

Reducing the Environmental Burden of Factories and Business Offices

Advancing eco-friendly business activities through comprehensive environmental protection activities in our factories and offices

The Thinking behind Our Activities to Reduce Environmental Burdens in Factories and Offices

The Group continually strives to reduce the quantities of materials and energy used in its operations, as well as the amounts of chemicals and waste materials generated and atmospheric pollutants emitted, while trying to minimize manufacturing costs. It also takes a rigorous approach to complying with laws and regulations and eliminating environmental risks.

We are also continually trying to raise our standards by introducing systems for comprehensively evaluating these activities, rendering their level of eco-friendliness 'visible,' and extending them throughout the Group.

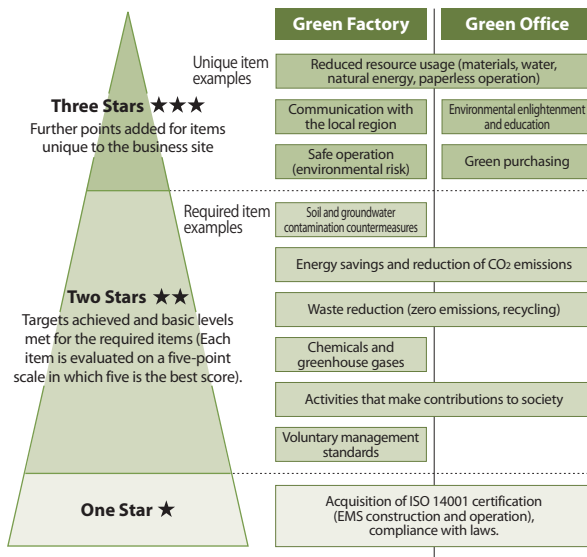
Applying the Green Factory and Green Office Systems

To reduce even further the environmental burden of our factories and business offices, we initiated in fiscal 2007 our Green Factory and Green Office systems, designed to comprehensively evaluate our level of eco-friendliness and autonomous initiatives and render them 'visible.'

In our Stage V Environmental Protection Program, we propose achieving a two star (★★) or higher level in the Green Factory or Green Office system at every one of our relevant business sites in Japan by the end of fiscal 2009, and we continue working to achieve the certified levels and improve and heighten our eco-friendliness.

In fiscal 2008, 40 (81%) of our factories subject to the Green Factory system and 338 (77%) of our offices subject to the Green Office system achieved a two-star or higher ranking. Of these, 118 sites (two factories and 116 offices) that had promoted their own independent initiatives reached the three-star level.

Certification Levels



Using Green Process Activities to Reduce the Environmental Burden in our Manufacturing Processes

The Group promotes Green Process activities with the aim of further lightening our environmental burden by reducing energy usage in our factories, rigorously controlling chemicals, reducing waste, etc.

These activities are conducted in parallel with cost-reduction activities, and consist of initiatives such as optimizing the amount of energy and raw materials used in manufacturing processes and switching to alternatives with a lower environmental burden. In these activities, we first identify the total input of materials (raw materials, chemical additives, etc.) and energy into the process, together with their purchasing costs, and then establish our own

An Example of a Green Process Activity

Improving Final Testing in a Semiconductor Production Process (Fujitsu Integrated Microtechnology Ltd)

At Fujitsu Integrated Microtechnology Ltd's Aizu Plant (which offers LSI package assembly and testing services), the components of the testers used in the testing process, and their method of disposal, were improved as part of the factory's Green Process activities.

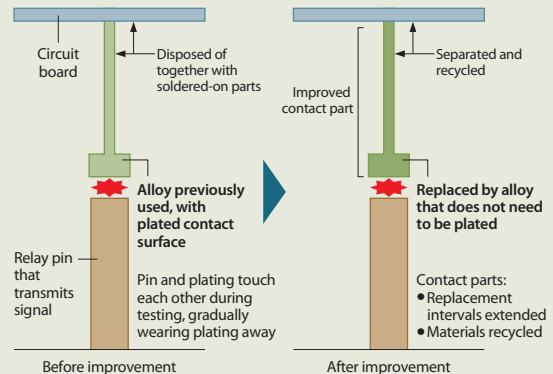
For example, a plated alloy was used as the material for the contact parts used in the test measurements, and the plating wore off slightly with every measurement, eventually leading to spurious results. Changing the material to a different alloy that requires no plating alleviated this problem.

It is still necessary to replace the contact parts periodically, but this used to be done by replacing the entire circuit board (with the contact parts soldered onto it) and throwing the old one away. Now, the worn-out contact parts are removed from the board, and both the board and the parts are recycled.

Measures like this have enabled the factory to purchase new parts and replace old ones far less often, and (by recycling) to greatly reduce the amount of material disposed of. In addition, costs have gone down because new parts are purchased less frequently.

