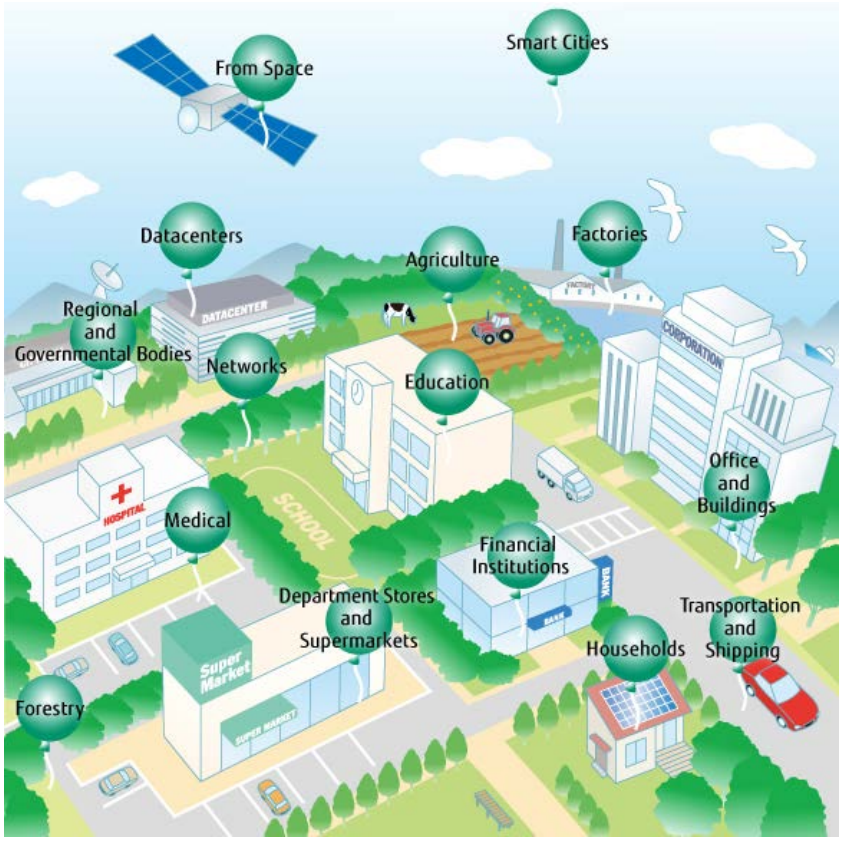
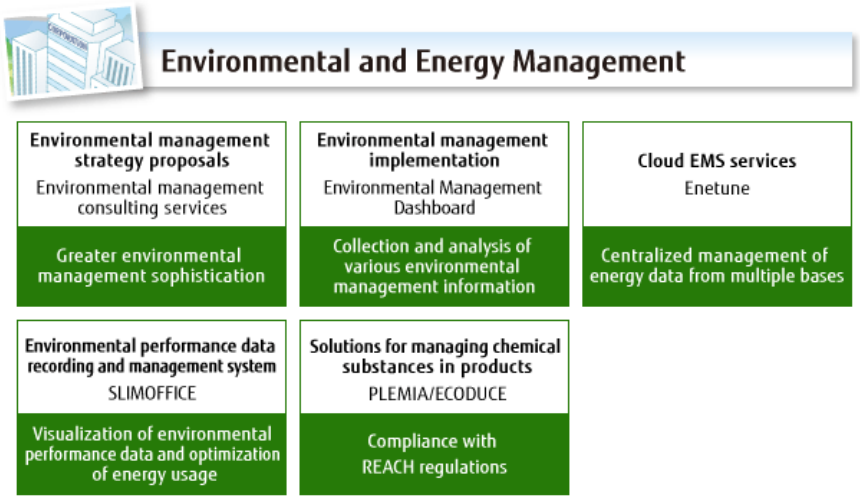
Fujitsu Group's Green ICT Helping Achieve a Low-Carbon, Prosperous Future

Through its advanced environmental solutions, services, and products, the Fujitsu Group's green ICT is helping to reduce the environmental burden generated by all aspects of our daily lives and by society. We are continuously widening the scope of our efforts in this field so we can help more countries and regions and more people.





