



# Eco-Factories & Offices

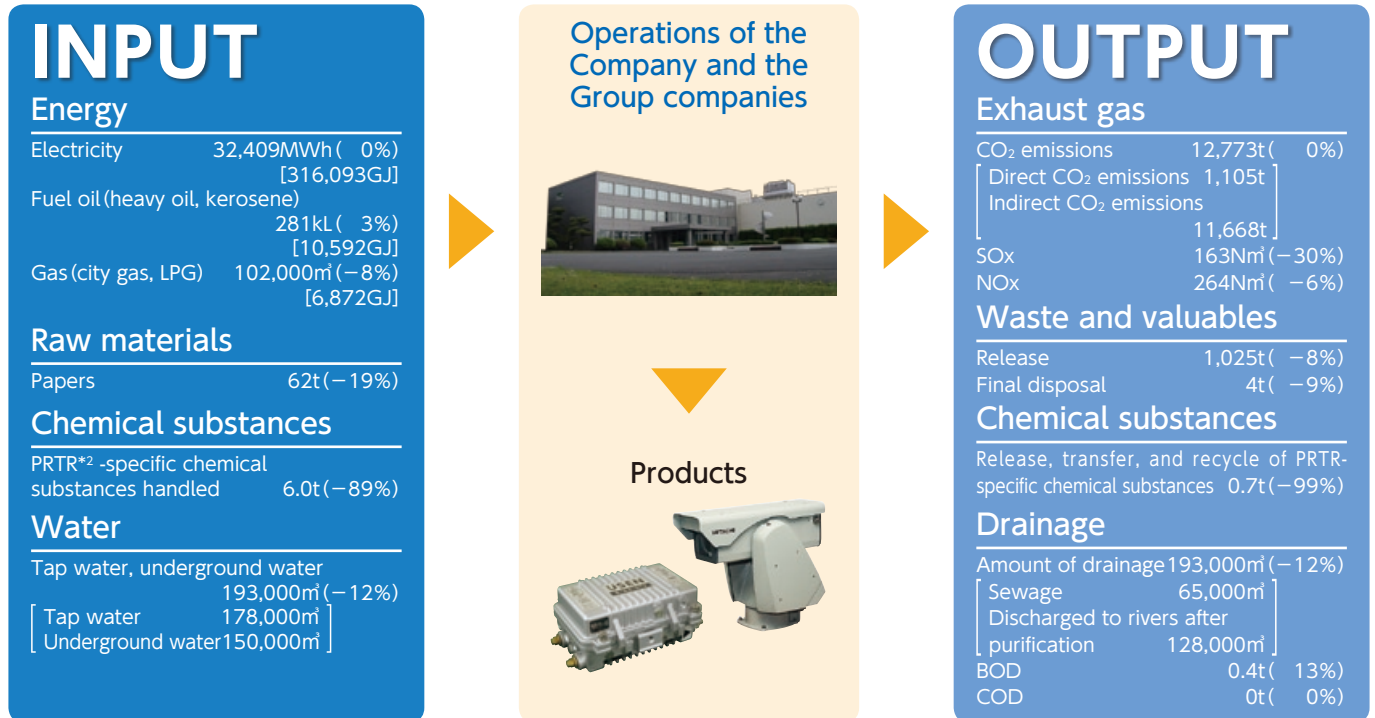
Through the entire production process of products, we work to save energy and enhance facilities in an attempt to prevent global warming and to reduce industrial waste.

## Operations and Environmental Loads

In conducting its operations, our Group expends resources and energy to provide products and consequently discharges CO<sub>2</sub> and wastes. The Company and its Group Manufacturers\*1 monitor the inputs and outputs of such elements, and work to reduce hazardous chemical

substances and increase energy efficiency.

Regarding the procurement stage of raw materials and the reduction of environmental impact by our products, see "Promoting CSR Activities in Our Supply Chain" and "Providing Next-Generation Products and Services," respectively.



\*1 Group Manufacturers: Hitachi Kokusai Yagi Solutions Inc., Kokusai Electric Semiconductor Service Inc., and Goyo Electronics Co., Ltd.  
 \*2 PRTR: Pollutant Release and Transfer Register

The values in parentheses show the changes from fiscal 2011.

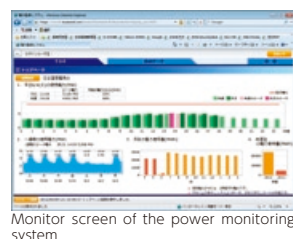
## Prevention of Global Warming (Energy-saving Efforts)

Production centers of the Company and Group Manufacturers have set a fiscal 2015 target of reducing the basic unit of CO<sub>2</sub> emissions in production by 10% compared to fiscal 2005, as a means to reduce the energy used at the product manufacturing stage. In fiscal 2012, we worked toward the goal of reducing our unit requirement for carbon dioxide emissions for production by 7%. However, a decline in production with regard to emissions actually resulted in a 5% cut, and thus we fell short of the goal.

As efforts regarding facilities in fiscal 2012, we implemented the renewal of high-efficiency air-conditioning equipment, switched mercury lamps to LED lamps, introduced a power monitoring system, and took other measures. With regard to operations, we sympathize with the National Campaign Against Global Warming promoted by the government from 2005, implemented "Cool Biz" and "Warm Biz" at all our business establishments, and continued our participation in the "Light Down Campaign."

