



# Eco-Mind & Global Environmental Management

We work to cultivate an eco-mind establishing an environmental management system as the major leverage for it, according to our Guidelines and Commitments and our Environmental Conservation Action Guidelines.

## Hitachi Kokusai Electric Action Guidelines for Environmental Conservation

### [Purpose]

In order to realize an environmentally harmonious and sustainable society through products and services, Hitachi Kokusai Electric is committed to meeting its social responsibilities by promoting globally-applicable Monozukuri ("designing, manufacturing or repairing products"), which is aimed at reducing the environmental burdens of products throughout their entire life cycles, ensuring global environment conservation.

Introductory website of Action Guidelines for Environmental Conservation



Home Page of Hitachi Kokusai Electric Inc.

<http://www.hitachi-kokusai.co.jp/global/csr/environment/earth.html>

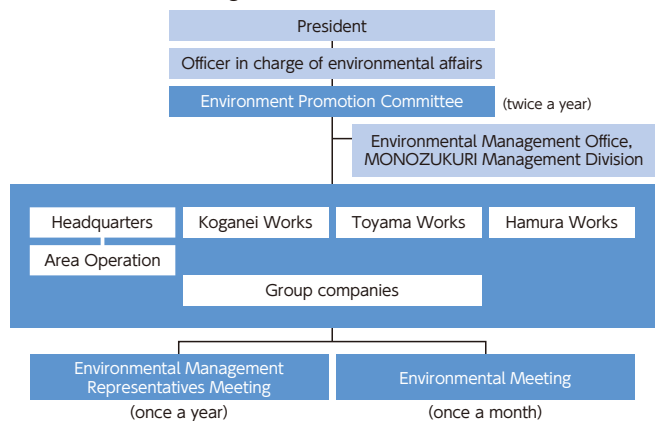
or

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## Environmental Management System

The "Environment Promotion Committee" comprised of the environmental affairs officer, general manager of the Works, and environmental affairs officers of the Group deliberates, determines, and implements a medium-term environmental action plan, yearly targets, and important challenges for the entire Group. The Environmental Management Office of the MONOZUKURI Management Division helps promote the implementation plan based on the determination by the Environment Promotion Committee and performs follow-ups on the progress at the "Environmental Management Representatives Meeting" and "Environmental Meeting."



### Situation of acquiring ISO 14001 certification

In fiscal 1996, our Group began acquiring ISO 14001 (environment management system) certification, and in 2006 acquired said certification for all our domestic production and service bases at that time.

We expanded the scope of application in fiscal 2007 to include the sales division of our head office, which is a contact point with our customers, and in fiscal 2011 included the sales divisions of area operations and sales offices of the Company. The expanded scope of ISO 14001 certification thus applies thereafter and at present.

## Targets and Results of Environment Activities in Fiscal 2012

The results and evaluation of the major items of the Environmental Action Plan in fiscal 2012 are as follows:

| Category                                   | Main item                                        | Action goal                                                   | Index                                                                              | Final year (fiscal 2015) targets | Fiscal 2012 targets | Fiscal 2012 results | Evaluation |
|--------------------------------------------|--------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------|---------------------|---------------------|------------|
| Eco-Mind & Global Environmental Management | Establishment of Environmental Management System | Improvement in environmental activity level (GP: Green Point) | GP of GREEN 21-2015                                                                | 640 GP                           | 448GP               | 475GP               | 🌳🌳🌳        |
|                                            | Nurturing of Environmental Literacy              | Fostering environmental minds by environmental e-learning     | Participation ratio                                                                | 98 %                             | 98%                 | 100%                | 🌳🌳🌳        |
| Next-Generation Products & Services        | Promotion of Eco-Products                        | Increasing Hitachi Eco-Products                               | Ratio of Eco-Product sales to total sales                                          | 88 %                             | 81%                 | 85%                 | 🌳🌳🌳        |
| Super Eco-Factories & Offices              | Preventing Global Warming                        | Improvement of CO <sub>2</sub> emission intensity             | Basic unit of production CO <sub>2</sub> emissions (reference year 2005)           | -10 %                            | -7%                 | -5%                 | 🌳          |
|                                            | Energy Reduction during Transportation           | Improvement of transportation energy intensity                | Basic unit of production transportation energy (reference year 2006)               | -15 %                            | -13%                | -25%                | 🌳🌳🌳        |
|                                            | Effective Use of Resources                       | Improvement of generation amount intensity of wastes, etc.    | Basic unit of the amount of production waste, etc. generated (reference year 2005) | -20 %                            | -6%                 | -8%                 | 🌳🌳🌳        |
|                                            |                                                  | Promotion of electronic manifest                              | Increase of registration (issuance) ratio                                          | 90% or more                      | 75%                 | 78%                 | 🌳🌳🌳        |

Evaluation standard 🌳🌳🌳: Achieved 100% 🌳🌳: Achieved 80% or more 🌳: Achieved less than 80%

## Evaluation results of fiscal 2012 for "GREEN 21-2015"

The Hitachi Group implements "GREEN 21," a mechanism for self-evaluating its environmental activities in order to improve and upgrade the levels of such activities. GREEN 21 is a mechanism for classifying the areas of environmental activities into eight categories, evaluating the degree to which the targets of environmental activities were achieved and the contents of said activities, and visualizing the results in the form of radar charts.

