Group employees. A new version of environmental e-Learning is planned for implementation given that FY 2013 is the first year of the Fujitsu Group Environmental Action Plan(Stage VII).



Environmental e-Learning program screenshot

## Environmental Education by Division

### Recycling Center Tours for Sales and Design Divisions

Environmental business seminars were held on May 23 and May 28, 2013 for sales divisions. The purpose of these seminars was to have participants observe with their own eyes Fujitsu's recycling initiatives and experience firsthand the dismantling of products and separation of materials, to improve their business skills by having them share in an understanding of environmentally conscious manufacturing. We have conducted these seminars every year since 2009 at Fujitsu recycling centers located throughout Japan and have so far hosted over 400 participants.

### Workshops for Sales Divisions

On June 26 and July 9, 2012, we conducted workshops on the theme of contributing to the green development of customers. These workshops were held for sales divisions and were attended by 43 participants.

After considering the topic of "starting points for customers and starting points for the global environment," participants broke into groups, and discussed and made presentations on the topics of "what is necessary to advance toward a sustainable future together with customers" and "effective initiatives that Fujitsu could take and methods for approaching customers."

### Environmental Proposal Training for Sales and SE Divisions

We have held approximately 50 training sessions, attended by over 1,000 participants, at sales offices throughout Japan to enhance the attractiveness of proposals to customers by adding an environmental element. In this training, we showed participants how to use the EcoCALC Web tool for calculating environmental contributions, and demonstrating the impacts of ICT solutions, in terms of CO2 emissions reductions, energy savings, and cost savings. We also showed participants how to incorporate the environmental-burden-lowering effects of ICT and environmental labels in proposals, and provided examples of outstanding environmental proposals.

## 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.

### Case Study

#### Initiatives at the Kawasaki Plant

Since 2009, the Kawasaki Plant has been collaborating with Kawasaki City, Kawasaki-shi park green tract of land association, and Kawasaki Frontale, on Carbon Challenge (CC) Todoroki, an initiative the four parties created to reduce CO2 emissions.

One of the activities sponsored by CC Todoroki was the Eco Kurashiko Fair held at Todoroki Ryokuchi Park on June 23, 2012. The purpose of the event was environmental education on a low-carbon society, resource circulation, and coexistence with nature, and the Kawasaki Plant participated with a booth where children could rescue dragonfly larvae left in a pool.



Eco Kurashiko Fair



Dragonfly larvae rescue event for children

## 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 environmental contribution efforts within the Group to raise awareness and promote activities that benefit the environment.

### 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 conducted an Environmental Photo Contest, open to all employees, every year since 1995.

Numerous entries were put forth for the FY 2012 Environmental Contribution Awards. Among them were efforts in areas like making environmental contributions to customers through the provision of products and services, reducing internal environmental burden, and social contribution activities. In the end, however, the FY 2012 Environmental Contribution Awards went to entries including an energy management system for mobile base stations; a robot class titled, "Future Dreams," to be held for families as a disaster recovery project; and approaches for reducing electricity consumption. For the Environmental Photo Contest, many 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. The contest's 1st Prize was presented to the photo appearing to the right, but prizes also went to 22 other entrants, as well.



Winner of the Environmental Photo Contest 1st Prize "Turtle from the highway"

### Special Environmental Award

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

New evaluation items were added in FY 2011 and FY 2012. The former included introducing ICT to make the effects of CO<sub>2</sub> reduction visible, enhancing the solutions business through pursuit of such opportunities, and pursuit of business discussions aimed at achieving customer cost reductions through energy conservation (reductions in electricity consumption). Added in FY 2012 was the pursuit of resource savings through the use of ICT. Organizations notable for their activities in these areas were recognized by Fujitsu's president at the Company's April 2013 Solutions Business Expansion Conference.



Award ceremony



Commemorative photo of award winners and Fujitsu's president