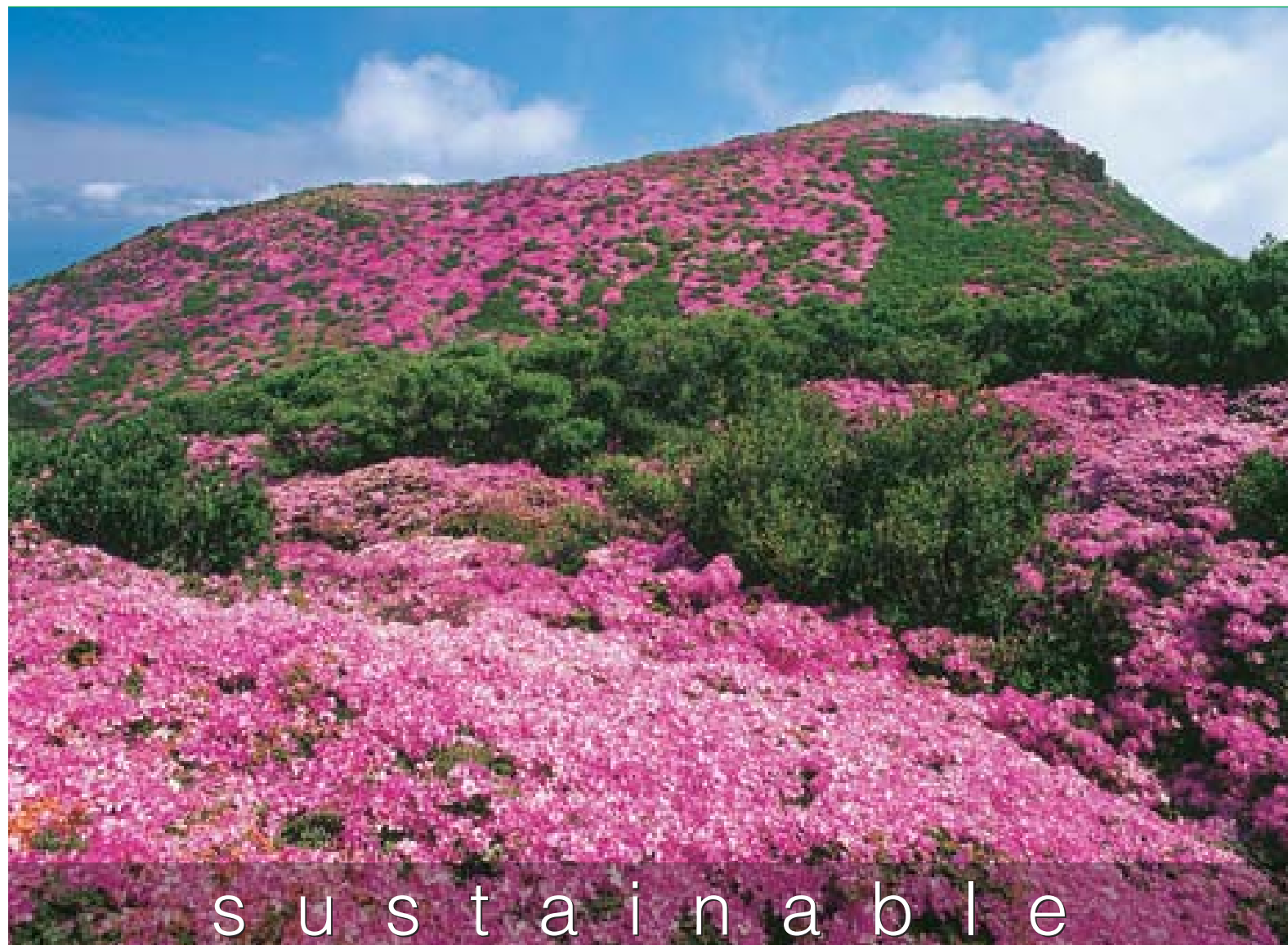




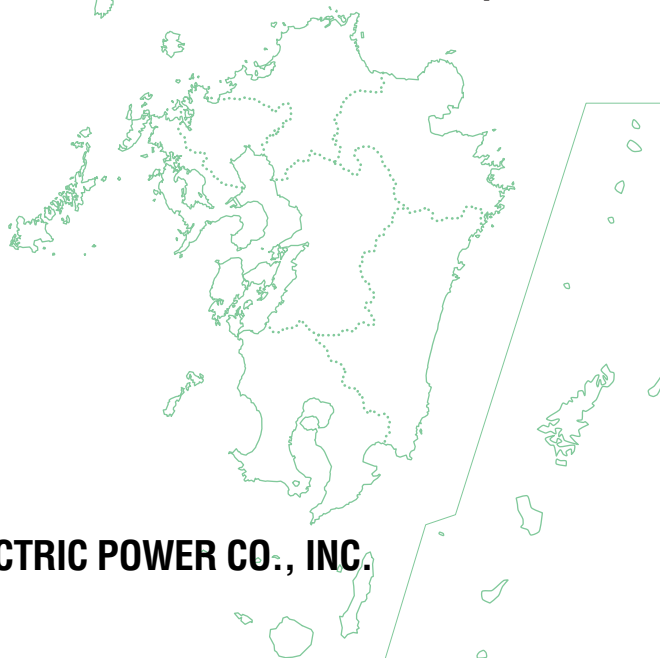
Towards an Environmentally Friendly Corporate Stance



s u s t a i n a b l e

Azaleas on Mt. Hiji, one of the Kuju Mountains

# 2006 Kyushu Electric Power Environment Action Report



**KYUSHU ELECTRIC POWER CO., INC.**

# Company Profile (As of March 31, 2006)

**Date of establishment:** May 1, 1951  
**Capital:** ¥237.3 billion  
**No. of shareholders:** 194,439  
**Service area:** Fukuoka, Saga, Nagasaki, Oita, Kumamoto, Miyazaki and Kagoshima Prefectures

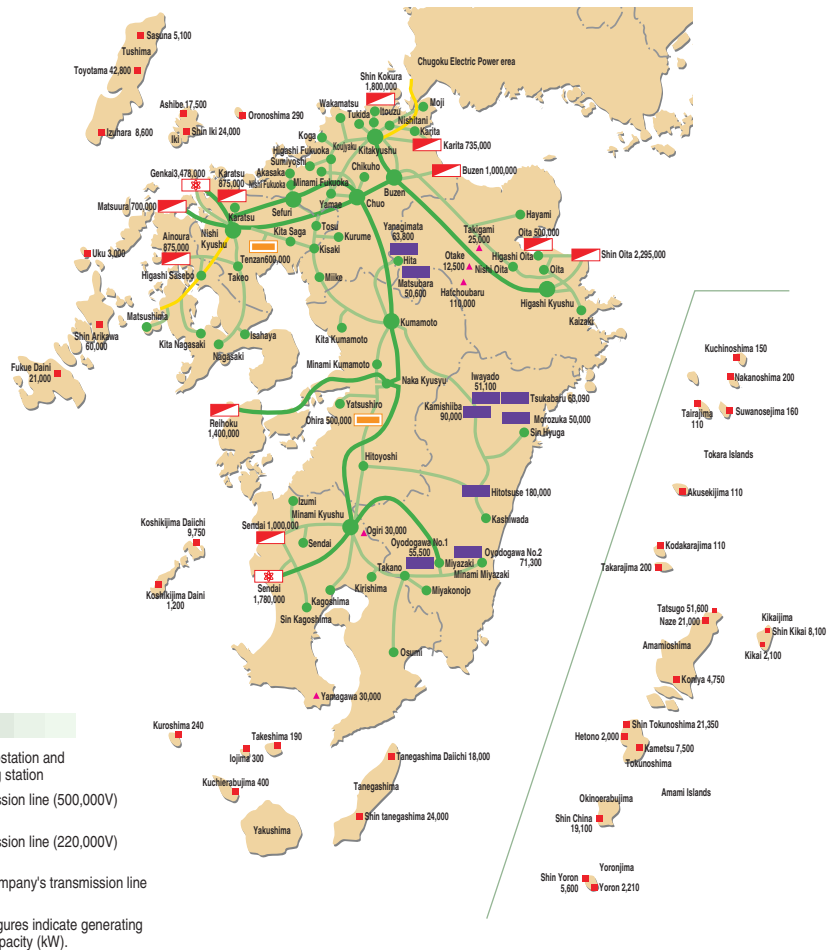
**Sales:** ¥1,329.4 billion  
**Total assets:** ¥3,857.3 billion  
**No. of employees:** 13,074

## Supply facilities

Hydroelectric power stations	139	2,378 million kW
Thermal power stations	10	11.18 million kW
Geothermal power stations	5	208,000 kW
Internal combustion power stations (includes heat exhaust and gas turbine)	35	383,000 kW
Nuclear power stations	2	5,258 million kW
Others	2	3,000 kW
Kyushu Electric Power total	193	19.41 million kW
Other companies' total	47	2,971 million kW
Total generation facilities	240	22,381 million kW
Substations	575	67.57 million kVA
Length of transmission lines	9,769km	
Length of distribution lines	132,327km	
<b>Number of customers</b>		
Lighting	7.31 million	
Electricity	1.05 million	
Total	8.36 million	

