Solutions that Benefit the Environment

By stepping up the certification of Environmentally Conscious Solutions, we are working globally to provide solutions that reduce the environmental burdens of our customers and society.

Our Approach

To reduce the amount of greenhouse gas emissions on a global scale, efforts will be needed not only to reduce power consumption and to develop environmental technologies, but to profoundly alter the way people live and work. ICT is indispensable to achieving these innovations, and it will be critically important to take full advantage of such ICT in the future.

The Fujitsu Group sees ICT as a way to reduce environmental burden - what we think of as "Green by ICT" - and is, therefore, committed to help lowering the environmental burden of society as a whole by moving forward with the provision of cutting-edge green ICT on a global basis.

Initiatives in FY 2012

Advancing Recommendations for Resource Savings in addition to Electricity Conservation, Energy Savings and CO2 Emissions Reductions

In FY 2012, we responded to changing customer needs by adding "ICT-based reductions in resource usage" to "CO2 emissions reduction" and "ICT-based electricity conservation and energy savings" as ICT solutions we offer to our customers.

Increasing the Certification of Environmentally Conscious Solutions

While the adoption of ICT solutions entails power consumption to operate servers and computers, such solutions can also reduce the impact on the environment by eliminating paper use and reducing the movement of people and goods for more efficient use of office and warehouse space.

At the Fujitsu Group, we have assessed the quantitative reduction in environmental burdens (in terms of reduced CO2 emissions) from ICT adoption using an environmental impact assessment method developed by Fujitsu Laboratories Ltd., and we certify products and services that exceed the required standard as Environmentally Conscious Solutions.

In FY 2012, we enhanced support aimed at increasing the number of Environmentally Conscious Solutions certified. This resulted in 43 new solutions being certified, bringing the total to 301 for the period FY 2004 through FY 2012. In FY 2013, we intend to continue expanding the scope of certified products and services and will consider program revisions, such as establishing standards from perspectives other than just CO2 emissions reduction.

Environmental Impact Assessment Method

We analyze environmental impact reductions produced by ICT solutions by classifying the implementation effects into seven categories: resource use, travel, supply chain and transportation, office space, warehouse space and other storage space, power consumption of ICT equipment and data communications. The benefits are converted into CO2 emissions using CO2 basic units (CO2 conversion coefficient) developed by Fujitsu. CO2 emissions from before and after ICT solution implementation are calculated and compared, and reduction effects are evaluated accordingly.

This approach accords with assessment guidelines published by Japan's Ministry of Economy, Trade and Industry and Ministry of Internal Affairs and Communications, and with methods (L.1410) recommended in March 2012 by the International Telecommunication Union (ITU).



Overview of Environmental Evaluation Method

 International Standardization of Methodology for Environmental Impact Assessment of ICT Goods, Networks and Services [Press Release]

Global Efforts

In order to globally promote solutions that contribute to reducing environmental burdens, we began in FY 2010 to perform evaluations based on the Environmentally Conscious Solutions certification system overseas as well. We have since completed informing overseas representatives about the assessment method and construction of the evaluation system itself. A remote medical system in Laos and other technologies have already been assessed under the system.

Promoting Visualization of Environmental Burden Reduction Effects from Customer ICT Utilization

In order to promote environmental impact reductions from ICT utilization, it is important that customers using ICT solutions understand how and how much they contribute to the environment. From this perspective, the Fujitsu Group makes it possible to see how ICT solutions reduce environmental impact and actively proposes this type of visibility to customers.

Aiming to further increase the number of proposals we make, we moved forward with three initiatives in FY 2012. The first was to create the environmental solution proposal manual to help sales personnel in their efforts to make proposals that result in lower environmental burden.

Next, we held around 50 training sessions for sales personnel and SEs working in sales offices and Group companies throughout Japan. The purpose of this training, which was conducted for over 1,000 participants, was to enhance abilities to win support for proposals. Training covered usage of the EcoCALC system for estimating environmental contributions, in terms of CO2 emission reductions, energy savings, and cost reductions, from the adoption of an ICT solution. It also showed participants how to incorporate ICT-based reductions of environmental burden and the use of environmental labels in proposals, and gave examples of outstanding environmental solution proposals.

The third initiative we undertook in FY 2012 was to establish a help desk to support proposal development. Through this helpdesk, we implemented support in the form of research on electricity consumption by systems, calculation of CO2 reductions and electricity savings, and assistance with the preparation of proposal documents. Sales personnel can now contact the help desk for various kinds of advice and information on prior cases, and this has accelerated the proposal development process.

As a result of the three initiatives, the number of environmental burden reduction proposals made in FY 2012 grew by 60%, compared to FY 2011, and proposals were made to customers in nearly all industries.

