

Reducing Environmental Burdens from Our Business Activities

At the Fujitsu Group, we are actively carrying out a range of initiatives to reduce the various environmental burdens that result from our business activities. These initiatives include introducing highly environmentally efficient equipment and utilizing systems to make power consumption visible. We are leveraging the expertise we are constantly accumulating through these activities to provide our customers with effective solutions.

In Data Centers

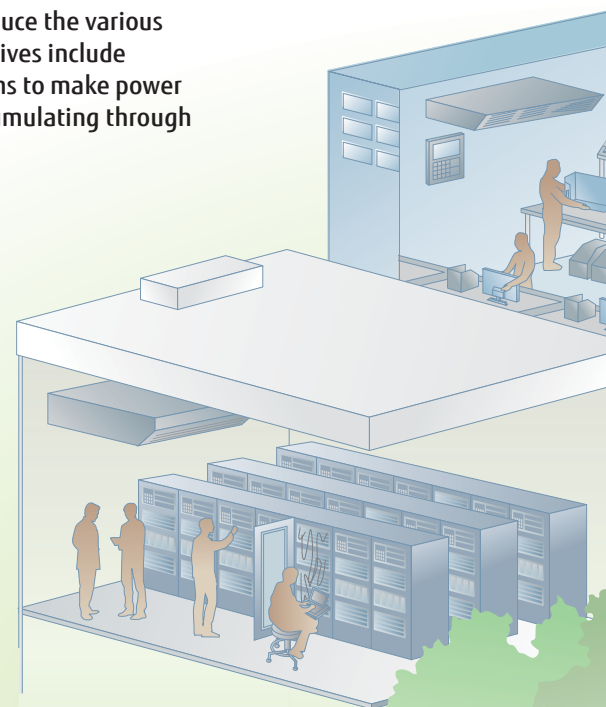
- State-of-the-art Eco-Friendly Data Center, New Annex of Tatebayashi System Center ▶ Please refer to P12
- Global development of the Eco-Friendly Data Center ▶ Please refer to P12
- The "London North" data center is utilizing the results of an in-depth survey to realize significant energy savings ▶ Please refer to P47

Development Center Adopts Cloud Computing to Consolidate and Reduce by Half the Number of Servers

Fujitsu's Numazu Software Development Cloud Center

Reduction in CO₂ of about 1,340 tons

Since fiscal 2008, we have consolidated the development-environment servers previously scattered across six sites in Japan into the Numazu Software Development Cloud Center and made a cloud-based development environment. Our objective was to reduce the workload generated by the activities of our software developers and center operators. We are currently switching to cloud computing in three stages; virtualization, standardization, and automation. Through this initiative, we aim to reduce our environmental burden and our costs. We expect to decrease the number of servers in fiscal 2010 by approximately 50% compared to fiscal 2008, and to reduce CO₂ emissions by about 1,340 tons.



Introduction of the extremely energy efficient Turbo Chiller

Fujitsu Tatebayashi System Center

CO₂ reduced about 2,200 tons

We have significantly improved energy efficiency by introducing a Turbo Chiller, achieving a reduction in CO₂ emissions of about 2,200 tons a year.



The Turbo Chiller

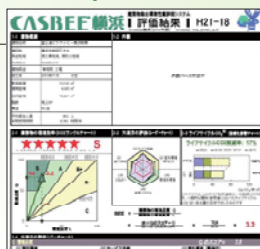
Evaluation based on the "Comprehensive Assessment System for Building Environment Efficiency (CASBEE)"

Fujitsu FIP Corporation Eco-Friendly Construction

Fujitsu FIP Corporation is currently constructing an Eco-Friendly Data Center that utilizes energy saving air-conditioning systems and also systems for recycling rain water and for generating solar power.

Thanks to these technologies, the new Data Center achieved higher evaluation results based on CASBEE*1 compared to the conventional Data Center.

In addition, Fujitsu Limited is providing support for the construction of a new plant for Fuji Ecocycle, which is a subsidiary of Fujitsu General Limited. The new plant will utilize highly efficient lighting, while materials for the plant interior have been chosen based on measures to prevent sick building syndrome. The plant is currently being evaluated based on CASBEE*2.



*1 FY2009: based on self-assessment report submitted to Yokohama City

*2 FY2009: based on self-assessment report submitted to Hamamatsu City

Development of "spot" air-conditioning system

Fujitsu Opens New Annex of Tatebayashi System Center

Improving energy saving in operations by 25 %

We developed a "spot" air-conditioning system to target those locations within the data center where hot air tends to accumulate, achieving an approximate 25% improvement in energy saving compared to a conventional air-conditioning system.