## Characteristics of the region

- Geothermal power generation facilities: approximately 40% of the nation's total geothermal power supply
- Power generation facilities on remote islands: approximately 70% of the nation's total power supply for remote islands (incl. hydroelectric and wind power generation)



## Main Offices

	Address	TEL
Kitakyushu Branch Office	3-1, Komemachi 2-chome, Kokurakita-ku, Kitakyushu 802-8521	+81-93-531-1180
Fukuoka Branch Office	1-82, Watanabedori 2-chome, Chuo-ku, Fukuoka 810-0004	+81-92-761-6381
Saga Branch Office	3-6, Kono-higashi 2-chome, Saga 840-0804	+81-952-33-1123
Nagasaki Branch Office	3-19, Shiroyamamachi, Nagasaki 852-8509	+81-95-864-1810
Oita Branch Office	3-4, Kanaikemachi 2-chome, Oita 870-0026	+81-97-536-4130
Kumamoto Branch Office	6-36, Kamisuizenji 1-chome, Kumamoto 862-0951	+81-96-386-2200
Miyazaki Branch Office	2-23, Tachibanadori-nishi 4-chome, Miyazaki 880-8544	+81-985-24-2140
Kagoshima Branch Office	6-16, Yojiro 2-chome, Kagoshima 890-8558	+81-99-253-1120
Tokyo Branch Office	7-1, Yurakucho 1-chome, Chiyoda-ku, Tokyo 100-0006	+81-3-3281-4931

# Editorial Policy

Kyushu Electric Power Co., Inc. recognizes its corporate social responsibility and is dedicated to disclosing information on the environmental impacts attributable to our business operations as well as our efforts to mitigate such impacts. We also consider such communication is essential in promoting environmental activities. Thus, the Environment Action Reports have been published since 1996 to disclose the status of our environmental activities.

## [Scope of the Report]

Organizations: Kyushu Electric Power Co., Inc. and its group companies

Period: April 1 2005 through March 31 2006

( Some future plans and activities are covered; and where possible updates of significant information up to the issue of this report are also included. )

## [Guidelines Referenced]

The Ministry of the Environment [The Standards for Environment Report Compilation]

The Ministry of the Environment [The Environmental Reporting Guidelines] (FY2003 version)

## [Date of Issue]

Last issue: June , 2005

Next issue: planned for June 2007

## Enhanced reliability of report

Since 2002, we have had our Action Reports reviewed by an independent institution in order to ensure information stated in the report is objectively reliable. Beginning with this report, we have been awarded the Environmental Report Review & Registration Mark. The mark is granted for reports that, upon review, are deemed to fulfill the criteria for awarding the mark, as stipulated by the Japanese Association of Assurance Organizations for Environmental Information.

 Data reviewed as significant environmental information



Environmental Report Review & Registration Mark

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## Supplementary Materials [Glossary]

A pull-out is provided at the end of this report for your convenience. The glossary provides useful definitions of terms used in the report and other basic environment-related terminology.

# “Valuing Trust” is the CSR of Kyushu

## The mission and responsibility to take a role in the lifeline

I'd like to thank you all for using our electricity every day.

Our company has long understood the social responsibility of public utilities, of bearing a lifeline of electricity to our customers, and doing so with safety and stability. From the very beginning, we have been fulfilling our social responsibility of providing inexpensive and dependable electricity.

Without the community's cooperation and support, constructing, operating and staffing our facilities would be impossible. With this in mind, we have undertaken activities that will further strengthen the trust we have worked long and hard to earn from society.

There is no change in our fundamental mission to prioritize safety and continue providing electricity reliably and efficiently amid a business environment in which competition in the energy markets is growing increasingly intense. Our company takes pride in handling our responsibilities, and we strive for a sincere, fair and rigorous code of business conduct.

## Contributions for sustainable social development

A company is a part of society—a truth that is important to remember amid today's numerous corporate scandals. A company cannot exist if we ignore its relationship with society.

Together with the advance of globalization, recent trends in deregulation and administrative reform, greater corporate-community engagement are

spreading through all industries. Defining a company's role and responsibilities has become critical.

It is generally said that CSR embodies a company's efforts to contribute to sustainable social development by meeting public expectations, not merely regarding legal compliance, but also involving the company's capacity to satisfy the public's fiscal and ethical expectations and enhance corporate value.

This is perfectly in accord with the business stance of Kyushu Electric Power Group's Management Vision and Kyushu Electric Power Group's Charter of conduct, the latter of which slates our pledge to create corporate value and contribute to developments in society, by raising the degree of satisfaction in our customers, shareholders, investors, society and employees.

We believe that is Kyushu Electric Power's CSR vision. The basic philosophy I continue to stress is “cultivating and maintaining trust”—which is the essence of the CSR we are hoping to achieve.

## Striving for CSR Excellence

Positive approach for CSR includes compliance management, information disclosure, environment management, and co-existence with society.

These contribute to social development, of course, but they also lead to the creation of greater value for the Kyushu Electric Power Group and improving our competitive edge. For us, CSR activities are not merely responses to social demands; they are actions directly rooted in our own company principles.

# Electric Power Company



Our company has taken positive steps to pursue our CSR ideals. To further enhance effectiveness, we appointed an officer specializing in CSR in June 2005. And in July 2005, we established the CSR Promotion Committee with our managing executive officers.

With this system in place, we are striving to be a company known for its CSR excellence.

## United with our stakeholders

Recent animated discussions regarding the nature of company ownership frequently ask: To whom does a company really belong? But I have long felt that it is not a matter of possession. Instead, a company is a public entity, a place where various stakeholders are engaged in creating value.

In order to continue being a company whose value can be measured by all stakeholders, we must listen closely to the voices of our stakeholders and reflect their opinions and feedback in our business management. In so doing, we will build our own CSR Management Cycle. Only then can we attain true excellence in CSR as well as business.

June 2006

松尾新吾

Shingo Matsuo

President

Kyushu Electric Power Co., Incorporated.

# Contributing to Building a Sustainable of Environmental Management

Message  
from the  
Chairperson of  
the Environmental  
Committee

## Environmental Conservation is Our Social Responsibility

As a part of our effort to fulfill our corporate social responsibilities (CSR), the whole Kyushu Electric Power Group practices “environmental corporate management” to promote awareness of the importance of environmental protection in all of our business activities, and to contribute to the maintenance of a rich natural environment.

In February 2005, the Kyoto Protocol, which obliges advanced countries to cut their greenhouse gas emissions, came into force. This represents a major movement for efforts to prevent global warming, but the road to that goal is rocky, and not negotiable by the Kyoto Protocol alone.

We are keenly aware that companies like us, which have little alternative than to produce environmental load in such forms as CO<sub>2</sub> in the process of generating electricity, have a responsibility to face challenges such as environmental protection in general—and prevention of global warming in particular—in a sincere manner.

In Japan, the enforcement of the Kyoto Protocol has seen an increase in the importance of the environmental endeavors of electricity producers, as illustrated by the inclusion in the Kyoto Target Achievement Plan adopted by the Cabinet in April 2005 of the necessity for the electricity industry to make efforts in this area.

In light of this, we have set ourselves a target of reducing the CO<sub>2</sub> emission per net system energy demand to less than 20% of FY1990 levels by FY2010, and we are doing everything we can to achieve this.

Specifically, we are looking to achieve the optimum combination of power sources for the future, with nuclear power as the core of that mix. Based on that, we are implementing measures to gear electric power supply towards that goal—such as by increasing nuclear power generation usage rates, improving thermal power generation efficiency, and introducing renewable energy sources—as well as demand, such as by promoting the use of energy-saving devices like heat-pump water heaters.

We believe these endeavors are capable of contributing to the realization of a sustainable society, and we are determined to see them make steady progress.

## Saving the Environment Together with Our Customers

Increased interest in environmental issues and more stringent regulations pertaining to anti-global-warming measures has resulted in a significant increase in enquiries from our customers about our environmental stance. Certainly, deregulation of the electricity industry means we are working hard to improve efficiency and reduce costs so as to drive electricity charges down, but rest assured that we are also labouring every day to provide customers with electricity that is of a high environmental quality and safe to use, and are open to suggestions from customers regarding energy conservation. In this way, we are working in cooperation with our customers to achieve consistent improvement in reducing our environmental loads.

# Society through Active Promotion

## Promoting Environmental Communication

Global warming and other environmental issues are highly relevant to socio-economic activity and the lives of people in general. Therefore, it is said that they are issues that everyone—national and local governments, businesses and people—must get involved in, and co-operate on. To that end, we believe communication is vital; we are proactive in eliciting our customers' opinions through visits to their homes and offices, environment and energy education workshops, through lectures and Eco Mother activities, and in reflecting those views in our implementation of environmental corporate management.

This is the 10th issue of the Kyushu Electric Power Environment Action Report as part of our communication efforts. We have worked to reflect the opinions and requests to enrich its content, giving more focus to “communication.”

We undertake to engage in environmental communication in order to better satisfy all our customers. We look forward to hearing your frank views and opinions.