As a result of a series of detailed improvements like this carried out on the testing process, both the CG value and costs have decreased by approximately 11%.

Improving Contact Parts and their Disposal Methods



original CG (Cost Green) index*. We then set quarterly reduction targets (planned values) at the production line level for each factory and evaluate the degree of attainment of these targets while rotating through the PDCA cycle. Based on the results, we try to continually improve our production processes through initiatives like introducing new manufacturing technology, revising our processes, and improving the work procedures.

*** CG index: Cost/Green index**

This index describes the product of input volume used per product, the cost, and the environmental impact (on a scale from 1 to 10).

Reducing the Amount of Waste Generated

Basic Approach

In working towards creating a recycling-minded society, we have adopted a basic 3R policy (reduce, reuse and recycle) and in aiming for an even higher level of 3R achievement, we encourage all our employees to separate waste materials into different categories for more effective recycling.

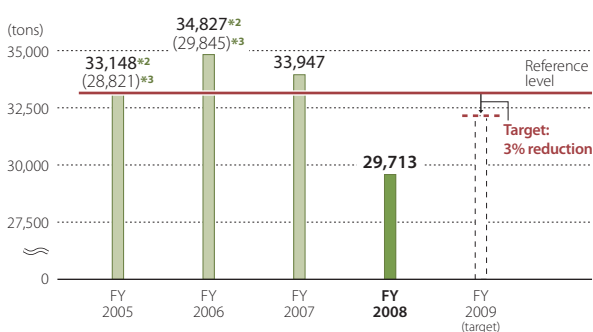
Fiscal 2008 Performance

In the Stage IV Environmental Protection Program, we set the goal of reducing the amount of waste generated by our business operations by 3% compared to fiscal 2005 levels by the end of fiscal 2009.

The total amount of waste generated by the Fujitsu Group came to 29,713 tons in fiscal 2008. While the results for the previous fiscal year corresponded to a 12.5% decrease, they corresponded to a 10.4% decrease compared to fiscal 2005.

This was due not only to converting things like waste paper and waste acid into valuable resources and using the sludge from cleaning tanks as fertilizer, but also to significant market changes.

Amounts of Waste Generated*1



*1 Statistics for eight Fujitsu sites and 32 Group companies.

*2 The values for 2005 and 2006 include the values for Fujitsu Semiconductor Technology, which was consolidated starting in 2007.

*3 Values in parentheses are for the range that was reported in fiscal 2006.

Basic Policy for Chemical Substances Management

Basic Approach

We have established "Prevention of environmental risks that could lead to environmental pollution or adverse health effects due to the use of harmful chemical substances" as our basic policy for chemical substances management, we manage the amounts used for about 1,200 chemicals, and we work to reduce the amount discharged and implement appropriate management at every business site.

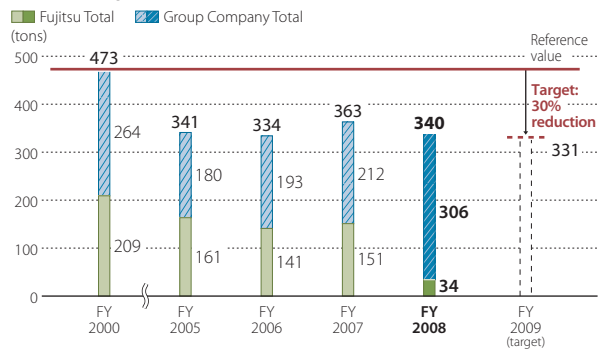
Results for Fiscal 2008

In our Stage V Environmental Protection Program, we propose the target of reducing VOC atmospheric emissions from business sites by 30% from fiscal 2000 levels by the end of fiscal 2009.

In addition to aiming for thoroughgoing and appropriate management of the target VOC chemicals and review of our manufacturing processes, in fiscal 2008 we also implemented reduction measures such as installing organic solvent collection units in semiconductor plants. As a result of these efforts, the total VOC atmospheric emissions for the whole group in fiscal 2008 was 340 tons, which corresponds to a 28% reduction from fiscal 2000 levels.

Although we have not set targets for target PRTR substances, we are managing the amounts handled and the amounts emitted.

