



Reducing the Environmental Impact of Business Activities

Reducing the Emission of Greenhouse Gases

Reducing the Emissions of CO₂ Originating from Energy

From the report of fiscal 2006, the OKI group changed the basic units to “real basic units” according to the calculation standards of the electric and electronics industry’s “Voluntary Action Plan on Measures to Fight Global Warming”. The CO₂ emissions originating from the use of electric power were calculated using the emission coefficients of the supplying power companies.

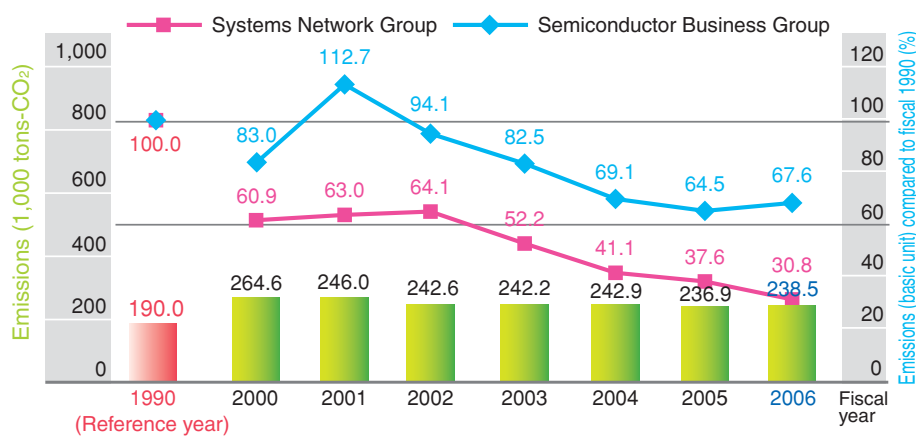
The calculations showed that we achieved the common target of the electric and electronics industry of “improving the CO₂ basic unit by real output*1 in fiscal 2010 by 28% (to 72% or less) compared to fiscal 1990.”

The total CO₂ emissions of our major production sites were about the same as in fiscal 2005 at 239,000 tons.

On the other hand, as regards the basic unit by business segment, the Systems Network Business Group showed a decrease of about 7% since it is using emission coefficients by power company, and the Semiconductor Business Group showed a slight increase due to a decline in sales.

* 1) CO₂ basic unit by real output: CO₂ emissions / real output (real output = output for each article / the yearly rate of the Bank of Japan’s Domestic Corporate Goods Price Index (electrical machinery & equipment), with fiscal 1990 being 1.

● Transition of CO₂ Emissions (Major Production Sites of the OKI Group)



Energy Conservation Measures of the Semiconductor Business Group

The Semiconductor Business Group is taking various measures to conserve energy. A key measure is to improve the efficiency of building equipment.

When renewing our equipment, we utilize our eco-conscious procurement system. For example, we actively promote upgrades to highly efficient turbo freezers. The performance counter (the ratio of the freezing capability and the consumed energy heat equivalent) of turbo freezers is twice better than that of absorption freezers, so that the renewals are very effective. In addition, the

Semiconductor Business Group adopted Eco Washers as outside air conditioners. To control the temperature and humidity of outside air, this equipment does not use dew-point temperature control, but vector control, eliminating over-cooling and re-heating.

These efforts lead to a cut of about 5,500 tons in CO₂ emissions in fiscal 2006 which corresponds to the electric power used by 3,750 ordinary households in one year.

● Key Energy Conservation Measures of the Semiconductor Business Group

Category	Item
Improvement of System Efficiency	Upgrade of old absorption freezers to highly efficient turbo freezers
	Upgrade of old turbo freezers to highly efficient turbo freezers
	Upgrade to highly efficient boilers
	Introduction of Eco Washers for outside air conditioners (elimination of over-cooling and re-heating)
	Upgrade to highly efficient air compressors
	Employment of inverters to power fan pumps
	Upgrade to highly efficient UPS
Improvement of Management Method Efficiency	Improvement of efficiency of steam supply method
	Improvement of waste water treatment efficiency
Others	Stop of facility operation
	Heat-shield coating on roof, etc.



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Eco-friendly Office Building

The office building “OKI System Center” in Warabi city, Saitama prefecture, was constructed considering security and the environment, taking advantage of IT technology. The new part of the building was designed in consideration of the environment and energy conservation using the latest technology. This led to a cut in CO₂ emissions of about 35% (950 tons annually) compared to ordinary buildings. The energy used for air conditioning was reduced by 20% by letting natural wind pass through the offices, and through “eco shafts” that vent heat during

the night in summer. Because room temperatures in offices for system development are high even in winter, we cut energy for air conditioning in winter by 30% by using outside air.

The toilets are flushed with rain water, resulting in a 30% cut of water use. This and others realize a building that is friendly to the environment and has a low impact from the use of energy.

And as a new effort, G.O. Food Service Co., Ltd. now uses rice that does not require washing in the employee canteen of the Center, realizing water savings of 1,200 m³ per year.



OKI System Center

Reduction of PFC Gas Emissions

The manufacturing process for semiconductors uses perfluoro compound (PFC) gas *1, a gas which has an influence on global warming, and emits some of it into the air. Because of this, the World Semiconductor Council (WSC) proclaimed the goal to reduce the emissions by 10% (as converted into global warming potential*2 by fiscal 2010 in comparison with fiscal 1995. The OKI group is working to reduce emissions by substitution with gases having a smaller impact on the environment, the installation of exhaust gas treatment equipment or by improving processes.

Since fiscal 2004, we have not been able to achieve our reduction targets due an increase in production quantities and other factors. OKI's Semiconductor Business Group is promoting further measures such as introducing combustion-type abatement equipment for PFC gas, but despite this, PFC gas emissions again slightly increased in this fiscal year compared to the previous year.

* 1) PFC gas: CF₄, C₂F₆, C₃F₈, C₄F₈, CHF₃, SF₆, NF₃.

* 2) Global warming potential: a numerical indicator that converts the impact on global warming into quantities of CO₂.

● Transition of PFC Gas Emissions (Converted into Global Warming Potential)