June 2006

今村 毅

Kowashi Imamura  
Executive Vice President  
Chairperson of the Environmental Committee  
Kyushu Electric Power Co., Incorporated.





## We continually strive to achieve better operation of our environmental management system (EMS)

EMS P12

We have started EMS Training to complement the ongoing support that the Environmental Affairs Department provides to business sites and offices.

## We have reinforced our efforts to combat global warming

Energy and resource conservation in office P25

Take active part in "Cool Biz" drives P26

Starting from FY2006, we have established new environmental targets in four areas - e.g., in-house power consumption - in order to further boost our office energy and resource conservation activities. Kyushu Electric Power has also been a proud and active member of Team Minus 6%, the movement started by Global Warming Prevention Headquarters (headed by Prime Minister Junichi Koizumi) since June 2005.

Kyushu Electric Power is a proud member of Team Minus 6%.



みんなで止めよう温暖化

チーム・マイナス6%

## We have begun cooperative collection of industrial waste

Cooperative collection of industrial waste P29

In a move aimed at more efficient and effective recycling and reduction of the volume of waste disposed of at landfills outside company premises, we have begun cooperative collection of industrial waste.

## We have submitted our environmental impact assessment procedure for scrutiny

Environmental assessment P31

With a view to development of the upcoming nuclear power in the latter part of the next decade, we have conducted an environmental survey at the Sendai Nuclear Power Station, and submitted the resulting environmental impact assessment procedure to the national and pertinent local governments in August 2005.

## We are dedicated to eliminating asbestos

Control of chemical substances (asbestos) P34

We ascertained and published information relating to the amount of asbestos used in our buildings and facilities.

## We won first prize in the Green Reporting Awards

Environment Action Report P36

Kyushu Electric Power was honoured with first prize at the 9th Green Reporting Awards held jointly by Toyo Keizai Inc., and the Green Reporting Forum for our FY2005 Environment Action Report.

## The Kyushu Electric Power Group practices environmental corporate management.

Environmental corporate management at the Kyushu Electric Power Group P42

FY2005 saw us expand the number of group companies practicing environmental corporate management from 40 to 46, and we have also beefed up the group's environmental targets for FY2006 onwards.

## See the notices regarding our Pluthermal Plan for the Genkai-3 Nuclear Power Station

Pluthermal Plan P08



## We hold environmental education support activities at the Onagohata Recreation Forest.

Environmental education support activities P39

To support environmental education especially at schools, Kyushu Electric Power is hosting nature classes and nature watch programs in the Onagohata Dam area.



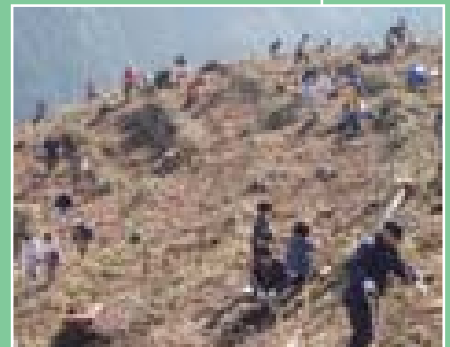
Children enjoy learning at the environmental workshops.



## The Kyushu Homeland Forestation Program is underway all over Kyushu.

Kyushu Homeland Forestation Program P38

The Kyushu Homeland Forestation Program, which aims to plant one million trees over 10 years starting from FY2001, has marked its sixth anniversary, and 540,000 trees have been planted so far.



A forestation program underway in the Sozu River source area of Hitoyoshi City. (Hitoyoshi City, Kumamoto Prefecture)

1 million trees

540,000 so far

'01 '02 '03 '04 '05



We are working with communities all over Kyushu to conduct environmental activities.

We are engaged in environmental communication all over Kyushu.



Our Kyushu-wide exhibition centers offer educational fun for all

**Lectures and Study Tours P36**

In July 2005, the Kyushu Energy Hall (Yakuin, Chuo-ku, Fukuoka) welcomed its five millionth visitor, while the Genkai Energy Park (Genkai-cho, Higashi Matsuura-gun, Saga) welcomed its two millionth visitor in May 2006.



Kyushu Energy Hall

More information about each center on page 61.



Genkai Energy Park



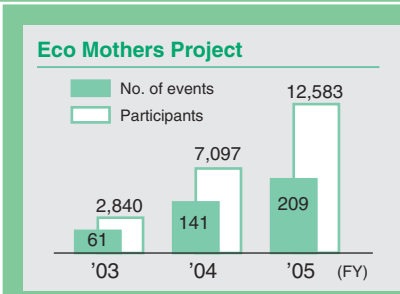
Eco Mothers in each region conduct their own unique environmental PR activities.

**Eco Mothers Project P37**

In FY2005, Eco Mothers performed 209 environment related picture card shows at kindergartens, nursery schools, and children's meetings.



After an environmentally-themed picture-card show, children find out through hand-made educational materials about what they can do to preserve the environment.



## ~Pluthermal Plan~

### We outlined a plan to start pluthermal operations at Genkai-3 that will be in use by FY2010.

We established a policy for the pluthermal plan at Genkai-3 that will be in use by FY2010.

We submitted our applications for prior consent to Saga Prefecture and Genkai town on May 28, 2004, based on our safety agreement. On the same day, we submitted the application for permission for reactor modification to the government.

After undergoing a safety review, we received permission for our pluthermal plan from the Ministry of Economy Trade and Industry (METI) on September 7, 2005.

In order to obtain understanding from surrounding municipalities, we continued

#### ■What is pluthermal?

Spent uranium fuel burned in a nuclear reactor contains plutonium that can be reused as nuclear fuel.

"Pluthermal" involves utilizing the plutonium extracted from spent fuels as MOX\* fuel. MOX fuel is made of plutonium extracted from spent fuels and uranium, and is loaded into the current reactor.

The term "pluthermal" comes from plutonium and thermal reactor.

\*MOX fuel is the fuel utilized in the pluthermal process. The term "MOX" comes from mixed oxide, since MOX fuel is made from uranium and plutonium as forms of mixed oxides.

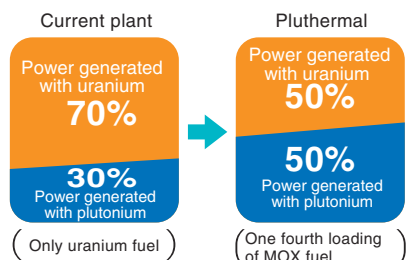
#### ■The necessity of our pluthermal plan

Our pluthermal plan enables us to conserve uranium resources and reduce levels of radioactive waste because plutonium contained in spent fuel is recovered and reused.

In a view of nonproliferation, we intend to safely and steadily utilize the plutonium that has already been recovered from our plants' spent fuel.

#### ■The safety of our pluthermal plan

- In nuclear power plants that use only uranium fuel, some plutonium transformed from uranium burns in the reactor. The amount of energy produced from the plutonium in current reactors is approximately 30%.
- In the case of pluthermal operation, the amount of energy produced from plutonium rises to 50%, since loaded MOX fuel contains plutonium. The government has confirmed the safety of pluthermal operations.



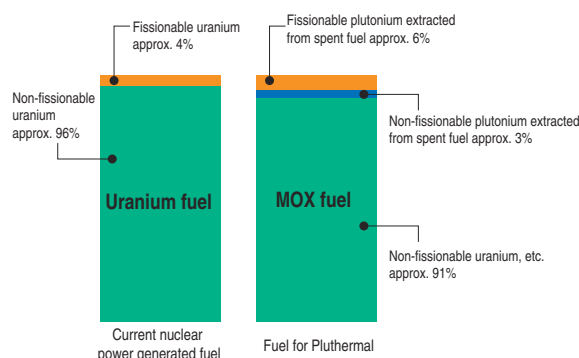
- Pluthermal operations have been conducted safely in France, Germany, Belgium and other parts of Europe since the 1960s.
- Problems attributable to the characteristics of MOX fuel have not been reported.
- Our pluthermal plan at Genkai-3 has been reviewed by the government and deemed safe.

to conduct activities to help local residents understand both the safety and the necessity of our pluthermal plan. On March 26, 2006, Saga prefecture and Genkai town gave us their consent.

We will proceed with procedures for mixed oxide fuel (MOX Fuel) fabrication and shipment, aiming to implement our pluthermal plan by FY2010.

And we will also comply with relevant laws in each stage and ensure measures for safety by doing appropriate quality assurance activities.

The safe operation of our nuclear power plants is our top priority, and we make every effort to disclose information. With the understanding and cooperation of neighborhood people, we are making steady advances in our pluthermal plan.



#### ■Main activities to gain understanding for our pluthermal plan

- Visitations and information seminar activities
- Open discussions
- Seminars, lectures, events
- Newspaper ads
- Magazine ads
- TV and radio commercials, etc.



