Reducing Environmental Burdens at the Factory

We promote comprehensive environmental protection activities based on the Fujitsu Group Environmental Protection Program (Stage VI) at the factories that perform our manufacturing.

Approach to Reducing Burdens at the Factory

The Group continually strives to reduce the quantities of materials, water resources, and energy used at its factories, 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.

Promotion of Green Process Activities in the Semiconductor Fabrication Process

In the Fujitsu Group, we promote Green Process activities, which implement, in coordination with cost-saving activities, measures such as optimizing the energy and amount of raw materials used in manufacturing processes and switching to alternative components with lower environmental burdens.

Previously, we promoted Green Process activities at all Fujitsu Group manufacturing sites. However, starting in FY 2010, we have, based on the past results of these activities, specialized these efforts for semiconductor fabrication factories that require particularly large inputs of raw materials such as chemical substances. We are also promoting activities at other manufacturing sites that focus on facilities and process improvements and on new technology development in the manufacturing areas (mounting, assembly, and testing processes) which we established in FY 2008.

In the Green Process activities at semiconductor fabrication factories, as we did before, 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 original CG (Cost Green) index*. Based on this, we then set quarterly or semiannual reduction targets (planned values) at the production line level for each factory and evaluate the degree of attainment of these targets while going 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.

Also, for activities other than those for manufacturing processes at factories, if promoting the activity in coordination with the manufacturing process would be more efficient, we adopt the CG index (Cost/Green index) approach in those activities as well.

* **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).

Example of a Green Process Activity
•Fujitsu Integrated Microtechnology Ltd.

Reducing Industrial Waste by Processing Waste Plating Solution at the Factory Itself

At Fujitsu Integrated Microtechnology, which handles the Fujitsu Group semiconductor product packaging and test processes, each division within the factory sets its own targets for the Green Process activities it promotes.

For example, at the Kyushu plant, when we moved the previously subcontracted plating process in house, we decided to process some of the waste plating solution that had previously been subcontracted for processing as industrial waste to a vendor by using liquid waste processing facilities within the plant and so reduced the amount of liquid waste shipped out of the plant.

To process waste plating solutions within the plant, we installed new waste plating solution piping and at the same time as asking the plant builder for opinions on the load it would impose on the wastewater processing equipment, we repeatedly tested to determine the optimal values for conditions such as pH adjustment and the amount of processing chemicals added for the amount of liquid waste entering the equipment.

As a result of these efforts, we reduced both the CG value and costs by 89.4% on average compared to the previous method.

Reducing the Amount of Waste Generated

Basic Approach

Working towards a recycling-minded society, our 3R* policy encourages all employees to separate waste materials into different categories for effective recycling.

* **3R**: Reduce, Reuse, and Recycle

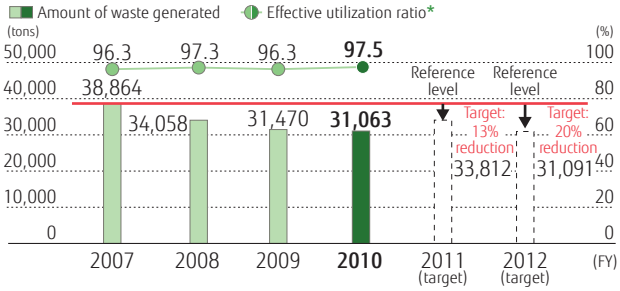
FY 2010 Performance

In Fujitsu Group Environmental Protection Program (Stage VI), we set the goal of reducing the amount of waste generated by our business operations by 20% compared to FY 2007 levels by the end of FY 2012.

We generated 31,063 tons of waste in FY 2010, which was a 1.3% reduction from the previous fiscal year's level and a 20.1% reduction from the FY 2007 level. The reasons for these reductions include the conversion of waste paper and waste acid to valuable materials.

These results include the Japanese companies FDK TWICELL and FDK Tottori, which have become consolidated companies as of this fiscal year.

Amount of Waste Generated



* This ratio includes waste materials that are the object of zero emissions policies including ordinary waste (Japan only).

