

Top Message	Interview to Head of Corporate Environmental Strategy Unit	Special Feature: Human Centric Intelligent Society	Fujitsu Group Environmental Action Plan Stage VII	Chapter I Contribution to Society	Chapter II Reducing Our Environmental Burden	Environmental Management	Data Overview
GHG Emission Reduction through the Provision of ICT	Deploying Sustainability Solutions	Development of Top-Level Energy Efficient Products	Improving the Resource Efficiency of Products		Research and Development of Advanced Green ICT	Collaborating with Communities and Taking Action as a Good Corporate Citizen	

# Development of Top-Level Energy Efficient Products

## Our Approach

As energy-related regulations for ICT products increase in number and in the breadth of the products they target, energy efficiency is taking on importance within society in the form of environmental label conformance and green procurement requirements.

Amid this background, the Fujitsu Group believes that we must accelerate improvement of the energy performance of products during their use, in order to reduce GHG emissions. For that reason, we are engaged in the development of products featuring top-level energy efficiency. Up to now, we have worked to improve the energy efficiency of products through development of "Super Green" products. As we now seek to further increase energy efficiency, in our Environmental Action Plan (Stage VII) we have set a target of making over 50% of all new products top-level energy efficient.

## Summary of FY 2014 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Achieve top-level energy efficiency of more than <b>50%</b> of newly developed products.
FY 2014 Targets	Make <b>45%</b> or more of new products top-level energy efficient.
FY 2014 Key Performance	Made <b>46.0%</b> of new products top-level energy efficient.

## FY 2014 Performance and Results

### Actively Applied Energy-Saving Technology

We have set targets for the achievement of top-level energy efficiency based on the number of product series that are expected to be developed during FY 2013–14.

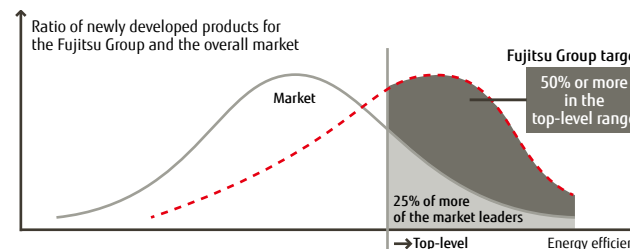
Applications of energy-saving technologies include the adoption of high-efficiency power supplies, energy-saving displays, optimized energy-saving controls, and the strengthening of power management features. In addition to these, we are actively undertaking the aggregation of LSIs and the reduction of components.

### Achieved Top-Level Energy Efficiency for 46.0% of New Products

As a result of applying and expanding energy-saving technologies across our divisions in products including servers, PC servers, PCs, network devices, and scanners, we were able to meet our target for new product top-level energy efficiency.

## Reference Information Top-Level Energy Efficient Products

Products, beginning with "top-runner" products (first in the world or industry, top of the world or industry), that achieve 25% or more of the market benchmark in energy efficiency.



## Reference Information Top-Level Energy Efficient Product Target Standards

For its targets in each product area, Fujitsu sets standards that recognize top-level energy efficiency compared with the market overall or with conventional products.

### Example of Target Standards\*1

Reference Level	Product Categories
ENERGY STAR criteria (in effect) compliant	PCs, imaging equipment, etc.
Top-level achievement rate of the Top Runner Program (FY 2011) under the Energy Conservation Law	Servers*2, storage systems, etc.
Industry-leading energy efficiency	LSI, products for specified fields, etc.
Industry's highest-level battery life	Smartphones
Power consumption reductions over prior products/prior performance	Network products*3, electronic components, etc.

\*1 Depending on product specifications, standard values differ even for products within the same category.  
 \*2 Excluding PC servers.  
 \*3 A larger number of stars designate the top-level, concerning the products which are assessed by Ecology Guideline For the ICT Industry.

## FY 2015 Targets and Plans

### Deploying Outstanding Energy-Saving Technology and Expanding Its Application

To achieve our fiscal year target, we will review plans to pursue actions such as the addition of top-level product development in all divisions. In addition, we will deploy outstanding energy-saving technology across the company and expand its application to products. Looking toward the future, we aim to advance the development of advanced technology for energy saving devices, which will contribute to revolutionary improvements in energy efficiency.

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## Development of Top-Level Energy Efficient Products

### Main Activities in FY 2014

#### Tablets with Energy-Saving Designs for Long Battery Life for Corporate Users

##### ARROWS Tab Q775/K



The tablet can be custom equipped with the palm vein authentication sensor.

ARROWS Tab Q775/K is a large-screen 13.3-inch tablet running Windows and targeted at corporate users as a tablet that can function as their main PC. Using the latest Intel® Core™ i processor and an IGZO energy-saving display, the tablet achieves approximately 9.1 hours\*1 of battery life. Furthermore, the tablet is Energy Star compliant and achieves an energy efficiency rate of 500%\*2 or more (FY 2011 standards) based on the Law Concerning the Rational Use of Energy.

In addition, with weight in the range of 900+ grams, the ARROWS Tab Q775/K is the lightest in its class for tablets with 13.3-inch and larger screens. In order to create the tablet's compact and lightweight frame, magnesium alloy, with its superior strength and weight advantages, was used for the internal cover, combined with hybrid molded components such as glass-hardened resin for a new level of strength and lightness.

\*1 Core™ i5 model. Measured based on the JEITA battery operating time measuring method (Ver. 2.0).

\*2 Tablet model with the Core™ i7-5600U processor.

#### ScanSnap iX100, the World's Lightest and Most Energy Efficient Scanner

##### ScanSnap iX100



The compact ScanSnap iX100 is a battery and Wi-Fi equipped portable scanner, and yet still achieves a world-beating weight of only 400 grams\*. Features of the product include a 10% reduction in printed circuit board size compared to using conventional technology, while 3-D modeling of all components, to optimize installation down to units of 0.1 mm, has minimized dead space in the structural design and the scanner's primary parts have been made as light as possible.

In addition, the ScanSnap iX100's control IC functions were limited to essential operations only, and the efficiency of neighboring power supply circuits was boosted, in order to ensure long battery life. Total power consumption was minimized by thoroughly eliminating excess power consumption for each and every component and by optimizing the timing of the scanner's transition to operation, sleep, or power-saving mode. The result is a 50% reduction, over ENERGY STAR criteria, in power consumption during sleep mode.

\* For the A4 scanner with battery and Wi-Fi. Source: PFU Limited (as of June 1, 2015).

#### Development of EcoBoard, an Environmentally Conscious Score Board that Can Operate on Solar Power Alone

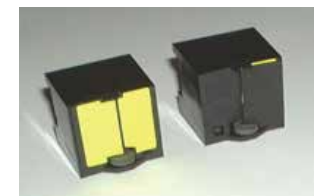


Environmentally conscious score board for baseball stadiums

Fujitsu Frontech Limited has developed a product called EcoBoard, which operates solely on power generated by its solar panels and can update its live display for game scores and informational messages.

The magnetic reversal elements used by EcoBoard operate on magnetic force from electromagnets. The board boasts an energy saving design, since operational power is only necessary when switching displays, after which magnetism keeps the images in place. Operation is possible at night or under cloud cover\* and, in contrast to standard score boards, no external power supply is needed.

\* Even without sunlight, operation (on full battery power) for approximately six games is possible, assuming 9-inning games.



Magnetic reversal elements