The pluthermal forum

#### History outline

- April 28, 2004 We established the policy for implementing the pluthermal plan at Genkai-3 to be in use by FY2010.
- May 28 Applications for prior consent were submitted to Saga Prefecture and Genkai town based on the safety agreement between the municipalities and Kyushu Electric Power. Based on the Nuclear Reactor Regulation Law, the application for permission for reactor modification was submitted to the government.
- February 10, 2005 METI consulted the Atomic Energy Commission and the Nuclear Safety Commission to obtain their permission for our pluthermal plan.
- February 20 A forum on our pluthermal plan was hosted by our company in Genkai town.
- August 29 The Nuclear Safety Commission submitted its report to METI.
- August 30 The Atomic Energy Commission submitted its report to METI.
- September 7 METI granted us permission to proceed with our pluthermal plan.
- October 2 A forum on pluthermal was hosted by the government in Genkai town.
- December 25 A forum on pluthermal was hosted by Saga prefecture in Karatsu city.
- February 7, 2006 Saga prefecture announced its views on the safety of our pluthermal plan at Genkai-3.
- March 26 Based on safety agreements, Saga prefecture and Genkai town gave us their consent for our pluthermal plan.

# Promotion of Environmental Management

Promotion of Environmental Management _____	10
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Environmental Committee



Bottom from left:  
Group Environmental Management  
Promotion Subcommittee  
EMS support for business sites  
EMS handbooks

# Promotion of Environmental Management

As a part of our CSR commitment, the Kyushu Electric Power Group members work together to practice environmental management, which contributes to a productive environment through raising environmental consciousness in all our corporate activities.

## 1 Environmental Policy

The Kyushu Electric Power Environment Charter was established to define the stance and direction of environmental activities to be pursued. The Kyushu Electric Power Group Environment Philosophy was developed for group companies to set forth the principles of their commitment to environmental activities. The Kyushu Electric Power Group Environment Policies were developed to specify guidelines for implementing the environmental activities.

### Kyushu Electric Power Environment Charter

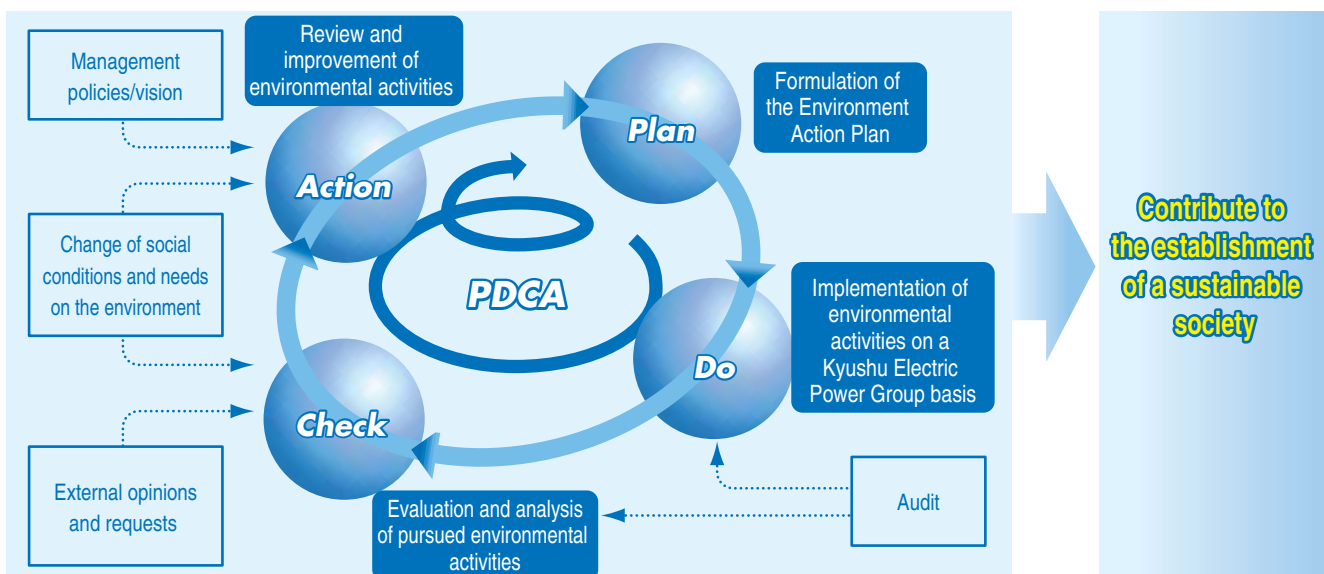
#### Towards an Environmentally Friendly Corporate Stance

1. The company shall recognize the importance of maintaining awareness of environmental conservation needs in all its corporate activities.
  - Fully realize that dealing with environmental problems is a fundamental precondition for its own existence and business activities.
2. The company shall make concerted efforts to contribute to a sound environment in all its corporate activities.
  - Strive to prevent global warming and to conserve nature and environment.
  - Actively implement environmental conservation programs that contribute to the community's well being.
  - Reduce waste output and encourage use of waste as a resource, thus promoting a recycling society.
3. The company shall promote the disclosure of environment related information in all its corporate activities.
  - Promote ease of public access to environment related information concerning the company's business activities and provide opportunities for communicating with members of society.

February 15, 2001  
President

## 2 Environment Action Plan

Kyushu Electric Power Group formulated the Environment Action Plan as a guideline for all employees to participate in the implementation of environmental management. To continue the secure implementation of environmental activities, the Action Plan is revised and improved every year based on several factors, including the evaluation of current social conditions and needs, and internal and external evaluations related to the company's environmental activities during the previous year. The summary of environmental activities implemented and their results are publicized as the Kyushu Electric Power Environment Action Report.



## FY2006 Environment Action Plan

The FY2006 Environment Action Plan consists of five core environmental action policies: promotion of environmental management, addressing global environmental issues, establishing a recycling society, maintaining harmony with the local environment, and working with society. Targets and detailed plans follow under those policies.

### Five Core Environmental Action Policies



### FY2006 Environment Action Plan Focal Points

#### 1 Solidify environment-oriented activities through effective EMS operation

- By ensuring all our business locations and all our group companies operate the EMS effectively and efficiently, we aim to further solidify our environment-oriented activities and achieve continuous reduction of environmental load.

#### 2 Steady efforts to reduce greenhouse gas emissions

- In addition to efforts in the area of energy supply, such as minimizing CO<sub>2</sub> emissions through safe and stable operation of nuclear power stations, we will also work hard at the energy use aspect, for instance by promoting the use of heat-pump water heaters and encouraging energy conservation among customers.
- We will also promote further energy and resource saving effects in offices through thorough management of our four new target areas - in-house power consumption, internal logistics, paper purchasing, and use of clean water - which were introduced this year.

#### 3 Effective and efficient promotion of zero emissions activities

- Through smooth operation of our cooperative collection system for industrial waste, as well as the expansion of items covered by the system, we aim to boost recycling rates and reduce the volume of waste disposed of at landfills outside company premises.

#### 4 Dealing thoroughly with asbestos

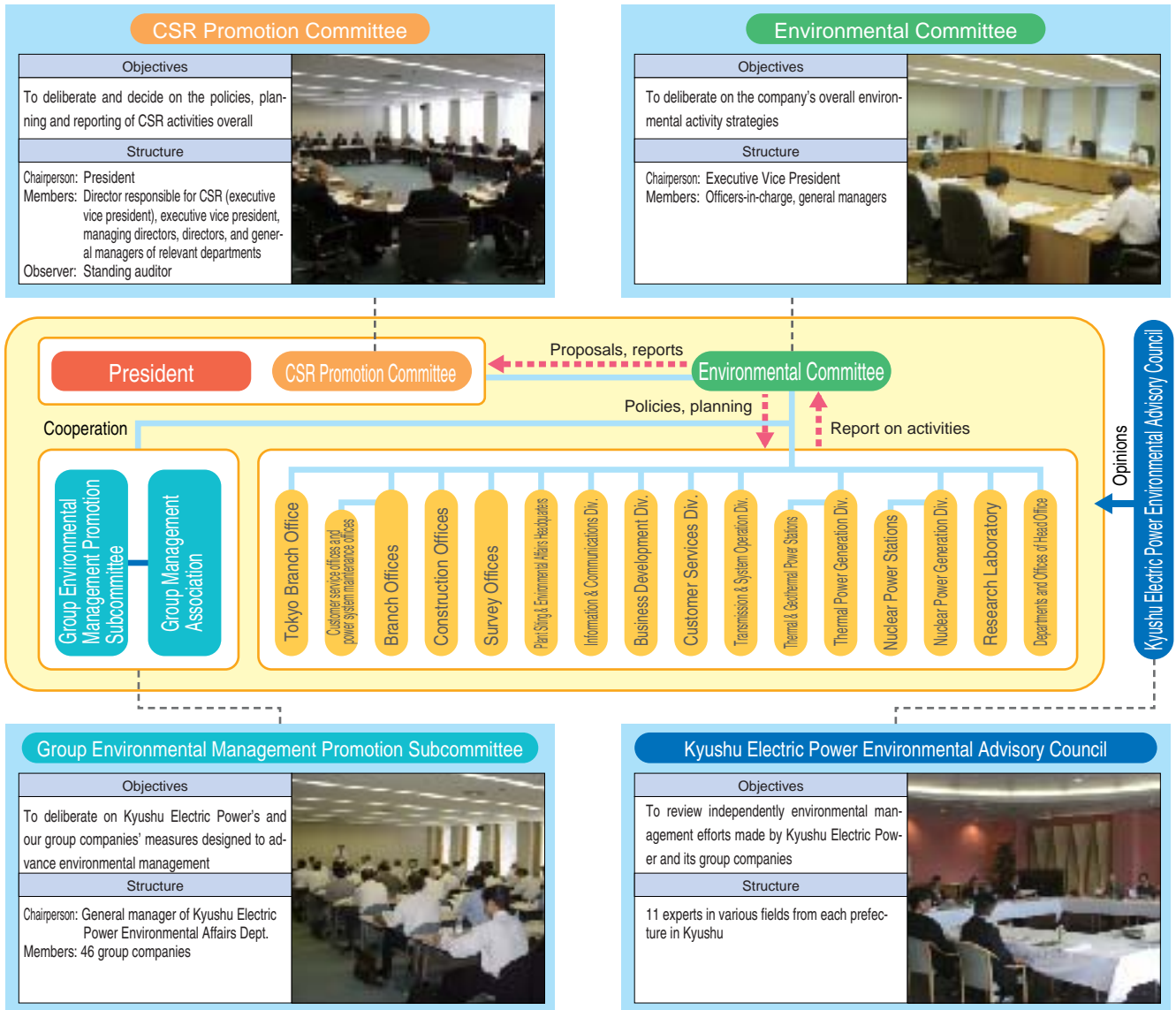
- We will continue our stringent control of spray-on asbestos and products that contain asbestos, and work towards replacement of asbestos with alternatives.

