

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	
Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites	Promoting Environmentally Conscious Datacenters	Reduce CO ₂ Emissions from Logistics and Transportation	Promoting CO ₂ Emission Reductions with Our Business Partners	Increasing Amounts of Renewable Energy Used	Efficient Use of Water Resources	Reducing Chemical Substances Emissions	Limiting Amounts of Waste Generated	Product Recycling

Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites

Our Approach

The Fujitsu Group is working in every location where it does business to reduce emissions from its own sites, promote the reduction of emissions along its value chain, and contribute to the reduction of emissions by its customers and society overall, in order to help fight global warming, and to do so from a common understanding of the necessity to halve (or cut by 80%, in the case of developed countries) greenhouse gases emitted across the globe by 2050.

The primary GHG emissions from our business sites (plants, datacenters, and offices) are CO₂ accompanying energy (electricity, fuel oil, and gas) usage, and perfluorocarbon (PFC), hydrofluorocarbon (HFC), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃) used in semiconductor manufacturing. We have set reduction targets for these and are striving to decrease the amounts we use and emit.

Summary of FY 2014 Achievements

Targets under the Fujitsu Group Environmental Action Plan (Stage VII) (toward FY 2015)	Reduce greenhouse gas emissions in our business facilities by 20% (compared to FY 1990)	Improve energy intensity in our business facilities over 1% (each year)
FY 2014 Targets	Reduce greenhouse gas emissions in our business facilities by 19% (compared to FY 1990)	Improve energy intensity in our business facilities by an average 1% or more (each year)
FY 2014 Key Performance	Reduced greenhouse gas emissions in our business facilities by 33.1% (compared to FY 1990)	Improved energy intensity in our business facilities 5.1%

FY 2014 Performance and Results

Promoted Reductions of CO₂ Emissions Accompanying Energy Consumption

As CO₂ reduction measures, we continued in FY 2014 energy saving practices with the machinery at each business site (including installing inverters and BAT*-applicable machinery, as well as switching fuels, etc.) optimizing production processes and drive machinery, optimizing office air-conditioning temperatures, saving energy used for lighting and office automation equipment, and promoting visualization and data measurement with regard to energy consumption.

In addition, to reduce emissions of gases other than CO₂ (such as PFC, HFC, SF₆, and NF₃), we are switching to low global warming potential (GWP) gases, and installing abatement systems on production lines.

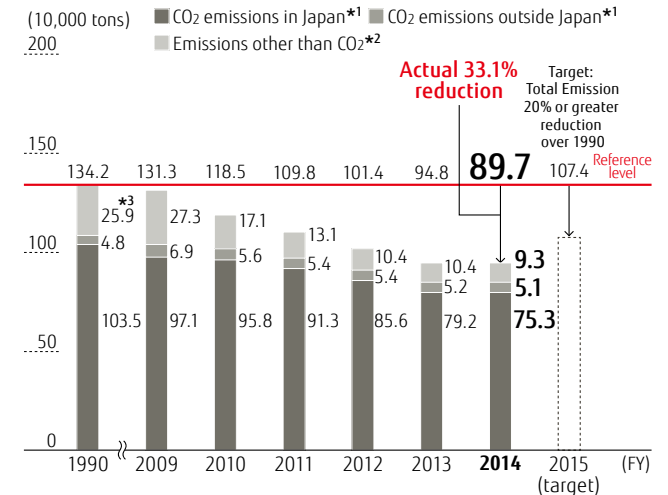
* BAT (Best Available Technologies): State-of-the-art technologies that are available for use and help contribute to reducing GHG.

51,000-ton Year-On-Year Reduction of GHG

FY 2014 overall GHG emissions were approximately 897,000 tons (emission rate per unit of sales: 18.9 tons/100 mill. yen), which was a 33.2% reduction compared to FY 1990.

The breakdown of GHG was approximately 804,000 tons of CO₂ (753,000 tons emitted in Japan, 51,000 tons outside Japan) and approximately 93,000 tons of gases other than CO₂.

Trends in Total Greenhouse Gas Emissions



*1 CO₂ emissions in/outside Japan: CO₂ conversion factor for purchased electric power has been calculated with a fixed value of 0.407 tons of CO₂ per MWh since FY 2002 for performance reports in our Environmental Action Plan.