VOC Atmospheric Emissions



* Because the Electronic Device Division became a Group company, a change in the proportion has arisen in fiscal 2008

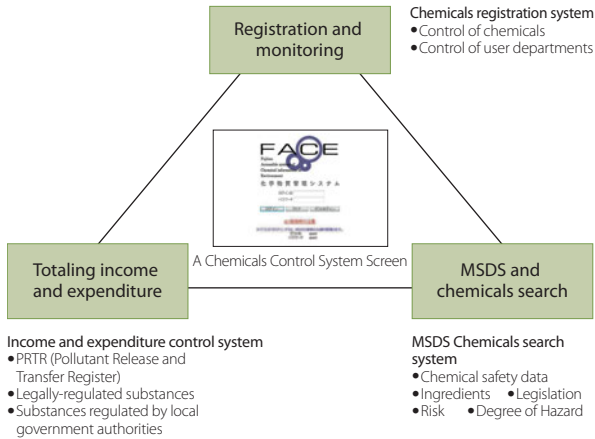
Operation of the Chemicals Control System

The Fujitsu Group operates the Chemicals Control System.

Because this can be used not only to register and monitor chemicals at every site but also to manage Materials Safety Data Sheets (MSDS) and control income and expenditure in conjunction with purchasing data and inventory control, it is helping the Group to strengthen its chemicals control and make it more efficient.

Reducing the Environmental Burden of Factories and Business Offices

Overview of Chemicals Control System



Comprehensively Assessing Risk

The Group has until now carried out periodic disaster-prevention inspections of the buildings, facilities and environmental equipment at all of its sites, using teams of facility specialists and environmental experts, to prevent the emergence of risks due to deterioration or natural disasters such as earthquakes, typhoons and heavy rainfall.

However, because of the current importance of ensuring operational continuity, the Group has recently commenced new third-party verification programs, adding teams specialized in operational continuity, safety/hygiene and risk finance to address potential risks from all possible aspects, not just from the conventional approaches for facilities and the environment. We intend to continue these activities with the aim of further lowering the risks associated with our buildings and equipment.

Responding to Soil and Groundwater Pollution

We have reviewed our internal rules established in fiscal 2006 in response to soil and groundwater problems and will handle such problems based on these revised rules for soil and groundwater surveys, policies, and disclosure.

In the future, at the same time as performing planned surveys and, if pollution is discovered, implementing cleanup operations and countermeasures appropriate for the conditions at each business site, we will also disclose relevant information in collaboration with government authorities.

The following website gives an overview of our initiatives to combat soil and groundwater pollution, together with the results of our surveys of groundwater pollution at our sites in Japan and the status of our cleanup operations at those sites:

Our initiatives to combat soil and groundwater pollution (in Japanese)
<http://jp.fujitsu.com/about/csr/eco/factories/gwater/>

Status of New Soil and Groundwater Pollution Measures Undertaken in Fiscal 2008

In fiscal 2008, as a result of a voluntary survey we performed, we found soil and groundwater contamination at two business sites. For both of these, we reported the state of the contamination and explained the countermeasures we would take to the relevant authorities and the local citizens.

Sites Continuing to Undertake Cleanup Operations and Institute Countermeasures in FY 2008 Stemming from Past Business Activities

We have dug wells to monitor the influence outside our sites of contamination due to groundwater at business sites where soil or groundwater contamination has been found. We continuously monitor those wells. In fiscal 2008, these measures were continued at five sites.

The table below lists the largest of the most recent measurements for chemicals whose measurements are recognized to have exceeded legal limits in fiscal 2008 stemming from past business activities.

Site Name	Location	Cleanup and countermeasure status	Monitoring well maximum value (mg/ℓ)		Regulation value (mg/ℓ)
			Substance	Measured value	
Sites Where Groundwater Pollution Was Confirmed before FY 2008					
Kawasaki plant	Kawasaki, Kanagawa Prefecture	We are continuing to cleanup VOCs by pumping and aeration.	1, 1-dichloroethylene	0.024	0.02
			Cis-1, 2-dichloroethylene	7.4	0.04
Suzaka plant	Suzaka City, Nagano Prefecture	We are excavating and removing contaminated soil	PCB	0.0006*	Must not be detected.
Oyama plant	Oyama City, Tochigi Prefecture	We are continuing to cleanup VOCs by pumping and aeration and other methods.	Cis-1, 2-dichloroethylene	3.589	0.04
			Trichloroethylene	0.485	0.03
Nagano plant	Nagano City, Nagano Prefecture	We are continuing to cleanup VOCs by pumping and aeration	Cis-1, 2-dichloroethylene	0.24	0.04
Shinetsu Fujitsu	Shinano machi, Kamiminodhi Gun, Nagano Prefecture	We are continuing to cleanup VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	0.18	0.04
			Trichloroethylene	0.067	0.03
Sites Where Groundwater Pollution Was Newly Confirmed in FY 2008					
Fujitsu Optical Components	Tochigi Prefecture Oyama	Continuing VOC cleanup operations by means of pumping and aeration	Cis-1, 2-dichloroethylene	0.68	0.04
			Trichloroethylene	0.340	0.03
Sites that Have Completed Cleanup Operations and Continue to Monitor Groundwater					
Old Minami-Tama Factory	Tokyo Inagi	Cleanup using the in-situ iron filings admixture method (iron filings injection) has been completed. The groundwater is now being monitored	Cis-1, 2-dichloroethylene	Below threshold	0.04
			Tetrachloroethylene	Below threshold	0.01