As an initial step in expanding the offering of proposals for reducing environmental burden to a global scale, we began operating EcoCALC in the U.K. as a pilot project in January 2013. Our goals for FY 2013 are to begin operating EcoCALC on a global scale in earnest and to further expand ICT-based contributions to the lowering of environmental burden. We aim to do the latter by actively searching for cases in which EcoCALC was adopted and communicating information on them both inside and outside Fujitsu.



EcoCALC pilot project launched in January 2013.

Case Study

Fujitsu's Global Cloud Platform Wins Environmental Awards

The FUJITSU Cloud IaaS Trusted Public S5 provides customers with network access to server, storage, network, and other ICT infrastructure at Fujitsu datacenters. This allows customers to avoid building their own ICT infrastructure and to use only what they need, when they need it. After introducing them in Japan in October 2010, Fujitsu began offering IaaS Trusted Public S5 services in Australia, Singapore, the U.S., the U.K., and Germany in June 2011. On a global basis, IaaS Trusted Public S5 services have led to major reductions in energy usage, reduced CO2 emissions by around 30,000t per year, and freed up physical space for customers.

In recognition of the reductions in energy consumption they have helped to bring about across the globe, IaaS Trusted Public S5 services were named the winner of the Commerce and Information Policy Bureau Director-General Award in the "Savings in Society's Energy Consumption by IT" category of the Green IT Awards 2012 sponsored by Japan's Green IT Promotion Council, and supported by the Japanese Ministry of Economy, Trade and Industry, in October 2012. One month later, IaaS Trusted Public S5services also received the Chairperson's Award, Eco-Products Awards Steering Committee, in the Eco-Services Category at the 9th Eco-Products Awards, sponsored by the Eco-Products Awards Steering Committee, and supported by Japan's Ministry of Finance, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, and Ministry of the Environment.

- Fujitsu Deploys Six-Country Global Cloud Platform [Press Release]
- Fujitsu Public Cloud Service Wins Green IT Award [Press Release]
- Fujitsu Public Cloud Service Wins Chairperson's Award at Eco-Products Awards 2012 [Press Release]

Case Study

Financial Services Business Group Vigorously Working to Propose Solutions that Reduce Electricity Consumption and Save Energy

In FY 2011, Fujitsu's financial services business group completed the development of a tool that simplifies the calculation of electricity consumption reductions from upgrades of servers, storage, network, and other ICT platforms, and began promoting its use within the business group. In FY 2012, it worked with Group companies to create a template for creating proposals that pay particular attention to energy-saving impacts and other environmental points relevant for ATM systems, palm-vein authentication devices, and other such products. This template was put to work in business negotiations throughout Japan. The business group also made it a point to discuss best practices in regular monthly meetings involving Group companies. It worked to get other units to adopt these best practices and endeavored to invigorate proposal activities, as well. These initiatives succeeded in increasing the number of environmental solution proposals by a factor of 3.3 compared to the result for FY 2011.

Solutions that Benefit the Environment : Case Study Archives

Fujitsu Group Environmental Action Plan(Stage VII) Environmental Solution Targets

GHG Emission Reduction through the Provision of ICT

As part of the Fujitsu Group Environmental Action Plan (Stage VII), we have promised to help lower the greenhouse gas (GHG) emissions of our customers and society by providing ICT solutions. Our target is to achieve a reduction of 26 million tons - 16 million in Japan and 10 million overseas - over the three-year period of FY 2013-2015. This target constitutes a global expansion of the Fujitsu Group Environmental Protection Program (Stage VI) target of reducing CO2 emissions by customers and society by a total of 15 million tons or more through the provision of green ICT over the four-year period of FY 2009-2012.

Calculating environmental impacts from the introduction of ICT, however, is not easy. Fujitsu, therefore, has evaluated the CO2 emission-lowering impacts in around 300 prior cases in which customers implemented Fujitsu's environmental solutions. Furthermore, by calculating base units (CO2 emission reduction per monetary unit of sales) for each environmental solution, we made it possible to measure various potential emission reductions. Calculations of annual reduction contributions under the Fujitsu Group Environmental Action Plan(Stage VII) will now be performed by multiplying the annual sales figures for individual solution categories by the appropriate base unit figure.

We established our current GHG emission reduction target based on a calculation approach that uses multiple years of actual results, and that we are confident leads to accurate results. We are also, however, an active participant in an initiative aiming to define an international calculation method within the next 1-2 years. Going forward, we will continue to revise and improve the accuracy of our calculation approach based on accumulated knowledge and experience, and work to establish compatibility with the international standard to be determined.