#### 5 Active communications of environmental issues with parties concerned

- We will expedite communication with as many customers as we can through the Eco Mothers Projects, publication of the Environment Action Report, and other activities.

### 3 Promotional Scheme

Kyushu Electric Power Co., Inc. has structured a company-wide scheme for the implementation of environmental management.



### 4 Environmental Management System

All business sites have established ISO14001-based EMS. Each site works steadily to achieve energy-saving and resource-saving targets, and together we work at environmental risk control through evaluation of our compliance with environmental laws and conducting environmental-accident drills.

In addition to the ongoing support that the Environmental Affairs Department at our head office has been providing to business sites since FY2004—e.g., support for improving our internal environmental auditing framework, reinforcing environmental activities, and support tailored to suit individual business sites' needs for raising environmental awareness—FY2005 saw the introduction of EMS training for environmental management

representatives and the administration office, through which we aim to raise the level of EMS operation.

Furthermore, we are proactive in training of internal environmental auditors; in FY2005, instructors from West Japan Engineering Consultants, Inc.—a company which supports acquisition of ISO14001 certification and is a member of the Kyushu Electric Power Group—held three workshops producing 123 auditors for a cumulative total of 613.



EMS training

## 5 Conformity to Environmental Regulations

We have received no recommendations, orders or penalties in connection with breaches of environmental laws and ordinances in the last five years. No legal actions regarding environmental issues have been filed against the company during this period.

We continue to pursue compliance management to engage in fair business activities in accordance with our corporate ethics. We strictly abide by agreements on environmental conservation concluded with local governments as well as laws and ordinances. In FY2005, seawater electrolysis equipment at Reihoku Power Station malfunctioned, resulting in environmental conservation agreement target figures being temporarily exceeded. Preventive measures were subsequently investigated and implemented.

## 6 Responding to Environmental Enquiries

Kyushu Electric Power responds appropriately to inquiries from outside the company.

In FY2005, a total of 48 environment-related suggestions and requests were received through the "Letter Box" on the company website, including those concerning the content of the Environment Action Report. Each correspondent received an individual response to their suggestion or request.

We value such opinions, and we will make sure to reflect them in our future environmental activities so as to ensure our environmental efforts are all they can be.

### Major environmental enquiries and responses in FY2005

Category	No.	Major topics	Response
Opinions, requests	22	A request for the Environment Action Report and materials used in the Eco Mothers Project.	Sent the 2005 Environment Action Report and materials used in the Eco Mothers Project.
		A request to reinforce measures to minimize CO <sub>2</sub> emitted through generation operations.	Explained our environment-oriented efforts.
Enquiries	22	Enquiry about CO <sub>2</sub> emission factors and the Kyushu Homeland Forestation Project.	Explained the term "CO <sub>2</sub> emission factor" and provided actual figures; sent Kyushu Homeland Forestation Project materials.
		Enquiry about anti-asbestos efforts	Explained the results of a survey into use of asbestos, and that no cases of illness or injury caused by asbestos and deemed work-related were found in surveys of current and former employees of Kyushu Electric Power and its subsidiaries (total 62 companies) up to August 5, 2005.
Sales promotion	4	Technical proposals regarding the treatment of PCBs	Explained that all machinery held by Kyushu Electric Power that uses PCBs is scheduled to undergo treatment to render it harmless at the Japan Environmental Safety Corporation's PCB waste treatment facility established under government supervision.

## Seawater electrolysis equipment malfunction at Reihoku Power Station

At the Reihoku Power Station on June 29, 2005, seawater electrolysis equipment, which serves to inhibit the adherence of seaweed and shellfish in seawater to pipes, malfunctioned. Residual chlorine concentration levels in discharge pits were seen to temporarily exceed the target level.

The surrounding sea was inspected by a boat-borne patrol but no effects were seen.

The matter was dealt with appropriately in accordance with the environmental conservation agreement, and similar measures have been implemented at all the other Kyushu Electric Power stations.

## 7 Emergency Measures

Damage to our facilities resulting from accidents and natural disasters can affect the surrounding environment. In preparation for such emergencies, the company installed and upgraded facilities for disaster prevention, implemented adequate education and training for our employees, and prepared manuals that help employees to better deal with such emergencies. In accordance with local disaster preparedness plans, we participate each year in nuclear power disaster drills held by local governments.



Nuclear power disaster drills at the Saga Pref. Offsite Center

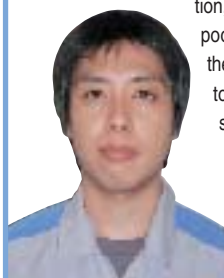


By quantifying eco-friendly conduct, we can evaluate ourselves using a points system.

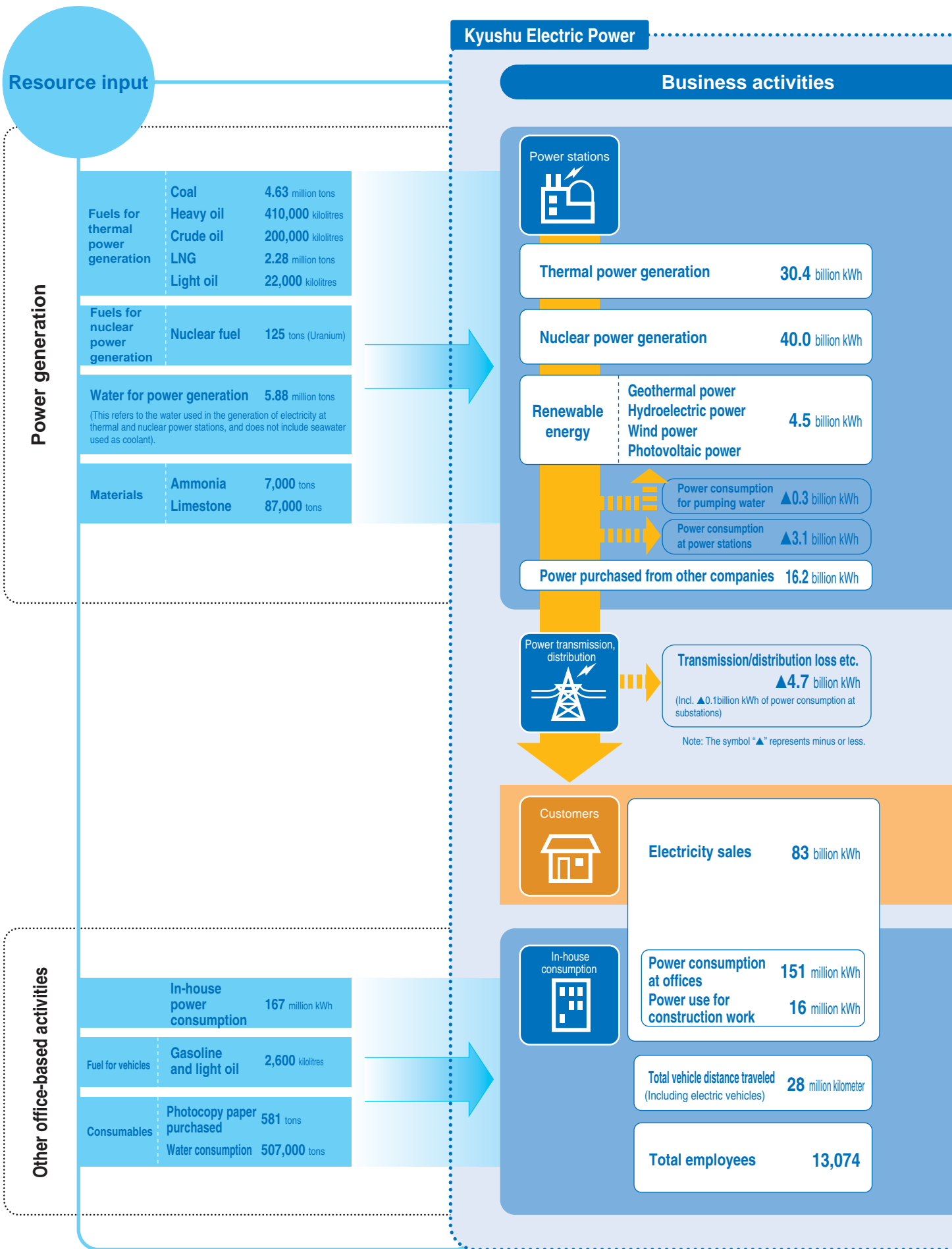
**Takeshi Fujii** Hydro Power & Substation Construction Section, Hitoiyoshi Power System Maintenance Office, Kumamoto Branch Office