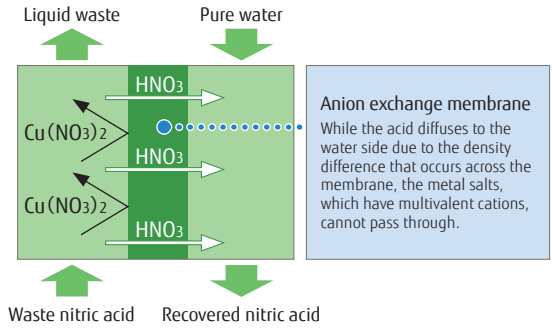
Example of a Waste Generation Reduction Activity
•Shinko Electric Industries Co., Ltd.

Recovery and Reuse of Nitric Acid Waste in the Plating Process

We use nitric acid to strip off and remove copper and nickel that has adhered to plating jigs and plating tanks at the Shinko Electric Industries Co., Ltd. Wakaho plant, and process that acid as liquid waste containing dissolved metals.

By purifying and concentrating this liquid waste using a diffusion dialysis method, we made it possible to recover and reuse the nitric acid. As a result, we were able to reduce the amount of nitric acid used by about 1,000 tons per year.

Nitric Acid Recycling Using Diffusion Dialysis



Reducing Water Use

Basic Approach

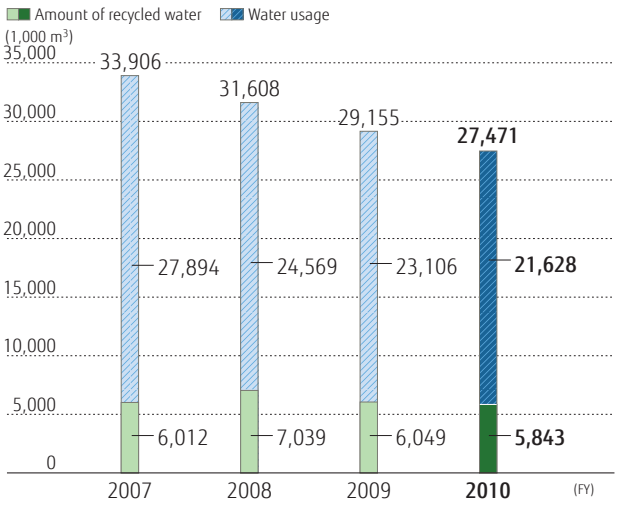
We are working to reduce our use of water resources through recycling and reuse of service water, the use of rainwater, and other measures.

Results for FY 2010

Our water use for FY 2010 was 21,628 thousand cubic meters. This was a 6.4% reduction from FY 2009 and a 12.0% reduction from FY 2008.

The ratio of recycled water to total water use was 27.0% in FY 2010, which was an increase from the 26.2% ratio in FY 2009.

Trends in Water Use



Reducing Chemical Substance Emissions

Basic Approach

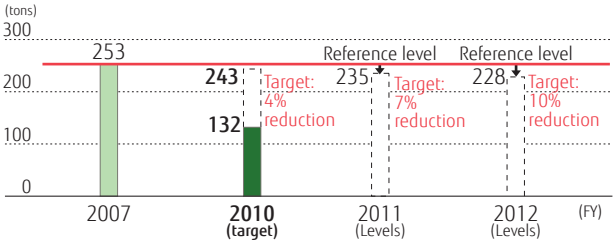
Prevention of environmental risks that could lead to environmental pollution or adverse health effects due to the use of harmful chemical substances has been established as our basic policy for chemical substances management. We manage the amounts used for about 1,300 chemicals, and we work to reduce the amount discharged and implement appropriate management at every business site.

Results for FY 2010

We set the goal of reducing emissions of specific chemical substances by 10% compared to FY 2007 by FY 2012 in the Fujitsu Group Environmental Protection Program (Stage VI).

Emissions of specific chemical substances by the whole Fujitsu Group in Japan in FY 2010 were 132 tons, which was a 48% reduction compared to the FY 2007 reference year.

Trends in Emissions of Specific Chemical Substances*



* **Specific chemical substances**: Of the substances that are the object of VOC and PRTR regulation, those for which the amount handled is at least 100 kg/year, and one substance selected from the top three substances in emission levels for the reference year.