*2 Emissions other than CO₂: These are converted to equivalent amounts of CO₂ using the global warming potential (GWP) of each gas.

*3 Our FY 1995 performance is taken to be the same as emissions in FY 1990.

FY 2015 Targets and Plans

Continually Strengthen Facility Investment and Operational Improvements

At our datacenters and in some of our manufacturing of electronic components, increased CO₂ emissions are projected accompanying increases in energy usage. However, we will strive for 20% or greater reductions, compared to FY 1990, through continual efforts to invest in facilities and improve operations.

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Reducing Greenhouse Gases (GHG) Emissions and Boosting Energy Intensity at Our Business Sites

Main Activities in FY 2014

Promoting Energy Management Practices Using ICT

The Fujitsu Group has built an Environmental Management Dashboard that is a platform system supporting our environmental business operations. The dashboard, which has been adopted at all of our business sites in Japan, collects and analyzes a variety of environmental information in real time and centrally displays that information on a portal screen.

The dashboard provides a visual perspective, in real time, of the types and quantities of energy used, the CO₂ emissions, the per-person and per-unit-area CO₂ emissions, and monthly comparisons over the previous year for the entire Group, as well as for each business office, company unit, building, and floor. In addition, in FY 2014, we added functions necessary for following the PDCA cycle, including the ability to display the status of energy usage by datacenters (see p. 33), in order to achieve the targets of the Fujitsu Group Environmental Action Plan (Stage VII). This system is not only used for decisions and judgments made by the management ranks and those responsible for energy management, but is also helpful for encouraging the independent, environmentally conscious conduct of employees.



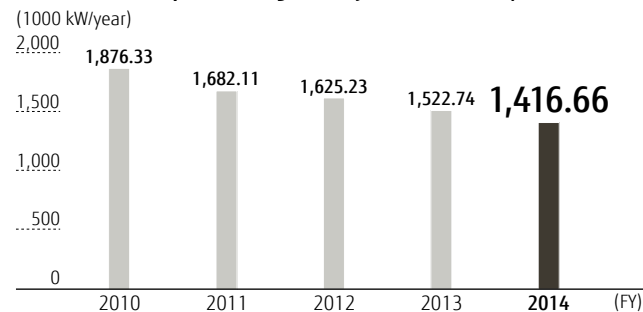
Environmental Management Dashboard

Reducing Electric Power Usage with Group-wide Energy Saving Measures

At Fujitsu Wireless Systems Limited, the 2011 Great East Japan Earthquake forced attention toward energy saving measures amidst supply constraints, prompting the creation of the Power Saving Measures Committee. Every year since FY 2012, targets for reductions in annual power usage have been set and various effective measures have been discussed and implemented. Initiatives to date include installing energy saving compressors, reducing the number of servers operating, installing photovoltaic panels and LED lighting, utilizing heat dissipation measures for production and other machinery, and utilizing indoor insulation. On top of these, we are automatically monitoring electricity peaks 24 hours a day and working to limit electric power usage, particularly during the hottest period of summer and the coldest period of winter, when demand reaches its apex.

Results of these compound energy saving efforts yielded a 24.5% (over FY 2010) reduction in electric power usage in FY 2014 (459.67 kWh) and a 27.3% improvement in peak usage (172 kW).

Annual electric power usage at Fujitsu Wireless Systems



Reducing Peak Summer Electric Power Demand Focusing on our Production Unit

We are striving to even out and limit peak summer electric power usage at Fujitsu IT Products Limited, which is our plant producing servers and storage equipment.

In addition to existing energy saving measures, we also rolled out activities at our Production and other Units, emphasizing reductions in electric power usage in the middle of the day during the summer, which is our peak period. These activities include shifting clean room operating hours to the nighttime, consolidating soldering equipment (using batch production) for printed circuit boards, reassessing heater usage, and shutting off nitrogen generating equipment (by switching to using liquid nitrogen during the daytime).

These and other measures, such as consolidating the operation of machinery for inspection, and reducing the load on air-conditioners by applying aluminum insulation and heat reduction sheets to building windows, yielded more than a 10% reduction year on year in contracted electric power in FY 2014, and an approximate CO₂ emissions reduction of 620 tons.