## **Eco-Factories** (eco-friendliness in production activities)

We make efforts to slow down global warming by saving electric power consumption and enhancing the facilities, reduce waste discharge toward the goal of zero emissions, and promote other programs in an attempt to reduce our environmental impact.

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

Our Group has set its fiscal 2010 energy reduction target in the manufacturing stage to making a 35% cut in the real production CO<sub>2</sub> unit requirement from the level in fiscal 1990, thereby working to slow down global warming. That target is shared with the rest of the electrical and electronics industry.

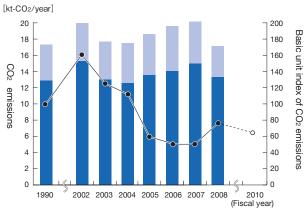
The basic unit of CO<sub>2</sub> emissions in actual production is the unit of measure for the uniform target of the electrical and electronics industry, and has been used as a control indicator since fiscal 2005. The basic unit of CO<sub>2</sub> emissions in actual production by Hitachi Kokusai Electric and Group member manufacturers in fiscal 2008 was reduced by 26%, which was short of our target value of a 30% reduction from the level in fiscal 1990.

CO<sub>2</sub> emissions by Hitachi Kokusai Electric and Group member manufacturers in fiscal 2008 was reduced by 13% from the level in fiscal 2007, but it was increased by 3% from the level in fiscal 1990.

The Group will continue to take such energy-saving measures as reexamining operation methods of the facilities and upgrading them into energy-saving types. Our 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 CO₂ emissions and the basic unit index of CO<sub>2</sub> emissions in actual production











Display of air-conditioner's setting

### Compliance with the Tokyo Ordinance on Global Warming Prevention

Our Koganei Works and Hamura Works have been presenting plans and making efforts since fiscal 2006, since both facilities are subject to the Tokyo program for global warming prevention plans as per an ordinance issued by the Tokyo Metropolitan Government (TMG). In its mid-term assessment of fiscal 2008, the TMG gave "AA" rankings to both the Koganei Works and Hamura Works. (The top ranking is AAA.)

Fiscal 2010 will witness a revision of the ordinance issued by the TMG, thereby mandating the obligation to reduce the total emission level of greenhouse effect gases and the program for trading emissions, for which we are preparing new systems.

#### **Topics**

#### Controlling carbon dioxide emissions and contributing to society through efforts by the Ecocap Movement

Since 2008, we have been participating in the Ecocap Movement, which involves the recycling of PET bottle caps. The collecting associations sell the caps to recycling agents and the money obtained from these sales is donated to the Ecocap Movement (a non-profit

organization). By April 2009, we had collected about 90,000 caps, equivalent in value to the cost of polio vaccinations for about 120 patients.

This means that we had reduced our carbon dioxide emissions by about 700 kg from the level if all the caps had been burned. The caps sold will be recycled for use in making automotive dashboards and other products, thereby contributing to a reduction in plastic refuse.

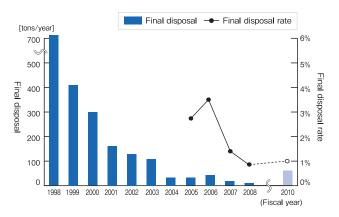


#### **Waste Reduction**

Our Company and Main Group Manufacturers are working toward the target of reducing their final disposal of waste by 90% by fiscal 2010 from the levels in fiscal 1998. In fiscal 2008 we enhanced recycling, thoroughly implemented the disposal of sorted garbage, and consequently made a 98% cut in disposable waste from 1998 levels to achieve the target. Moreover, regarding the targeted final waste disposal rate of 3% or less (as added for fiscal 2005 and onwards), we achieved the target in fiscal 2008 at 0.9%.

From now on, each place of business will reduce 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."

#### Final disposal and final disposal rate of waste



# Promoting the conversion of industrial waste manifestos into electronic form

The Government of Japan is promoting the introduction of electronic manifestos instead of conventional paper-form industrial waste manifestos in order to "share information" and "transmit information efficiently."

Our Koganei Works has introduced the electronics manifesto system of the Hitachi Group and is switching from conventional paper manifestos to electronic manifestos. We will introduce this system to other factories as well.



Operation screen for electronic manifesto

## 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), an entity handling more than one ton of any such substances reports the substances. Neither the Company nor its Main Group Manufacturers have encountered the applicable quantity (1ton) in fiscal 2008.

■ PRTR-specific chemical substances actually released and transferred (in kilograms per year)

(Sum of Hitachi Kokusai Electric and Main Group Manufacturers)

Chemical substance	Quantity handled	Consumption	Quantity recycled	Transfer	Release
Lead and its compounds	778	587	48	143	0
Hydrogen fluoride and its water-soluble salts	333	0	229	0	44
Toluene	278	13	0	15	250
Xylene	200	16	0	0	184

<sup>\*</sup>Substances significantly handled are shown above

# Appropriate Control of PCB-containing Equipment

An entity who own 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, our 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.

#### **Topics**

#### Converting plastics to valuable matter

Goyo Electronic Co., Ltd. has begun finely sorting plastic materials (previously disposed of as industrial waste) into specific material categories, thereby making it possible to sell the waste as valuable matter. Moreover, this fine sorting has enabled the recycling of materials (for reuse), thereby helping to reduce environmental impact.



Glossary

\*1 Industrial waste manifesto ·······This is a control form to be issued for preventing illegal disposal and ensuring appropriate processing when the processing of industrial waste is commissioned to a disposal agent. The issuance of such a document is mandated under the Industrial Waste Disposal Law.