<u>Cooperation with External Organizations</u>

Provision of Sustainability Solutions

Until now, our goal has been the provision of environmental solutions focusing on the reduction of CO2 emissions. However, given recent energy conditions and social developments, we have expanded the definition of "solution" to include saving energy, saving resources, preventing environmental pollution, and conserving biodiversity - areas in which we can contribute to global sustainability under the Fujitsu Group Environmental Action Plan(Stage VII). Moving ahead, we will work to expand the provision of solutions that contribute to the resolution of these social concerns.

VOICE

Alison Rowe

Global Executive Director Sustainability International Business FUJITSU LIMITED

Information, Communications and Technology (ICT) is pervasive in every industry and every country and is critical for our future and for society. Our ambition is to reduce 26million tons of greenhouse gas emissions for our customers and society between April 2013 and March 2016, through rapidly deploying sustainability solutions globally at scale. We will provide solutions that enable massive improvements in resource and energy efficiency, enhance of quality of life and protect our environment. Our solutions will include top ranking energy efficient products, deployed on secure and flexible platforms, hosted in our sustainable data centers around the world. We will continue to consult with our customers and support them in achieving efficiency and resilience throughout their operations and supply chain to shape a sustainable future.



Providing Environmental Solutions

We provide solutions that support implementing and improving environmental management so that our customers can achieve both business growth and reduced environmental burdens.

Our Approach

In the context of increasingly severe environmental problems, our customers must promote environmental management that aims at achieving business growth and reductions in environmental burdens. Both are essential if they are to conduct sustainable business.

We at Fujitsu provide environmental solutions to support our customers' environmental management. We evaluate their environmental activities and allow them to visualize what can be improved in an integrated manner from a management standpoint. We propose measures that resolve environmental issues in a way that conforms to our customers' business strategies. Furthermore, our efforts are not limited to evaluating the current situation and proposing measures; we also support continuously increasing the level of our customers' environmental management by iterating the PDCA cycle.

Initiatives in FY 2012

In FY 2012, Fujitsu began to provide new services based on internally developed know-how. One example is the Environmental Management Dashboard, which we provide in a form adapted to aggregate and process each customer's management and environmental data. In addition to providing new services, we also worked to promote the Fujitsu Sustainability Solution Eco Track (an SaaS-based environmental management information service), the capabilities of which extend from the collection and tabulation of data, to the preparation of reports.

Case Study

Providing Internally Developed Know-How as Services

Fujitsu has implemented cutting-edge green ICT internally, and accumulated a wealth of experience and know-how as a result. A prime example is the Environmental Management Dashboard. We developed this tool to provide real-time visual representations and forecasts of electricity usage and CO2 emissions at all of our business sites. Once we began to use the Environmental Management Dashboard internally, in 2011, we realized enormous benefits in terms of measures for saving electricity and other forms of energy. We therefore decided to launch the Environmental Management Dashboard service in FY 2012 and some companies have decided to implement it in their operations.

Meanwhile, in the management of chemical substances used in products, we used know-how we have developed for identifying and properly responding to global regulatory trends to launch a new service in April 2013. This service provides information on the regulation of chemical substances in products and has already been used on a pilot basis by SEGA Corporation.

Our plans for FY 2013 call for expanded provision of environmental solutions, with these services playing central roles.

- Environmental Management Dashboard
- Fujitsu Launches Information Service for Chemical Substances Regulations [Press release]

Case Study

Global Promotion of the "Fujitsu Sustainability Solution Eco Track" Environmental Management Solution

In Europe, laws and regulations, like the EU Energy Efficiency Directive, are being tightened, and this is requiring companies to undertake increasingly sophisticated environmental management initiatives. Fujitsu has responded to this need by offering environmental management solutions with which it has built a track record of success in Japan. These solutions, which are offered under the name "SLIMOFFICE" in Japan, are now being offered under the unified "Eco Track" global brand. The European launch of these services, and our ICT-based support of the environmental management efforts of companies there, began in German-speaking countries in April 2013.

Eco Track is a cloud-based service the capabilities of which extend from the collection and measuring of energy usage and other data from multiple business sites, to report creation. They can be easily used via a personal computer with an Internet connection and require no special expertise. At the moment, services are being offered in German and English, but we plan to accommodate other languages as well to meet the needs of multinational corporations.

At CeBIT2013, held in March in the German city of Hanover, Eco Track won the IT Innovation Award 2013 for the "Mittelstand" Initiative in the Green IT category. This award is presented to for innovative ICT products and solutions, and, in its selection, Eco Track was praised as a practical solution easily implementable and applicable particularly in middle-market companies.

• FUJITSU Sustainability Solution Eco Track (SaaS-based Environmental Management Information Service)

Providing Environmental Solutions : Case Study Archives