Households

Energy-efficient PCs
ESPRIMO desktop and LIFEBOOK notebook PCs
Energy efficiency and conservation

Plugs that measure power, temperature, humidity and illumination
F-PLUG
Better visualization of power consumption for home electronics

PC recycling
Recycling of Fujitsu-made PCs
Contribution to resource recycling

Household energy management
Smart sensing platform (SSPF) V01
Control home electronics and energy devices over a network

Transportation and Shipping

Transport support solutions
Onboard station (digital tachograph)
CO_2 approx.-19%*1

Logistics center system
LOMOS/DJ
CO_2 approx.-58%*1

Traffic information data service
SPATIOWL
Provides real-time traffic information

Wide-area highway transportation simulator
Creation of more eco-friendly transportation environments

Office and Buildings

Energy-efficient PCs
ESPRIMO desktop and LIFEBOOK notebook PCs
Energy efficiency and conservation

Software to reduce PC power consumption
Systemwalker Desktop Patrol
CO_2 approx.-17%*1

Measurement of power consumption
Smart electrical outlets
Visualization of power usage by connectivity devices

Workflow solutions for personnel and expenses
GLOVIA smart workflow
CO_2 approx.-46%*1

e-ledger management software
Interstage List Works
CO_2 approx.-56%*1

Building management system
Futuric
CO_2 approx.-47%*1

Regional and Governmental Bodies

Resident information solutions
MICJET MISALIO
CO_2 approx.-18%*1

Automated system for issuing identifying documents
Conbrio-J
CO_2 approx.-66%*1

Education

e-Learning system Internet Navigware	**School campus administration system** Campusmate-J	**Public library package** iLisfiera
CO_2 approx.**-93**%*1	CO_2 approx.**-54**%*1	CO_2 approx.**-17**%*1

Medical

Electronic health record system with integrated clerical functions HOPE/EGMAIN-RX	**Regional medical network** HumanBridge	**Health management solution** HOPE/webH@ins-GX
CO_2 approx.**-41**%*1	CO_2 approx.**-31**%*1	CO_2 approx.**-55**%*1

Factories

Environmental performance at manufacturing sites Green manufacturing services	**Environmental management system (management of pollutant emissions)** e-FEINS	**Facility management system** Futuric
Further strengthen environmental performance and competitiveness at manufacturing sites	Reduction in environmental risk	CO_2 approx.**-47**%*1
Production scheduling system GLOVIA/SCP FA	**Production planning system for assembly work** GLOVIA/SCP FP	
CO_2 approx.**-60**%*1	CO_2 approx.**-35**%*1	

Department Stores and Supermarkets

POS system for mass retail TeamStore/M	**WebSERVE smart e-COMMERCE** Web-EDI purchasing transactions
CO_2 approx.**-31**%*1	CO_2 approx.**-35**%*1

Financial Institutions

Solutions for the financial sector ATM centeral journal system	**Currency image OCR system for financial institutions** KMASTER
CO_2 approx.**-65**%*1	CO_2 approx.**-59**%*1

Networks

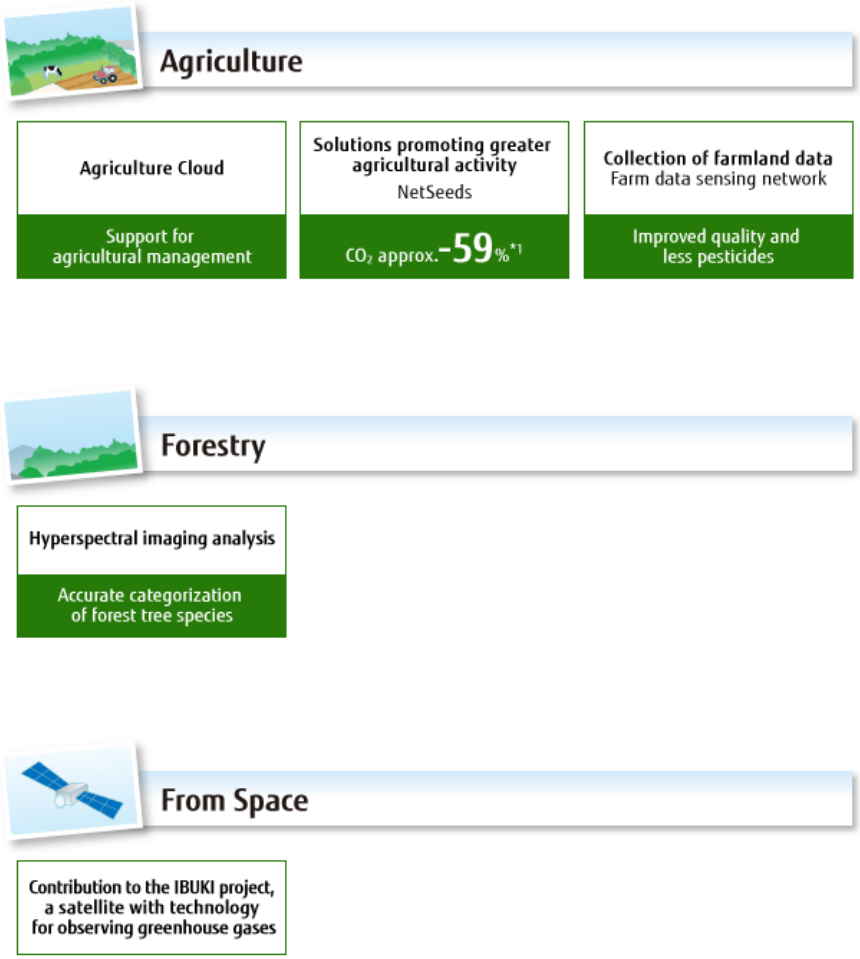
L2 switch FLASHWAVE 2440 Power consumption approx. **-64%**[*2]	**Gigabit ethernet PON system** GE-PON ONU Power consumption approx. **-41%**[*2]	**Network server** IPCOM EX2300 Power consumption approx. **-20%**[*2]
Standard switching hub SH1516C Power consumption approx. **-71%**[*2]	**Real-time image transmission system** IP-900 Power consumption approx. **-24%**[*2]	