Upgrading our environmental management through ICT

In the Fujitsu Group, we are positively leveraging ICT in order to further upgrade our environmental management

Example of our utilization of ICT

Collecting and analyzing environmental-performance data on the Fujitsu Group's global activities
Global Environment Database System

Effective operation of environmental management systems
ISO 14001 Green Management System

Management of restricted chemical substances in products
REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) compliant chemical substances control system "PLEMIA/ECODUCE"

Traceability management for used ICT equipment
Integrated recycling information management system

Virtual manufacturing
Three dimensional visualization verification simulator (VPS: Virtual Product Simulator)

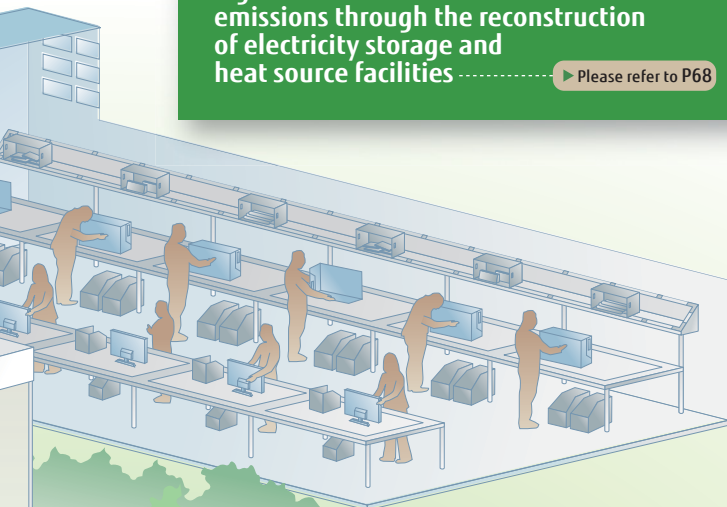
Chemical substance management in plants
Chemicals Control System (FACE)

Environmental Management Information Systems
<http://www.fujitsu.com/global/about/environment/management/ems/information-sys/>

In Plants

- Compliance and air conditioner energy-saving initiatives ▶ Please refer to P68
- Significant reductions in CO₂ emissions through the reconstruction of electricity storage and heat source facilities ▶ Please refer to P68

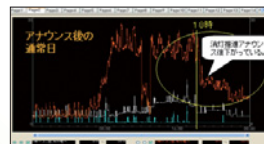
- Improved efficiency for the air-conditioner-use cold water supply within the LSI packaging process ▶ Please refer to P70
- Reduction in sludge resulting from the silicon grinding waste-water treatment process ▶ Please refer to P70
- Reduction in IPA gas emissions ▶ Please refer to P71



Making power consumption visible

Fujitsu Numazu Plant and PFU Ltd. Saving more energy

The Fujitsu Numazu Plant has been publishing the trends in its energy consumption on our intranet, which is helping to support its energy saving efforts such as encouraging employees to turn off lights



Also, PFU Ltd., has introduced a system that can monitor the energy being used on every floor on an hourly basis. The system, which is managed by the ProDeS Center (the production and development center), monitors power consumed by equipment such as lighting and air conditioners and the data it provides are utilized in energy-saving initiatives. Also, by publishing information on cost reductions and environmental burdens within the company, PFU is building a foundation on which it can promote environmental programs to all its employees.

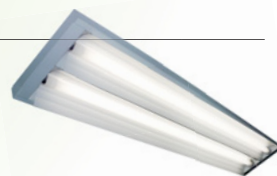
In Offices

- Achieving zero emissions of waste paper through a Nationwide Paper Recycling System ▶ Please refer to P72
- Reducing CO₂ emissions by expanding the application of modal shifts in distribution ▶ Please refer to P74

Installing highly efficient reflector plates that increase the brightness of fluorescent lights

PFU Ltd. Improving energy savings

The ProDeS Center Office has achieved energy savings by installing highly efficient reflector plates, enabling it to reduce the number of fluorescent lights it requires. It has also saved energy by a campaign to make sure employees turn lights off.



Encouraging 'eco-commuting' by walking and cycling

Fujitsu Isotec (FIT) Reduced CO₂ by about 14.5 tons

Since July 2009, Fujitsu Isotec has been implementing a campaign to encourage employees to leave their vehicles at home and commute to work on foot, by bicycle, or by public transport. By March 2010, this initiative had achieved an approximate 14.5 ton reduction in CO₂ emissions.



Offices with the highest levels of environmental standards

Fujitsu Australia Ltd. (FAL) Saving resources

The Gauge Building where FAL has its offices has been awarded the 6 Star Green Star, which is the highest possible environmental rating in the commercial sector under Australia's environmental building design certification system. This building utilizes water recycling, co-generation, and a range of other technologies to achieve impressive energy and resource savings.



Acquiring certification for measuring and reducing CO₂ emissions

Fujitsu Services Ltd. Reduced CO₂ by 1.7%

Following the efforts made by Fujitsu Services Ltd. to reduce CO₂ in its business operations in fiscal 2008, in March 2010 Fujitsu was presented with the 'Carbon Trust Standard' for reducing its carbon footprint by 1.7% (1,483.7 tons), compared to its averaged emissions in fiscal 2006 and fiscal 2007. The Carbon Trust introduced the Carbon Trust Standard to evaluate the methods companies use to measure and reduce their CO₂ emissions.

