

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 CO₂ and wastes. The production sites of the Company and the Group monitor the inputs and outputs of such elements, and work to educe 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.

Input

Energy

Electricity (1%)32,605MWh [317,624GJ] Fuel oil (heavy oil, kerosene) 193,000m3 (-31%) [7,358GJ] Gas (city gas, LPG) 88,000m3 (-14%)

[6,410GJ]

Raw materials

Materials and parts 2,141t (-%)Package materials 316t (-%)**Papers** 43t (-31%)

Chemical substances

PRTR*1 -specific chemical substances handled 3.9t (-35%)

Water

Tap water, underground water 159,000m³ (-18%) Tap water 145,000m³ Underground water 14,000m³_

Operations of the Company and the Group companies



Products/ Services

Output

Exhaust gas

CO2 emissions*2 14.857t (-1%)Direct CO₂ emissions 869t Indirect CO₂ emissions 13.988t SOx 93Nm³ (-43%) 229Nm³ (-13%)

Waste and valuables

Release 1.076t (5%)Final disposal (5%)

Chemical substances

Release, transfer, and recycle of 0.6t (-21%) PRTR-specific chemical substances

Drainage

Amount of drainage 159,000m³ (-18%) Sewage 47,000m3 Discharged to rivers after purification 106,000m³ Underground seepage, etc. 6,000m³ -**BOD** 2.7t (650%) COD 0t (0%)

> The values in parentheses show the changes from fiscal 2012.

Reduction of wastes

At production sites of the Company and the Group companies, we have strived to reduce Waste and Valuables Generation per Unit since fiscal 2011, one of the revised indices according to the activities of the Hitachi Group in fiscal 2013, and set a goal of improving it by 38% in fiscal 2015 comparing to that in fiscal 2005.

While we had the goal of improving the Waste and Valuables Generation per Unit between fiscal 2005 and 2013 by 17%, we actually improved it by 35%, through making the cardboard boxes for reusable package materials, simplifying packages, and reducing the packing materials for transporting overseas products, thus achieving the goal.



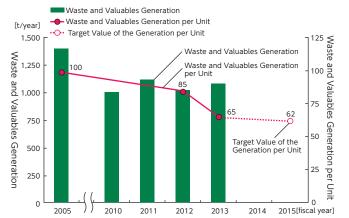
Sorting carts set in the Toyama Works



Instruction for sorting

The "e-learning about wastes" is conducted at the Toyama Works, to promote the separation of trash and the proper method of disposing of wastes. The illustrations of wastes are attached to sorting carts to prevent mistakes. For foreign visitors, the instructions are written in English, Korean, and Chinese in addition to Japanese.

■ Improvement in the amount of Waste and Valuables Generation and that per Unit



^{*1} PRTR: Pollutant Release and Transfer Register

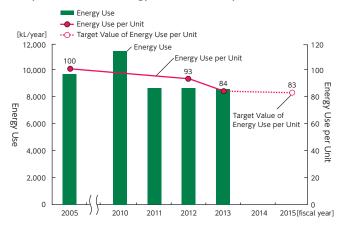
^{*2} CO2 emissions: Emissions were calculated based on the 2005 emission coefficients for electric power by country published by IEA.

Prevention of Global Warming (Energy-saving Efforts)

The production sites of the Company and the Group companies conduct activities to reduce the energy used at the product manufacturing stage. In fiscal 2013, we revised indices according to the activities of the Hitachi Group, and set a goal of improving Energy Use per Unit by 17% in 2015 comparing to that in fiscal 2005. In fiscal 2013, we made efforts to attain a goal of improving Energy Use per Unit by 7% from fiscal 2005, and succeeded in improving it by 16%, due to the effects of the operation of the newly constructed energy-saving factory.

As efforts regarding facilities in fiscal 2013, we implemented the renewal of high-efficiency air-conditioning equipment and switched mercury lamps to LED lamps. With regard to operations, supporting the National Campaign Against Global Warming promoted by the government from 2005, we implemented "Cool Biz" and "Warm Biz" at all our business establishments, and continued our participation in the "Light Down Campaign."

■ Improvement in Energy Use and that per Unit

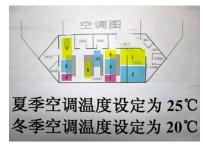


Appropriate control of the set temperatures of air conditioners in overseas offices

Kokusai Electric Korea Co., Ltd. and Hitachi Kokusai Electric (Shanghai) Co., Ltd., which are our Group companies, indicate set temperatures on the temperature control panels for air conditioners, to control air-conditioned temperature appropriately, in order to curtail air-conditioning energy in offices.



Indication of set temperatures for air conditioners at Kokusai Electric Korea Co., Ltd.



Indication of set temperatures for air conditioners at Hitachi Kokusai Electric (Shanghai) Co., Ltd.

Environmental care for the construction of new buildings

The Tokyo Works of the Company built the new building West-Wing, in order to streamline operation through the integration of production sites, and started operating it in July 2013. Under the concept of "environmental care," we installed 100-kW solar power generation equipment, adopted LED lamps fully, adopted air-cooled heat pump package air-conditioners, etc. for saving energy.

In addition, Goyo Electronics Co., Ltd. of the Group built the new building V-Wing for enlarging production area, and started operating it in December 2013. Under the concept of "environmental care" like the Tokyo Works, it used solar-powered LED street lamps for outdoor lighting, adopted LED lamps fully, and adopted air-cooled heat pump package air-conditioners, etc. for saving energy.

From now on, we will operate the installed energy-saving equipment effectively.



New building West-Wing of the Tokyo Works



Solar-powered LED street lamp of the new building V-Wing of Goyo Electronics Co., Ltd.

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 2013, we entrusted the Hokkaido Office of Japan Environmental Safety Corporation with the processing of the capacitors for fluorescent ballasts, including PCBs, which had been stored by Goyo Electronics Co., Ltd. of the Company's Group, and the processing to make them harmless was completed.

The devices including PCBs, which had been held by the Hamura Works of the Company and Omiya Works of Hitachi Kokusai Yagi Solutions Inc., were gathered to the Tokyo Works of the Company, for managing them under collective control.



PCB-containing equipment being carried out