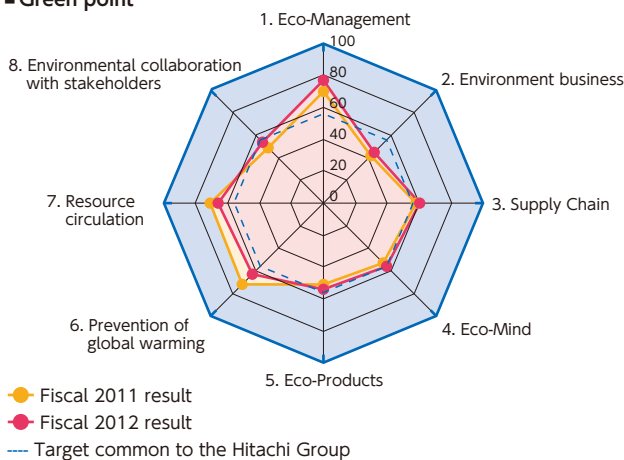
During the period from fiscal 2011 to 2015, we intend to add contributions to management by expanding environmental activities, preserving ecosystems, and conducting activities to collect and convey environmental information through the supply chain as pertaining to the evaluation items, and make efforts to raise the level of such activities, as "GREEN 21-2015."

In achieving the target, our result for fiscal 2012 was 475 GP as compared to 448 GP—the target common to Hitachi Group companies.

### GREEN 21 evaluation items

|   | Category                                      | Main Evaluation Indicators                                                                    |
|---|-----------------------------------------------|-----------------------------------------------------------------------------------------------|
| 1 | Eco-Management                                | Environmental control, Environmental accounting, Observance of laws and regulations           |
| 2 | Environment business                          | Reduction of annual CO <sub>2</sub> emissions by 100M tons, Environment business strategy     |
| 3 | Supply Chain                                  | Collection and provision of environmental information through supply chain                    |
| 4 | Eco-Mind                                      | Environmental education, Fostering of environmental expert                                    |
| 5 | Eco-Products                                  | Assessment of products and services                                                           |
| 6 | Prevention of global warming                  | Reduction of CO <sub>2</sub> emissions, Energy-saving effort, Energy-saving in mobility       |
| 7 | Resource circulation                          | Resource recycling, Control of chemical substances                                            |
| 8 | Environmental collaboration with stakeholders | Information disclosure, Communications, Activities of global citizens, Ecosystem conservation |

### Green point



## Environmental Accounting

According to the Environmental Accounting Guidelines specified by the Ministry of the Environment, our environmental conservation cost was defined as investments and expenses related to environment. The environmental conservation effects were determined based on profits from the sales of recycled items, expenditure reduction due to investments in energy-saving equipment, etc. We will continue to improve the return on investment.

### Environmental conservation cost

Expenses (in millions of yen)

| Item                           | FY 2010 | FY 2011 | FY 2012 | Overview                                                                                                           |
|--------------------------------|---------|---------|---------|--------------------------------------------------------------------------------------------------------------------|
| Business area costs            | 197.0   | 204.4   | 187.9   | Costs of maintenance of equipment with low environmental burden, depreciation, etc.                                |
| Upstream/downstream costs      | 0.2     | 0.1     | 0.3     | Costs for green procurement and recycling                                                                          |
| Management activity costs      | 67.3    | 43.8    | 51.5    | Personnel expenditures for environmental management, maintenance costs for environmental management system         |
| Research and development costs | 166.7   | 215.6   | 216.5   | R&D for the reduction of environmental burden caused by products and production processes, product design expenses |
| Social activity costs          | 2.0     | 1.9     | 1.5     | Environmental improvements such as afforestation and beautification, PR, and publicity expenses                    |
| Environmental damage costs     | 0       | 0       | 0       | Environment-related measures, contributions, and levies                                                            |
| Total                          | 433.1   | 465.9   | 457.7   | —                                                                                                                  |

Investments (in millions of yen)

| Item                                      | FY 2010 | FY 2011 | FY 2012 | Overview                                                                                             |
|-------------------------------------------|---------|---------|---------|------------------------------------------------------------------------------------------------------|
| Investments in environmental conservation | 9.2     | 57.4    | 20.4    | Direct investments in environmental load reduction facilities such as energy conservation facilities |

### Environmental conservation effects

Economic effects (in millions of yen)

| Item                  | FY 2010 | FY 2011 | FY 2012 | Overview                                   |
|-----------------------|---------|---------|---------|--------------------------------------------|
| Net income effects    | 8.3     | 9.7     | 9.0     | Profit on sale of recycled waste, etc.     |
| Expenditure reduction | 10.0    | 10.3    | 0.6     | Cost-saving effects, etc. by saving energy |
| Total                 | 18.3    | 20.0    | 9.6     | —                                          |

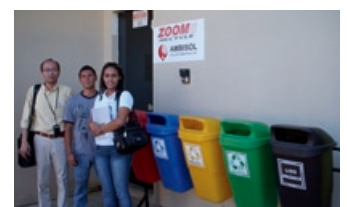
The scope of data tabulation covers our head office, factories, and group companies (e.g., Hitachi Kokusai Yagi Solutions Co., Ltd., Goyo Electronics Co., Ltd., Sendai Works) .

## Environmental governance of overseas centers

We visited Hitachi Kokusai Linear Equipamentos Eletrônicos S/A in Brazil to inspect the legal conformity of our overseas centers.

We conducted hearings involving the site representatives by referring to preliminary research documents, and inspected the operation management status of environmental facilities. We also accompanied the personnel visiting the disposal contractor of industrial waste and, in so doing, managed to monitor the local disposal system, such as the status of recycling and the barcode control of materials received for disposal.

From the Japanese side, we will continue giving assistance in order to improve the environmental governance of our local centers.



Local disposal contractor of industrial waste