

Environmental Report

Eco-factories (eco-friendliness in production activities)

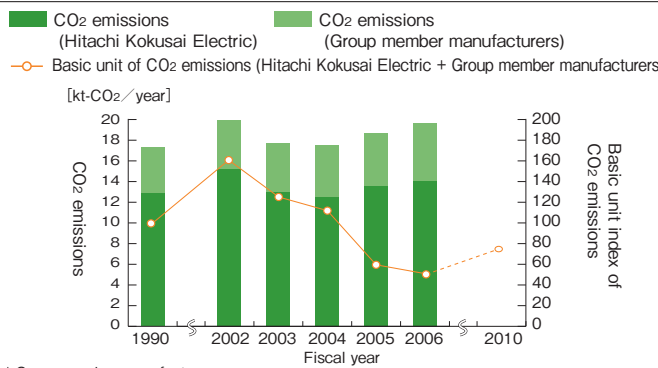
Prevention of global warming(energy-saving efforts)

The Hitachi Kokusai Electric Group strives to prevent global warming by targeting a 25% cut in the basic unit of CO<sub>2</sub> emissions in actual production by fiscal 2010 from the level in fiscal 1990.

The basic unit of CO<sub>2</sub> emissions in actual production is the unit of measure for the uniform target of four associations of electrical and electronics manufacturers, and has been used as a control indicator since fiscal 2005. The basic unit of CO<sub>2</sub> emissions in actual production by Hitachi Kokusai Electric and Group member manufacturers in fiscal 2006 was reduced by 47% from the level in fiscal 1990. Conversely, CO<sub>2</sub> emissions of Hitachi Kokusai Electric and the Group member manufacturers have risen 14% from the level in fiscal 1990 due to a rise in production and the building of add-ons. The Group will continue to take such energy-saving measures as upgrading the equipment into energy-saving types.

The Hitachi Kokusai Electric Group has supported the national campaign "Team Minus 6%" promoted by the Ministry of the Environment since fiscal 2005, reduced the use of air-conditioning at all places of business, and participated in the "black illumination" campaign (to reduce the use of illumination).

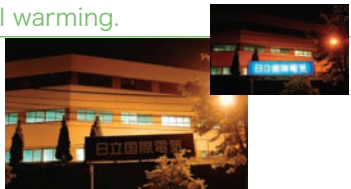
Changes in CO<sub>2</sub> emissions and the basic unit index of CO<sub>2</sub> emissions in actual production



\* Group member manufacturers:  
YAGI ANTENNA INC., Hitachi Kokusai Denki Engineering Co., Ltd., Goyo Electronics Co., Ltd., Tohoku Electronics Engineering Inc., YAGI ELECTRONICS CO., LTD.

The Group joined "Black Illumination 2006," a campaign intended to promote a reduction in CO<sub>2</sub> emissions, and curtail the use of illumination in order to slow the pace of global warming.

The Hitachi Kokusai Electric Group turned off the illumination and related equipment at four sites.



Toyama Works with its company name lamps turned off

"COOL BIZ" and "WARM BIZ" (Reduced use of air-conditioning)

Employees as well as guests are urged to cooperate.



Energy-saving efforts in physical distribution

The energy-saving law which was amended in April 1, 2006, defines the companies who transport cargo more than 30 million ton-kilometers a year as the designated companies and obligates them to save energy. Our transport in fiscal 2006 totaled 5.99 million ton-kilometers which was one-fifth of the requirement by the energy-saving law. We make the following efforts to save energy in physical distribution.

Eco-friendly efforts in product transport

Semiconductor manufacturing equipment made at Toyama Works of Hitachi Kokusai Electric is used in clean rooms where there is very little dust or dirt. To keep the products clean, shipment requires much packing materials and wooden frame packing. Such heavily packaged products used to be loaded onto two trucks and delivered to customers. In cooperation with Kokusai Electric Semiconductor Service Inc., which is in charge of physical distribution, we introduced clean trailers with capability of keeping cleanliness during transport, and thereby eliminated the need for wooden packing and greatly reduced the amount of packing materials. Moreover, higher loading efficiency by these special-purpose trailers has made it possible to transport all products in a single trailer, thus significantly reducing the energy expended in transport.