### Introducing a power visualization system

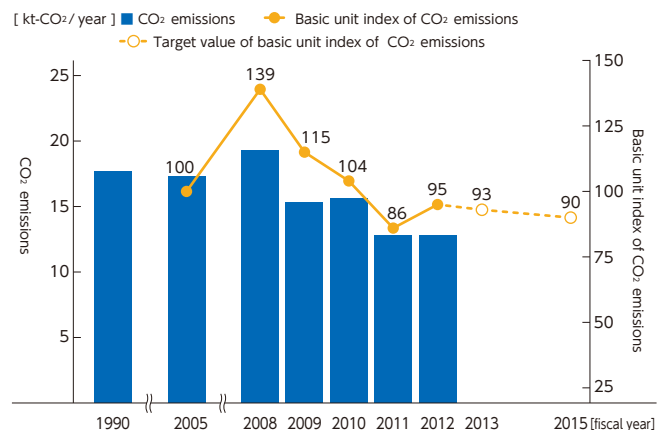
In fiscal 2012, the Hitachi Group introduced a power visualization system that monitors power consumption on



a real-time basis in order to control peak power.

In our Group, we also monitor the power consumption of five factories having a contracted power consumption of 500 kW or more on a real-time basis, and constantly monitor the leeway with regard to contracted power.

### ■ Changes in CO<sub>2</sub> emissions and the basic unit of CO<sub>2</sub> emissions in production



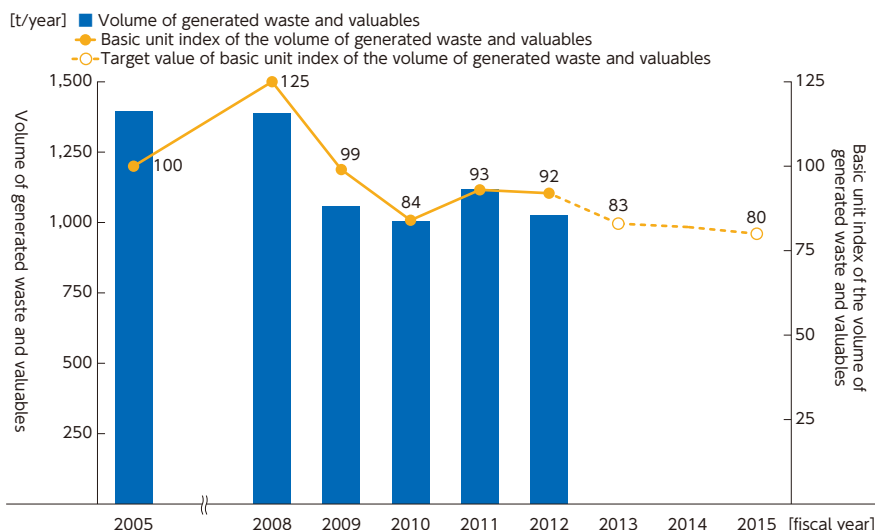
N.B. For the CO<sub>2</sub> emission factor used in calculating CO<sub>2</sub> emissions, we used the factors employed by the various power companies as announced by the Ministry of the Environment. We used 0.36 as the CO<sub>2</sub> emission factor in and after fiscal 2010, as used by the Hitachi Group.

## Reducing the Volume of Waste

The production centers of our Company and Group Manufacturers have set the target of improving the basic unit of the volume of generated waste and valuables by 20% in fiscal 2015 from the 2005 level, as one of the measures to control the volume of generated waste and valuables.

In fiscal 2012, we achieved our target by realizing an 8% cut as compared with our 6% cut target for the basic unit of the volume of generated waste and valuables, by shifting from wooden packing material to corrugated cardboard in packing products produced overseas, improving the packing style of delivered materials from our business partners, and making other efforts.

### ■ Transition of the volume and basic unit of generated waste and valuables



## PRTR-specific Chemical Substances

Under the “Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management (PRTR Law)” enacted in April 2001, any establishments that handle a certain quantity of targeted chemical substances or more must now report it to the authorities concerned. Since the revision of PRTR-specific chemical substances in fiscal 2010, the production centers of our Company and Group Manufacturers have been mainly engaged in chemicals used in the surface treatment of printed circuit boards and chemicals included in fuels, thereby monitoring and filing applications for the amounts handled. In fiscal 2012, however, with the closing of factories that manufacture printed circuit boards, the total amount of targeted chemical substances declined significantly.

### ■ PRTR-specific chemical substances actually released and transferred

(Sum of the production centers of the Company and Group Manufacturers) (in kilograms per year)

Chemical substance	Quantity handled	Release	Transfer	Consumption	Removal	Quantity recycled
Xylene	1,509	55	24	1,430	0	0
1,2,4-Trimethyl benzene	1,947	0	0	1,947	0	0
Toluene	124	87	22	15	0	0
Lead	418	0	6	356	0	56
Hydrogen fluoride and its water-soluble salts	435	94	341	0	0	0
Methylnaphthalene	1,493	0	0	1,493	0	0

N.B. Substances significantly handled are shown above

## Proper control of PCB-incorporating equipment

Operators owning transformers, capacitors, fluorescent lamp stabilizers, or similar equipment containing polychlorinated biphenyls (PCBs) are obligated to strictly store and control such items, and properly dispose of them by fiscal 2026 as per the Act for Special Measures for PCBs.

Our Group properly performs continuous control in locked storage facilities and conducts periodic inspection, in order to prevent loss and leakage.

In fiscal 2012, equipment containing a high concentration of PCBs stored at our Koganei Works was commissioned to Japan Environmental Safety Corporation (JESCO) for disposal, thereby completing the process of making the equipment harmless.



PCB-containing equipment being carried out