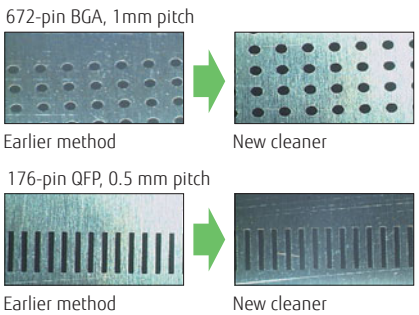
Example of Reducing Specific Chemical Substances

Reducing VOC Emissions by Substitute Metal Mask Cleaners

We have been working since 2005 to reduce VOC emissions at the Fujitsu Nasu plant, which mainly manufactures cell phones and cell phone base stations.

Among VOCs of concern, we previously used 1-methoxy-2-propanol as a cleaner for the metal masks used when printing solder paste on printed circuit boards at the Nasu plant. As the result of evaluating an isoparaffin family hydrocarbon solvent that does not contain this substance, we determined that the cleaning ability of this solvent is not inferior to that of the earlier cleaner. In July 2010, we started switching over to non-VOC cleaners and succeed in completely eliminating the use of 1-methoxy-2-propanol.

Comparison of Metal Mask Cleaning Quality
The same quality level was achieved after switchover (lower photograph).



Reducing Environmental Burdens at the Factory

Environmental Liabilities

We intend to be a corporate group that accurately forecasts and evaluates today the extent of its environmental liability tomorrow, that does not defer settlement of this liability to a later date, and that discloses information to its stakeholders on the soundness of the Group from a medium- to long-term perspective. To achieve this, at the end of FY 2010 we recorded as a liability on the Group's consolidated balance sheet 5.38 billion yen soil-pollution cleanup costs, high-level PCB waste disposal costs, and asbestos processing costs during facilities demolition. Based on data previously acquired, this total is the amount we calculate to be necessary for the Fujitsu Group in Japan to carry out these tasks.

For processing waste with high levels of PCBs (transformers and capacitors), we have registered in advance with Japan Environmental Safety Corporation (JESCO), which processes PCB waste under Japanese government supervision, and perform this processing based on JESCO plans.

Responding to Soil and Groundwater Pollution

We have reviewed our internal rules established in FY 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.

WEB 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 FY 2010

A voluntary survey in FY 2010 revealed soil and groundwater contamination at one site. We reported the state of contamination at this site and explained our countermeasures to local citizens and authorities.

In FY 2010, we completed the soil and groundwater decontamination work started in 2007 at the Suzaka plant and reported its completion to the local citizens and authorities. We will continue to perform periodic groundwater monitoring in the future.

Contaminated soil removal from an underground storage tank at the Suzaka plant

Measures to Purify Soil and Groundwater Pollution Due to Past Business Activities

We have dug wells to monitor groundwater contamination near our sites where soil or groundwater contamination has been found. We continuously monitored seven such sites in FY 2010.

The table below lists the largest of the most recent measurements for chemicals whose measurements are recognized to have exceeded legal limits in FY 2010 stemming from past business activities.

Business Sites Where Soil or Groundwater Contamination Has Been Found

Site Name	Location	Cleanup and Countermeasure Status	Monitoring Well Maximum Value (mg/l)		Regulation Value (mg/l)
			Substance	Measured value	
Kawasaki plant	Kawasaki City, Kanagawa Prefecture	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	2.5	0.04
Oyama plant	Oyama City, Tochigi Prefecture	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	3.075	0.04
			Trichloroethylene	0.452	0.03
Nagano plant	Nagano City, Nagano Prefecture	We are continuing to clean up VOCs initiatives by pumping and aeration.	Cis-1, 2-dichloroethylene	0.33	0.04
			Trichloroethylene	0.045	0.03
Shinetsu Fujitsu	Shinano machi, Kamiminochi Gun, Nagano Prefecture	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	0.048	0.04
Fujitsu Optical Components	Oyama City, Tochigi Prefecture	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	0.095	0.04
			1, 1-dichloroethylene	0.024	0.02
			Trichloroethylene	0.31	0.03
FDK Sanyo plant	Sanyo-Onoda City, Yamaguchi Prefecture	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	0.061	0.04
			Trichloroethylene	0.11	0.03
FDK Washizu plant	Washizu, Kosai City, Shizuoka Prefecture	We are continuing to clean up VOCs by pumping and aeration.	Cis-1, 2-dichloroethylene	0.42	0.04
			Trichloroethylene	0.16	0.03
			Tetrachloroethylene	0.044	0.01