- Reduction in packing materials: 66% reduction per product
- Reduction in transport energy: 40% reduction per product



Modal shift efforts

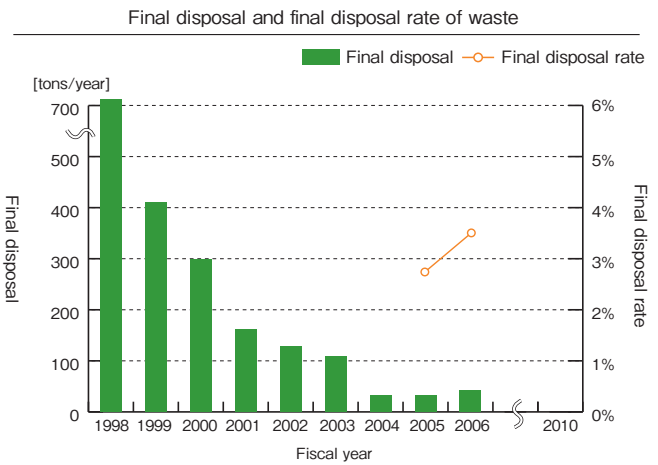
The company in charge of physical distribution for Koganei Works of Hitachi Kokusai Electric - Kokusai Electric Techno Service Co., Ltd. - has introduced a modal shift, from truck to railroad transport. In the railroad transport adopted thus far for certain products, they have managed to cut CO<sub>2</sub> emissions by 81% from the truck transport previously employed. They will continue extending this new means of transport to other products in promoting this modal shift.



Photo courtesy: Japan Freight Railway Company

Waste reduction

Hitachi Kokusai Electric and main Group member manufacturers are committed to make a 90% reduction in final disposal by the end of fiscal 2010 from the level in fiscal 1998. Fiscal 2006 saw Hitachi Kokusai Electric recycle its wrappings and packages for electronics parts, and thoroughly sort their waste, thus making a 93% cut from the level in fiscal 1998 and reaching the target. However, with regard to the 3% final disposal rate of waste, one of the targets since fiscal 2005, we achieved a rate of 3.4% in fiscal 2006, falling a bit short of the target. From now on, we will focus on reducing its final disposal rate down to zero emissions; that is, "a final disposal rate of 1% or less and final disposal of less than 5 tons."



Appropriate control of PCB-containing equipment

Entrepreneurs who own transformers, capacitors, fluorescent lamp stabilizers, and related equipment containing polychlorinated biphenyls (PCBs) are obligated to strictly store and control such equipment, and properly dispose of it by the end of 2016 as per the PCB Special Measures Law. To prevent PCB loss and leakage, the Hitachi Kokusai Electric Group properly controls its PCBs on a continuous basis in locked storage facilities. Moreover, the Group periodically investigates and confirms the storage level and other factors relative to PCB-containing electrical appliances, and reports its findings to the local governments concerned every year.

To properly dispose of PCB waste, the Group registered its applicable equipment with the Japan Environmental Safety Corporation (JESCO) in March 2006, and thereby began the systematic disposal of PCB waste.

Survey results of PRTR-specific chemical substances

According to the "Law concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management" (PRTR Law) that became effective in April 2001, places of business handling more than one ton of any such substances have been legally obligated to report the chemical substances ever since fiscal 2003. However, neither Hitachi Kokusai Electric nor its main Group member manufacturers have encountered any reportable substances exceeding the applicable quantity handled. From this fiscal year on, the Group member companies to which we have commissioned part of its manufacturing operations are part of the tabulation.

PRTR-specific chemical substances actually released and transferred (in kilograms per year)					
(Sum of Hitachi Kokusai Electric and main Group member manufacturers)					
Chemical substance	Quantity handled	Consumption	Quantity recycled	Transfer	Release
Lead and its compounds	1,019	651	99	269	0
Hydrogen fluoride and its water-soluble salts	777	0	690	0	80
Toluene	299	41	0	6	249
Xylene	278	12	0	5	261

\*Substances significantly handled are shown above.

Controlling contamination of soil and groundwater

According to the "Soil Contamination Countermeasures Law" which became effective in February 2003, the Hitachi Kokusai Electric Group conducts voluntary surveys of soil and underground water on its own properties. Fiscal 2006 saw lead contamination found in the ruins of small incineration furnaces at two of the Group's sites. The Group then replaced the soil and finished purifying it.