### VOICE ● EMS at business sites

The Hitoiyoshi Power System Maintenance Office was awarded ISO14001 certification in 2000. At first, some of our employees felt we were being forced into it, so there was some difficulty in maintaining and improving our EMS activities. Looking to rectify that lack of enthusiasm, we looked for ways to enliven EMS activities and came up with the concept of awarding points for everyday eco-friendly behavior, so that people could rate themselves as a way of increasing awareness of the importance of EMS. Specifically, points are awarded for things like CO<sub>2</sub> reduction, such as by walking or cycling to work, car-pooling, ensuring correct tire pressure and cutting the car engine where idling is inappropriate; not to mention separating trash, composting kitchen scraps, participating in community cleaning and tree-planting events and helping local children's associations recycling drives. These measures have helped sow the seed of EMS awareness in employees, and EMS activities are becoming livelier by the year.

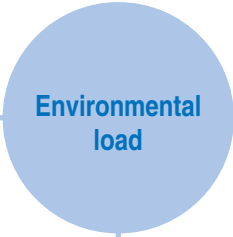


# Business Activities, Environmental Activity Benefits and Environmental





# Load (FY2005)



## Effects of environmental activities

See environmental accounting on page 16

Global environmental conservation	CO <sub>2</sub> reduction <sup>*1</sup>	46.6 million tons-CO <sub>2</sub>
	Collection of SF <sub>6</sub> <sup>*2</sup>	0.45 million tons-CO <sub>2</sub>
	<b>Recovery rate of 99.2%</b>	
	CO <sub>2</sub> absorbed by forests	0.022 million tons-CO <sub>2</sub>

Local environmental conservation	SO <sub>x</sub> reduction <sup>*3</sup>	46,000 tons
	NO <sub>x</sub> reduction <sup>*4</sup>	18,000 tons
	Environmental load reduced in wastewater <sup>*5</sup>	882 tons

Resource recycling	Industrial waste recycled	630,000 tons
	<b>Recycling rate of 92%</b>	
	Low-level radioactive waste volume reduction	1,876 containers (each equivalent to one 200-litre oil drum)

### Definitions of the baseline for calculating effects of our environmental activities

- \*1 : The baseline for the effects resulting from power generation and purchase refers to cases when thermal power (except for LNG) generated kWh replaces power generated from nuclear power, hydroelectric power, new energy sources, and LNG. As baseline for the facility efficiency improvement, thermal efficiency and transmission and distribution loss factor in fiscal 1990 are used as baseline.
- \*2 : Baseline refers to the case when SF<sub>6</sub> is not recovered at equipment checkups/removals.
- \*3 : Baseline refers to the case when no desulfurization is carried out or non-usage of low-sulfur fuel at power stations.
- \*4 : Baseline refers to the case when no denitration is carried out at power stations.
- \*5 : Baseline refers to the case when no wastewater treatment is carried out at power stations.
- \*6 : Baseline refers to the case that no energy-conservation measures for facilities were implemented at business sites.
- \*7 : Baseline refers to the case when no clean-energy or fuel-efficient vehicle is introduced.

CO <sub>2</sub> reductions through office energy conservation <sup>*6</sup>	166 tons-CO <sub>2</sub>
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CO <sub>2</sub> reductions through introduction of low-emission and fuel-efficient company vehicles <sup>*7</sup>	197 tons-CO <sub>2</sub>
<b>Portion of fleet: 25.5%</b>	

Used paper recycled (Including photocopy paper, newspapers, magazines, cardboard and confidential documents)	2,106 tons
<b>Recycle rate of 100%</b>	

Reuse of reclaimed water and rain water	65,000 tons
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Greenhouse gas emissions	CO <sub>2</sub>	30.6 million tons-CO <sub>2</sub> <sup>*</sup>
	<small>(In-house power consumption: 61,000 tons-CO<sub>2</sub> (Including power purchased from other companies))</small>	
	N <sub>2</sub> O	39,000 tons-CO <sub>2</sub>
	HFC	800 tons-CO <sub>2</sub>
	SF <sub>6</sub>	40,000 tons-CO <sub>2</sub>
Air pollutant emissions	SO <sub>x</sub>	15,000 tons
	NO <sub>x</sub>	27,000 tons
Wastewater (Including 56 tons of environmental load and 7 tons of COD)		2.53 million tons
Industrial waste disposed of		56,000 tons
Increase in low-level radioactive waste (each equivalent to one 200-liter oil drum)		2,241 containers

\* Calculation methods for CO<sub>2</sub> emission volume and CO<sub>2</sub> emission factors for electric utilities as defined under the Law Concerning the Promotion of Measures to Cope with Global Warming were not established as of the time of calculation of these figures.

CO <sub>2</sub> emissions	6,000 tons-CO <sub>2</sub>
Used paper disposed	0 tons
Clean water consumed	442,000 tons

# Records and Targets of Environmental Load

We set specific target values for our main environmental activities, and are striving to achieve sustained reduction of environmental load

	Items	Unit	Record			FY2005 targets			
			FY2003	FY2004	FY2005				
Measures for global environmental issues	Supply	CO <sub>2</sub> emissions intensity (end use electricity)	kg-CO <sub>2</sub> /kWh	0.309	0.331	0.368 <sup>*2</sup>	Approx.0.34 <sup>*3</sup>		
		CO <sub>2</sub> emissions (Electricity sales)	10,000 tons-CO <sub>2</sub> [100 million kWh]	2,390 [773]	2,660 [802]	3,060 <sup>*2</sup> [830]	Approx.2,700 <sup>*3</sup> [801]		
		Nuclear power operating factor	%	88.9	86.2	86.8	84.4 <sup>*3</sup>		
		Efficiency at thermal power stations (sent-out thermal efficiency)	%	39.2	39.3	39.3	Approx.40 <sup>*3</sup>		
		Utilization of power generated from new energy sources	100 million kWh	3.9 or more	4.2 or more	4.5 or more	4.5 or more		
		Transmission and distribution loss factor	%	5.4	5.5	5.2	5.4 <sup>*3</sup>		
	Consumption	Office energy and resource conservation	In-house power consumption	CO <sub>2</sub> emissions <sup>*6</sup>	10,000 tons- CO <sub>2</sub>	5.4	5.8	6.1	—
				In-house power consumption <sup>*6</sup>	million kWh	176	174	167	—
			In-house logistics	CO <sub>2</sub> emissions <sup>*6</sup>	10,000 tons- CO <sub>2</sub>	0.6	0.6	0.6	—
		Fuel for regular vehicles consumed <sup>*6</sup>		Km/ ℓ	11.8	11.7	11.9	—	
		Low-emission/fuel-efficient vehicle introduction <sup>*7</sup>		%	11.8	21.6	25.5	25 or more	
		Paper purchased <sup>*6</sup>		tons	—	600	581	—	
		Clean water used <sup>*6</sup>	m <sup>3</sup> /person	—	36 <sup>*8</sup>	36 <sup>*8</sup>	—		
		SF <sub>6</sub> recovery at equipment inspections	%	98	98	99	98 or more		
		Regulated freons recovery at equipment checkups	%	99	100	100	100		
		Establishing a recycling society	Industrial waste recycled	%	92	92	92	90 or more	
			Coal ash recycled	%	90	90	91	90 or more	
			Other waste recycled	%	99	98	98	98 or more	
			Industrial waste landfilled outside company	tons	1,160	1,040	1,210	1,000 or less	
Used paper recycled	%		100	100	100	100			
Green procurement <sup>*9</sup>	%		88	94	97	100			
Harmoniously coexisting with the local environment	SO <sub>x</sub> emissions intensity per thermal power generated kWh	g/kWh	0.16	0.20	0.22	Approx.0.2			
	NO <sub>x</sub> emissions intensity per thermal power generated kWh	g/kWh	0.18	0.18	0.19	Approx.0.2			
	Sievert calculation in radiation measurement on people living near nuclear power stations per year	mSv	Less than 0.001	Less than 0.001	Less than 0.001	Less than 0.001			

Note: Qualified Person for Energy Management of Type 1 Designated Factory and Pollution Control Manager numbers have been removed from environmental targets as a result of the success of EMS, which has contributed to an increase in employees' awareness of environmental issues.