Datacenters

Mission-critical x86 servers PRIMEQUEST 1400 S2 Lite Power consumption approx. **-79%**[*2]	**PC server (IA server)** PRIMERGY RX300 S7 Energy consumption rate approx. **-73%**[*2]	**PC server (IA server)** PRIMERGY RX200 S6 energy-saving model Power consumption approx. **-33%**[*2]
Blade server PRIMERGY BX900/BX400 Achieve operations with low power consumption	**Disk Arrays** ETERNUS DX8700 S2 Power consumption approx. **-52%**[*2]	**System operation automation and job schedules** Systemwalker Operation Manager CO_2 approx. **-29%**[*1]
More energy efficient storage operations ETERNUS SF Storage Cruiser ETERNUS SF Advanced Copy Manager CO_2 approx. **-28%**[*1]	**Private cloud-compatible software** Systemwalker Service Catalog Manager Systemwalker Software Configuration Manager Systemwalker Runbook Automation ServerView Resource Orchestrator Reduction in server units of approx. **-50%**[*3]	
Multi-point temperature management Optical fiber temperature measurement system Detailed visualization of temperature distribution in real time	**Support for green facility development** Green Infrastructure Solutions More energy-efficient datacenter facilities	**Operational automation** Systemwalker Runbook Automation CO_2 approx. **-28%**[*1]

Smart Cities

Smart networks WisReed smart network technology; smart network management solutions Collection and management of smart meter data	**Cloud-based energy management system** Enetune Centralized management of power data and forecasting of power demand for multiple bases
Energy management in living environments Smart sensing platform (SSPF) V01 Control home electronics and energy devices over a network	**Atmospheric measurement and countermeasures services** Quickly and precisely measure and devise countermeasures for corrosive substances in the air



*1:
Calculated using an environmental impact evaluation methodology developed by Fujitsu Laboratories Limited

*2:
Comparison relative to power consumption during use for earlier products.

*3:
Internal Fujitsu examples.

Case Study

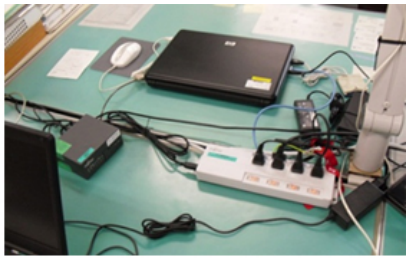
Conducting PC Power Consumption Measurement Trials for the City of Yokohama

In June 2011, as part of the effort to comply with the government directive for energy conservation in the face of looming summer power shortages, the City of Yokohama, together with Fujitsu Limited and the Fujitsu Research Institute, used smart power sockets to conduct trials that measured the effectiveness of power-saving settings on the PCs used at the city office.

The trials showed that using the power-saving setting on all the office PCs in Yokohama could reduce overall power consumption by an estimated 220,000 kWh annually.

The use of smart power sockets not only allows electric power consumption to be measured, it also visualizes in a quantifiable way the power savings gained by changing settings and improving the ways in which office equipment is used. Effective strategies for reducing power consumption during peak load hours can also be formulated. Fujitsu and the Fujitsu Research Institute will continue to use these smart power sockets to render the power consumption of office equipment visible, and help customers achieve their energy savings goals.