* Was detected in April 2008, but has not subsequently exceeded limit

Reducing the Environmental Burden in Offices

The Fujitsu Group also promotes environmental activities in its administrative offices, saving energy, working toward zero waste emissions and contributing to society and, of course, ensuring legal compliance. In fiscal 2007, we began operating our Green Office System, with the aim of instilling even more vigor into these activities and raising them to even higher levels. Under this system, the level each office has achieved in its environmental activities is evaluated and awarded one-to-three stars. Our target is to have all of the offices that come under this system achieve at least a two-star ranking by the end of fiscal 2009 (see page 63).

In this way, we plan to render the details of the activities carried out by our offices 'visible,' construct databases that allow the activities to be shared with and rolled out to other offices, and continue to raise the level of environmental activities throughout the Fujitsu Group.

On-Site Waste Disposal Auditing

One of the most important pieces of environment-related legislation applying to all offices in Japan is the 'Law on Waste Disposal and Cleaning.'

To confirm that IT equipment and other types of industrial waste are being properly dealt with, we operate a system we have formed to perform standardized Group-level checks of the periodic on-site audits carried out at the Fujitsu Recycling Centers that have selected to dispose of in-house IT equipment. Specifically, a member of the Fujitsu Group Environmental

Division visits the recycling center once a year with the person in charge of waste disposal from the relevant office, using a standardized checklist to check the documentation and the on-site disposal operation itself.



An On-Site Waste Disposal Audit in Progress

Creating a Database of Environmental Activity Measures, and Utilizing Checklists

By operating the Green Office system, we survey energy-saving, waste reduction and paper reduction measures and build them into a database, which we then use to make checklists.

These checklists are proving useful not only as materials for considering the measures to adopt when our offices set their environmental objectives and targets but also for invigorating and improving the activities by making it possible to 'see' operational improvement issues and measures that require investment.

Conducting a Field Survey in Response to the Revised Energy Conservation Law

The promulgation of the revised Energy Conservation Law in Japan on 30th May 2008 made it necessary for administrative

offices, like other sites, to identify their energy usage.

In order to respond readily to this requirement, we used the operation of the Green Office system to investigate and identify matters such as the theoretical and actual value of the electricity allocation (apportioning) method and the positioning of meters in all the relevant offices.

A Green Office Example

Constructing the First Nationwide Paper Recycling System in Japan

Although the Fujitsu Group has always worked hard to recycle as much waste paper as possible, a new fact-finding survey of the relevant offices based on the Green Office system revealed that approximately 20% of confidential documents and 30% of general waste paper was not being recycled, and that our regional offices and branch offices were using various different methods of recovering and disposing of paper waste. In order to resolve these issues and achieve zero emissions of waste paper in our offices, the Group began to construct and operate Japan's first nationwide paper recycling system.

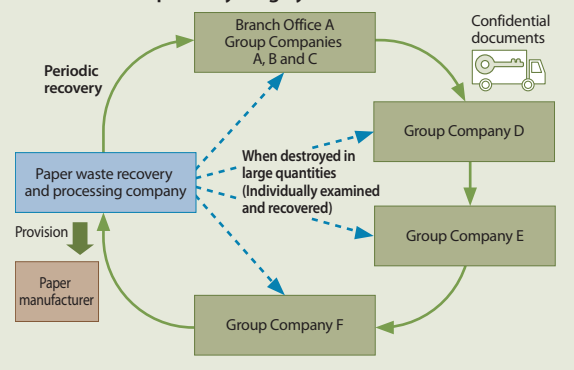
Under this system, paper waste recovery and recycling companies were integrated region by region, and Fujitsu established its own original system for recovering and recycling confidential documents, rigorously enforcing its own domestic standards for such documents (rules specifying recovery frequency, processing methods, preservation of confidentiality, etc.) to ensure both a high recycling rate and high security. We also greatly increased the recovery and recycling rates for general waste paper.

During fiscal 2009, we plan to extend the application of this system to 79 Fujitsu sites and to 276 sites and ten neighboring factories of 53 Fujitsu Group companies in Japan. We intend to use this initiative not only to reduce our environmental burden but also to decrease our transportation, processing and other costs and lower our security risks.

Internet Press Release: Japan's First Nationwide Paper Recycling System Constructed

<http://www.fujitsu.com/global/news/pr/archives/month/2009/20090317-01.html>

Flowchart of Paper Recycling System



With Our Customers

With Our Employees

For Our Shareholders and Investors

With Our Business Partners

With Global and Local Communities

For the Environment