\*1 : The degree to which FY2005 performance achieves the targets is evaluated on a 3-level system. ○: fully achieved, △: almost achieved (more than 80%), ×: not achieved (less than 80%).

\*2 : Calculation methods for CO<sub>2</sub> emission volume and CO<sub>2</sub> emission factors for electric utilities as defined under the Law Concerning the Promotion of Measures to Cope with Global Warming were not established as of the time of calculation of these figures.

\*3 : Prospects based on FY2005 power supply plans.

\*4 : Prospects based on FY2006 power supply plans.

Evaluation*1		Interim targets			Targets
		FY2006	FY2007	FY2008	FY2009
△	As a result of our ongoing efforts to operate nuclear power generation facilities safely and stably, working capacity of nuclear energy has increased 2.4 points on our projections. Still, the increase in electricity sales resulting from increased demand through seasonal heating and cooling devices (2.8 billion kWh more than planned) and a reduction in hydro electricity generated as a result of droughts saw an increase in thermal electricity generation, with a corresponding increase in CO <sub>2</sub> emissions by approximately 3.6 million tons-CO <sub>2</sub> , and net CO <sub>2</sub> emissions intensity by 0.03kg-CO <sub>2</sub> /kWh. It is our intention to continue working to maintain the usage rates of nuclear energy and improve the working capacity of high-efficiency thermal power stations so as to keep the net CO <sub>2</sub> emissions intensity to a minimum.	FY2010 target: reduce approximately 20% from FY1990 levels			
		Approx. 0.36*4	Approx. 0.34*4	Approx. 0.36*4	Approx. 0.36*4
○	While we were able to maintain the highest ever working capacity of high-efficiency thermal power stations such as Shin Oita Power Station, increases in electricity sales saw an increase in the operating ratios of conventional power stations, and thus we were unable to meet projections in this area. We will continue to improve the working capacity of high-efficiency power stations so as to boost thermal efficiency.	Approx. 2,900*4	Approx. 2,800*4	Approx. 3,000*4	Approx. 3,000*4
		[812]	[821]	[824]	[830]
○		82.1*4	87.5*4	83.9*4	Approx. 85*4
△		Approx. 40*4	Approx. 40*4	Approx. 40*4	Approx. 40*4
○	The use of company-owned power sources such as the Hatchobaru Binary Cycle Power Plant and efforts to purchase electricity from customers allowed us to meet this target.	5.0 or more*5	6.3 or more*5	7.4 or more*5	8.9 or more*5
○	The target was met with a 0.2-point margin due to efforts to improve operational efficiency of transmission and distribution facilities such as low-loss transformers, although electricity sales were higher than the planned value.	5.4*4	5.4*4	5.4*4	5.4*4
-	(New target)	FY2010 target: keep at approximately same levels as FY1990			
		Approx. 5.8	Approx. 5.7	Approx. 5.7	Approx. 5.5
-	(New target)	163 or less	159 or less	158 or less	153 or less
		FY2010 target: keep at approximately same levels as FY1990			
-	(New target)	Approx. 0.6	Approx. 0.6	Approx. 0.6	Approx. 0.6
		12.0 or more	12.1 or more	12.2 or more	12.3 or more
○	30 clean energy vehicles and 76 fuel-efficient vehicles were introduced as planned, allowing us to achieve the target.	40 or more	50 or more	60 or more	70 or more
-	(New target)	600 or less	600 or less	600 or less	600 or less
-	(New target)	36 or less	36 or less	36 or less	36 or less
○	The target was met by the use of vacuum SF <sub>6</sub> recovery equipment at the time of checkups ensured by facility management staff members' enhanced self-management awareness.	98 or more	98 or more	98 or more	98 or more
○	The target was met due to the recovery of regulated freons meeting the required legal standards (legal pressures at the time of dismantlement) by facility management staff members' enhanced self-management awareness.	100	100	100	100
○		90 or more	90 or more	90 or more	90 or more
○	Making effective use of coal ash, such as in cement materials and soil improvement material, thorough EMS-based target management, and steady progress in the new cooperative collection scheme allowed us to meet this target.	90 or more	90 or more	90 or more	90 or more
		98 or more	98 or more	98 or more	98 or more
×	An increase in the volume of waste resulting from regular inspection of facilities led to a subsequent increase in the volume of waste unable to be recycled. Therefore, this target was not achieved. It is our intention to expand the range of items recoverable under the cooperative collection scheme so as to reduce those destined for external landfills.	1,000 or less	1,000 or less	1,000 or less	1,000 or less
○	The target was met due to continuous efforts towards recycling 100% of used paper by ensuring handover process to recycling businesses including Kyushu Environmental Management Corporation.	100	100	100	100
△	This figure improved by three percentage points over the previous year thanks to our use of the Green Catalogue, but the target was not met. Future improvement is being pursued through efforts such as employee awareness enhancement and effective use of the new Electronic Catalogue purchasing system.	100	100	100	100
○	The target was met by proper operation of desulfurization and denitration facilities although increased electricity sales raised thermal power generated kWh, which has relatively high emissions intensity.	Approx. 0.2	Approx. 0.2	Approx. 0.2	Approx. 0.2
		Approx. 0.2	Approx. 0.2	Approx. 0.2	Approx. 0.2
○	The target was met by appropriately conducting nuclear power station operation and radioactive waste management according to laws and ordinances.	Less than 0.001	Less than 0.001	Less than 0.001	Less than 0.001

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\*5 : This figure is calculated by Kyushu Electric Power from national standard utilisation values currently being revised (as at May 31, 2006). (source: RPS Law Re-evaluation Subcommittee Report)  
 \*6 : This target was newly introduced based on the Kyoto Protocol Target Achievement Plan.  
 \*7 : This is the percentage of clean-energy vehicles (electric vehicles, hybrid cars) and fuel-efficient vehicles (i.e., those that conform with FY2010 fuel economy standards and are approved by the Ministry of Land, Infrastructure and Transport as low-emission vehicles) in the company fleet.  
 \*8 : The volume of clean water used in whole company divided by the number of employees (as at the end of the pertinent fiscal year).  
 \*9 : The scope of green procurement includes office and stationery supplies that conform with socially-recognised standards.

We introduced environmental accounting in FY2000 with the aim of acquiring quantitative understanding of the costs and benefits of our environmental activities. The resulting costs and benefits are disclosed to stakeholders and also are analysed to develop efficient and effective environmental activities.

## 1 Environmental Activity Costs and Benefits

Unit: 100 million yen

Category		Main activities	Investment		Cost	
			2004	2005	2004	2005
Global environment conservation	Global warming prevention	Installation of power sources with low CO <sub>2</sub> emissions, thermal efficiency improvement at thermal power stations, introduction of and support for new energy equipment/facilities, <sup>*1</sup> contribution to greenhouse gas reduction investment fund, energy saving (incl. low-emission/fuel-efficient vehicles and energy saving buildings), SF <sub>6</sub> emission reduction	0.8	2.0	60.3 <sup>*1</sup>	75.1
	Ozone layer protection	Measures for freons and halon recovery	0.3	0.7	0.5	0.2
Local environment conservation	Air pollution prevention	Flue gas treatment (desulfurization, denitration, particulate reduction equipment) and use of fuel of low sulfur content	9.2	1.9	105.4	87.0
	Water pollution prevention	Wastewater treatment and measures against oil leaks and warm wastewater at power stations	7.4	1.0	29.0	29.5
	Noise and vibration prevention	Noise and vibration measures at power stations, substations and transmission facilities, ground pollution measures	4.3	4.9	1.0	1.9
Resource recycling	Industrial waste	Reduction and recycling of industrial waste	9.7	2.6	42.5	50.7
		Disposal of industrial waste, storage and treatment of PCBs <sup>*2*3</sup>	3.1	1.1	55.2 <sup>*2</sup>	16.7
	General waste	Reduction and recycling of general waste	0.9	0.2	7.0	4.2
		Disposal of general waste	0.0	0.5	2.3	4.6
Radioactive waste and spent nuclear fuel	Disposal and other treatment of radioactive waste	12.7	30.0	57.1	58.9	
Green procurement	Additional costs incurred from green procurement	–	–	0.0	0.0	
Environmental activity management	Environmental activity organization	Costs for environment-related license acquisition, environmental education, training and personnel employment	–	–	3.2	3.4
	EMS application and maintenance	EMS (ISO 14001 and ISO compliant systems) acquisition, application and maintenance	0.0	0.0	1.3	0.9
	Environmental load measurement and monitoring	Environmental impact assessment, monitoring and measurement of environmental load substances	1.5	2.4	13.5	13.0
Environment-related research	Environmental conservation	Global warming prevention, air and water quality improvement and effective use of waste, etc.	0.0	0.0	1.5	1.6
	Environmental load control during transmission and distribution	Improvement in thermal efficiency and transmission/distribution loss factor, etc.	–	–	0.0	0.0
Social activities	Greening of sites	Greening, maintenance and management of power stations and other sites	3.3	3.1	13.4	16.7
	Maintaining quality townscapes and surroundings	Measures to create harmony with surroundings including buildings with scenic care and installing underground transmission and distribution lines	63.5	62.1	82.2	80.8
	Environment Month	Environment Month and Kyushu Homeland Forestation Program	–	–	1.2	1.0
	Supporting local environmental activities	Support for local environmental activities and environmental organizations	–	–	0.6	0.4
	Environmental information disclosure	Environment Action Report, brochures and website construction	–	–	0.3	0.4
Response to environmental impairment	Pollution load levy	–	–	7.1	7.2	
Total			116.6	112.7	484.7	454.4
Reference	Percentage of total investments and costs		6%	6%	4%	4%
	Total Kyushu Electric Power investment and costs		2,001	1,844	11,855	12,197

Note: Costs include depreciation expense. Figures are rounded and may not add up to the total.