Smart power socket
(used for measuring power consumption)



Connecting a gateway,
a smart power socket and a notebook PC

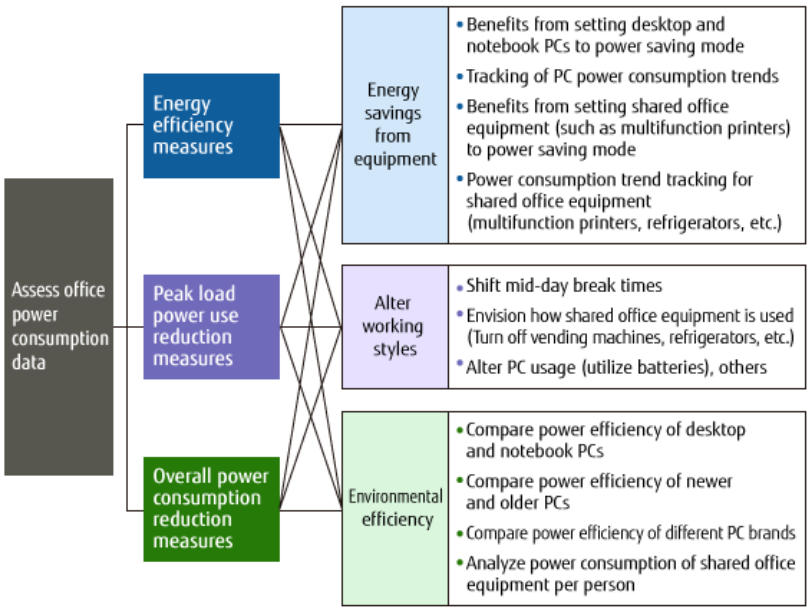
PC Power Consumption per Hour throughout the Yokohama of City and Reductions by Power-saving Settings

(Estimated Values)

Equipment	Units*	Before power-saving settings		After power-saving settings		Reduction (entire city)	Reduction rate
		Power consumption (per unit)	Power consumption (entire city)	Power consumption (per unit)	Power consumption (entire city)		
Total	24,415 units	-	873,939.2Wh	-	755,360.2Wh	-118,579.0Wh	-13.6%
Desktop PCs	7,847 units	66.4Wh	521,040.8Wh	53.4Wh	419,029.8Wh	-102,011.0Wh	-19.3%
Notebook PCs	16,568 units	21.3Wh	352,898.4Wh	20.3Wh	336,330.4Wh	- 16,568.0Wh	- 4.7%

*Number of office-use PCs (excl. Transportation Bureau and Waterworks Bureau) for the City of Yokohama City as of July 20, 2011

Examples of Points of Analysis and Proposed Measures Using Smart Power Sockets



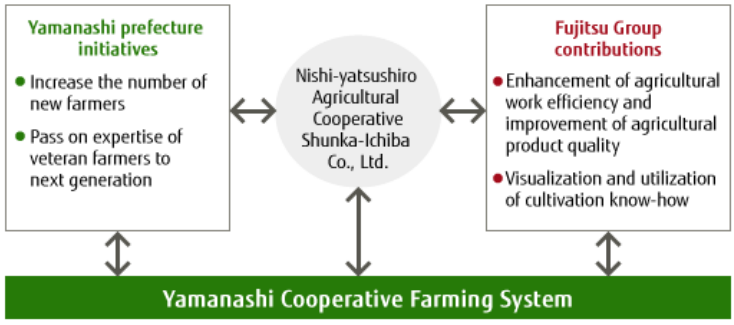
Case Study

Fujitsu's ICT Helping Revitalize Agriculture in Yamanashi Prefecture

Fujitsu utilizes ICT to provide support for primary industries with the aim of encouraging sustainable use of agricultural products and other living resources. As one example of this initiative, on March 14, 2012, we began a field trial for the cultivation of sweet corn using the farm-information sensing network developed by Fujitsu for the "Yamanashi Cooperative Farming System," to help revitalize local agriculture.

Sensor boxes incorporating temperature and humidity sensors with a simple camera were set up at a sweet corn cultivation field owned by the Nishi-yatsushiro Agricultural Cooperative and Shunka-Ichiba Co., Ltd. These boxes collect data on the temperature and humidity both inside and outside the vinyl tunnels covering the corn, and capture images of the coverings opening and closing. The data collected are analyzed to determine the ideal temperature and humidity for cultivation inside the tunnels. It also quantifies the know-how of veteran farmers, and is expected to be useful in training new farmers and assisting companies entering the business.

Sensors at a sweet corn field



- About "Green Policy Innovation": Contribute to reducing the environmental Burden of customers and society