Solutions that Benefit the Environment

We are working globally to provide solutions that reduce our customers' and society's environmental burdens through creating our own certification system for Environmentally Conscious Solutions.

▌ Basic Approach

The Vital Importance of Using ICT to Reduce CO_2

To reduce the amount of greenhouse gas emissions worldwide, efforts will be needed to reduce power consumption and to develop the environmental technologies required and to radically reform the way people live and work. To achieve these innovations, ICT has an indispensible and ever increasing role to play in reducing environmental burdens. It will be critically important to take full advantage of such ICT in the future.

For example, CO_2 emissions can be reduced by Internet teleconferencing that reduces the transportation of people and things.

The Fujitsu Group sees ICT as the way to reduce environmental burdens (which we call "Green by ICT") and we are globally promoting the provision of leading-edge green ICT to reduce the burdens of society as a whole.

▌ Action Policy

Concern for the Environment in Every Aspect of the Solutions Business

We believe that we must actively promote the reduction of environmental burdens by using ICT to achieve the CO_2 reduction targets in our Green Policy Innovation initiative.

Therefore, while we aim to increase still further the number of products and services that both solve business problems and reduce environmental burdens, as we were already doing, in FY 2010 we aimed to emphasize the quantitative reduction of burdens our proposals will achieve and give examples of their effectiveness when adopted. We also took the environment into consideration in all the business processes involved in providing solutions.

▌ Efforts in FY 2010

Increasing the Certification of Environmentally Conscious Solutions

Ever since FY 2004, we have assessed the quantitative reduction in environmental burdens (in terms of reduced CO_2 emissions) achieved when our solutions are adopted, and we certify products and services that exceed the required standard as Environmentally Conscious Solutions. In FY 2010, we certified 33 new items, bringing the total to 230. While increasing the number of these certified products and services, we aim to indicate the CO_2 reduction ratio for all our solutions.

Global Efforts

To proactively offer solutions that reduce environmental burdens in Europe and the Asia/Pacific region, we started full-scale overseas operation of our certification system for Environmentally Conscious Solutions in FY 2010. This was when we shared the evaluation procedures used in Japan for Environmentally Conscious Solutions and examples of their application with the heads of our key overseas centers and established the certification system. We are aiming at 100% coverage of divisions and regions*, which is a target of our Environmental Protection Program (Stage VI) by FY 2012.

* **100% coverage of divisions and regions**: Refers to implementing environmentally conscious solutions in five divisions (industry, transportation, business, home, and energy) and four regions (Japan, Europe, USA, and Asia/Pacific).

### Making CO_2 Reductions by ICT Visible

In FY 2010 we introduced mechanisms for our sales and SE staff to quickly calculate the effect of environmental burden reduction by ICT for customers who adopt it and to present that effect clearly to the customer.

First, we created a proposal template that shows the standard CO_2 reduction amount for Fujitsu Group products and solutions and deployed this within the Company. Next, we developed an environmental contribution calculation web tool and started using it within Fujitsu in October 2010. This tool uses a procedure developed by Fujitsu Laboratories Ltd. for quantitatively assessing the effect of environmental burden reduction (in terms of reduced CO_2 emissions) when Environmentally Conscious Solutions are certified. This tool makes it easy for sales staff to calculate the amount of CO_2 reduced by ICT when customers adopt it.

Furthermore, to increase the use of these proposal templates and the environmental contribution calculation web tool by sales and SE staff, we held briefing sessions on effective ways to use them and gave in-house awards for proposals that incorporated CO_2 reduction amounts and reduction ratios. As a result, we were able to achieve CO_2 reductions by ICT adoption in many business cases over a wide range of business types, including manufacturing, distribution, banking, and health care. We are using these examples of CO_2 reduction as reference material when customers are considering the reduction in environmental burden that they will achieve by adopting ICT.

In FY 2011, we named this environmental contribution calculation web tool EcoCALC. As we continue to improve its ease of use, we will expand its target usage from within the group to our business partners. Additionally, we will disseminate and share superlative examples of CO_2 reduction by adopting ICT both within and outside Fujitsu to expand the area in which we promote ICT to reduce environmental burdens.

EcoCALC, which calculates CO_2 emissions reduction effects
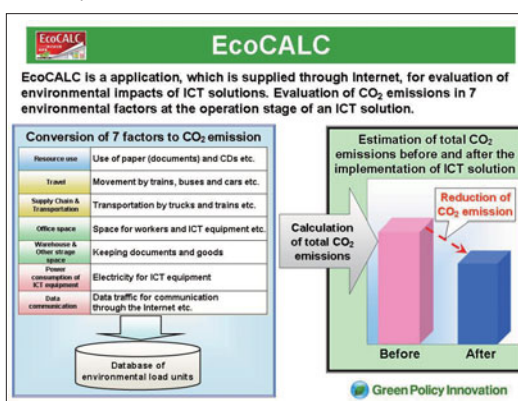
The EcoCALC screen

Shizuoka Telecasting Co., Ltd.

Updating the Platform for the TV station's Core System for Editing, Sales, and Broadcasting and Reducing Power Consumption by Half

Strengthening their ICT foundations became a critical issue for TV stations in handling new services such as terrestrial digital broadcasting and 1seg (One Seg) broadcasting, and in supporting the July 2011 transition to fully digital broadcasting, Shizuoka Telecasting, which broadcasts to Shizuoka Prefecture, upgraded their platform for editing, sales, and broadcasting in November 2010. This editing, sales, and broadcasting system is the core system that handles TV station business operations, from creating TV program schedules and time management for programs and commercials to issuing bills.

In updating their system, Shizuoka Telecasting adopted leading-edge platforms including a Fujitsu SPARC Enterprise UNIX server. At the same time as implementing an ICT foundation that provides the high quality and reliability required in the core system, we added functionality such as fault prediction and detection to allow business operations to continue even if a natural disaster or fault occurs. Also, Fujitsu's SupportDesk Standard maintenance and operations service makes 365-day/24-hour stable operation possible. While we optimized it with a view towards future upgrades of the whole system, we also reduced ICT operating costs.

When we proposed this platform update, we made use of our environmental contribution calculation web tool. We showed numerically that this update would provide large benefits in terms of reducing both power consumption and CO_2 emissions and made proposals that combined cost reduction and environmental benefits.

We expect that this upgrade can reduce CO_2 emissions by 51.6% compared with the previous system. This corresponds to an annual CO_2 reduction equivalent to that of about 950 cedar trees.

Voice

Sakio Sato
Director for Information Technology,
Shizuoka Telecasting

We are grateful to Fujitsu for their proposals that dealt with functional aspects and provided cost reductions.

Until now, we had not really considered power consumption, but Fujitsu rendered visible the amount of CO_2 reductions and electricity savings, which were useful reference materials in deciding to adopt the system.

The Hokuriku Bank, Ltd.

Achieving a 40% CO_2 Reduction by Updating the System that Handles the Bank's Daily Business

As a regional bank representative of the Hokuriku area, the Hokuriku Bank provides community-based financial services. They upgraded their internal business system in February 2011. As one of their goals, in addition to increasing management efficiency and reducing operating costs, they also hoped to reduce their environmental burden. For this bank, increasing the environmental efficiency of systems used in daily business was an important issue because it proactively promotes environmental protection activities and aims at reducing their energy consumption by 1% per year and 5% over five years in accordance with the Japanese revised Energy Conservation Law, which came into effect in April 2010.

In upgrading their system, while concentrating the very large number of servers installed at the various banking offices in one business systems center, they adopted Fujitsu green products. Furthermore, they switched to a mechanism in which virtual desktops (including PC OS and application software) are provided on the servers in the business systems center and the staff access that software from their individual PCs. This created a system that can be used efficiently. As a result, the required ICT resources can be maintained while the number of physical servers, the power consumed and their cost, could be significantly reduced.

When we investigated the CO_2 reduction effect of the new system operated in this way, we found that it provides an effective reduction in CO_2 by about 119 tons per year, which corresponds to a 40% reduction.

Voice

Akira Watanabe
Construction and Design Team Head
Management Control Division,
The Hokuriku Bank, Ltd.

Our bank has already pushed forward with a variety of approaches to reduce our environmental burden, including the installation of solar panels, growing greenery on rooftops, and switching to LED lighting. As part of that effort we have been searching for a mechanism to reduce our environmental burden within the bank.

While the main aims of this system update were to increase efficiency and reduce costs, the effect of reducing environmental burdens was also one that we could not overlook. I hope that in the future we can review our air conditioning and other equipment and facilities.