\*1 : FY2004 data has been partially recalculated due to the revision of some calculation standards for environmental activity costs.

\*2 : FY2004 data, including allowances for PCB disposal costs, has been recalculated.

\*3 : Includes expenses for investigating trace amounts of PCB.

\*4 : Excludes allowances for re-processing of spent fuel (see Reference)

[Reference]

Main activities	Cost	
	2004	2005
Allowance for used nuclear fuel reprocessing, etc.	266.3	310.8

## 2 Economic Effects from Environmental Activities

In fiscal 2005, our environmental activities brought about real economic effects, savings and income, of 20.35 billion yen.

Unit: 100 million yen

Items	2004	2005	
	Benefits	Benefits	
Amount of CO <sub>2</sub> reduced	Nuclear power generation	32.06 million tons-CO <sub>2</sub> /yr	32.20 million tons-CO <sub>2</sub> /yr
	LNG power generation	5.85 million tons-CO <sub>2</sub> /yr	5.70 million tons-CO <sub>2</sub> /yr
	Hydro/geothermal power generation	6.82 million tons-CO <sub>2</sub> /yr	4.81 million tons-CO <sub>2</sub> /yr
	New energy power generation and purchase	0.59 million tons-CO <sub>2</sub> /yr	0.79 million tons-CO <sub>2</sub> /yr
	Thermal efficiency improvement, transmission/distribution loss reduction <sup>*5</sup>	2.64 million tons-CO <sub>2</sub> /yr	3.11 million tons-CO <sub>2</sub> /yr
	Greenhouse gas reduction fund	0 tons-CO <sub>2</sub> /yr	0 tons-CO <sub>2</sub> /yr
	Energy saving activities	238 tons-CO <sub>2</sub> /yr	363 tons-CO <sub>2</sub> /yr
	SF <sub>6</sub> emission reduction <sup>*6</sup>	0.55 million tons-CO <sub>2</sub> /yr	0.45 million tons-CO <sub>2</sub> /yr
Freon emissions <sup>*7</sup>	1.6 ODP tons/yr	0.2 ODP tons/yr	
SOx reduction <sup>*8</sup>	40,600 tons/yr	45,900 tons/yr	
NOx reduction	16,000 tons/yr	18,300 tons/yr	
Particulate reduction <sup>*8</sup>	306,200 tons/yr	354,900 tons/yr	
Environmental load reduced in wastewater <sup>9</sup>	727 tons/yr	882 tons/yr	
Managed appropriately in conformity with laws and ordinances		Managed appropriately in conformity with laws and ordinances	
Amount recycled	590,000 tons/yr	634,000 tons/yr	
Amount correctly disposed of	53,000 tons/yr	56,000 tons/yr	
Used paper, shells, driftwood recycled	11,290 tons/yr	9,990 tons/yr	
Used paper, shells, driftwood properly disposed	1,728 tons/yr	1,637 tons/yr	
Volume reduction in low-level radioactive waste	1,489 containers/yr (each equivalent to one 200-liter oil drum)	1,876 containers/yr (each equivalent to one 200-liter oil drum)	
Amount of used nuclear fuel stored	2,996 assemblies	3,168 assemblies	
Green products (power material and equipment) purchased through green procurement	10,430 items	19,183 items 2,849 km (Recycled aluminum electric wire)	
Participants in training and lectures	17,133 persons/yr (gross)	17,833 persons/yr (gross)	
Personnel with environment-related licenses	1,813 persons	1,913 persons	
Sites acquired ISO 14001 certification	6 sites	6 sites	
Sites introduced ISO compliant systems	136 sites	121 sites <sup>*10</sup>	
Number of monitoring and measurement points	Continuous monitoring and measurement items	188 items	189 items
	Other monitoring and measurement points	29,945 points	30,759 points
Research cases underway towards practical application	9 cases	25 cases	
Total green area	46.99 million m <sup>2</sup>	47.02 million m <sup>2</sup>	
Number of buildings with scenic care	190 buildings	191 buildings	
Number of steel towers with environmental care	83 units	85 units	
Length of underground distribution lines	3,149 km	3,247km	
Number of participants at lectures	3,084 persons/yr (gross)	3,174 persons/yr (gross)	
Number of trees, saplings distributed	140,362/yr	136,782/yr	
Number of environment organizations supported	36 organizations	54 organizations	
Number of reports published	33,800/yr	33,500/yr	
Website access (environment-related)	306,300 hits/yr	254,400 hits/yr	
—	—	—	

<sup>\*5</sup>: FY1990 is the base year for benefit calculation.

<sup>\*6</sup>: The weight of CO<sub>2</sub> has been calculated using the global warming potential for SF<sub>6</sub> (23,900). The volume of the reduction includes reductions achieved through the inspection and overhaul of equipment.

<sup>\*7</sup>: CFC-11 weight calculated using the coefficient for freon damage to the ozone layer.

<sup>\*8</sup>: FY2004 data have been recalculated due to a revision of the calculation method.

<sup>\*9</sup>: COD standard weight calculated based on environmental standards for pollutants in wastewater.

<sup>\*10</sup>: Office relocation activity has reduced the number of separate offices. (▲15 offices)

Category	Main activities	Benefits		
		2004	2005	
Global environmental conservation	Global warming prevention <sup>*1</sup>	Fuel cost savings from improvement of thermal efficiency and the transmission/distribution loss factor; introduction of energy-saving, low-emission/fuel-efficient vehicles	93.4	136.4
Resource recycling	Waste measures	Income from sales of unneeded supplies	2.4	3.7
	Waste reduction	Final disposal cost savings from recycling	36.6	43.2
Savings in statutory charges	Pollution load levy savings from SOx emissions reduction <sup>*2</sup>		17.6	20.2
Total			150.0	203.5

<sup>\*1</sup>: Benchmark year for benefit calculation is FY1990.

<sup>\*2</sup>: FY2004 data has been recalculated due to revision of SOx reduction volume calculation standards.

## 3 FY2005 Calculation Results

Environmental activity investments and costs for FY2005 were 11.27 billion yen and 45.44 billion yen respectively. Compared to FY2004, environmental activity investments decreased by 0.39 billion yen and the costs decreased by 3.03 billion yen.

### Investments

Investment in low-level radioactive waste disposal, such as the expansion of used resin storage tanks, as well as in spent fuel storage, was increased.

Meanwhile, wastewater treatment in conjunction with the construction of the Omarugawa Power Station and capital investment for the effective use of coal ash at the Matsuura Power Station are proceeding as planned, meaning that overall investment dropped 3% in comparison with the previous year on the back of partial completion of countermeasure construction work.

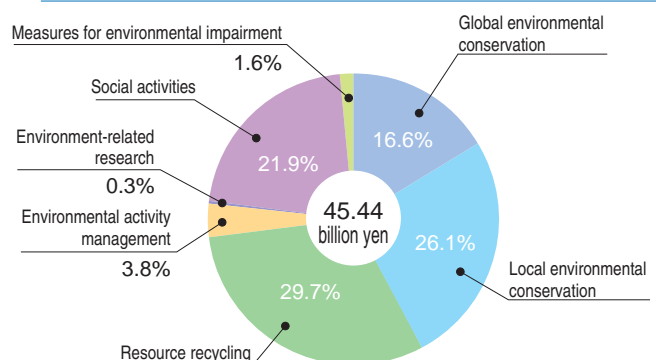
### Costs

Power purchase costs increased due to the increase of purchasing costs in conjunction with the introduction of new energy sources. However, reactionary fall in the listing of FY2004 PCB treatment reserves resulted in a 4% drop in comparison with FY2004.

### Effects of Environmental Activity

The amount of CO<sub>2</sub> reduced increased as a result of a higher rate of nuclear power use, but droughts caused a drop in the amount of CO<sub>2</sub> reduced through hydro electric power generation.

### Environmental activity cost component ratio (FY2005)



## 4 Working Towards Better Environmental Accounting

### Using environmental accounting to improve environmental efficiency

Having introduced a systematic environmental accounting system and striven to publish ever more transparent environmental data, we at Kyushu Electric Power aim to make effective use of that system as a tool for furthering our environmental corporate management regime, for example by using the successes of the system to good effect in our in-house decision-making processes.

It is our intention to further establish and develop our environmental accounting system so as to further improve our environmental efficiency and to further reduce our environmental load.

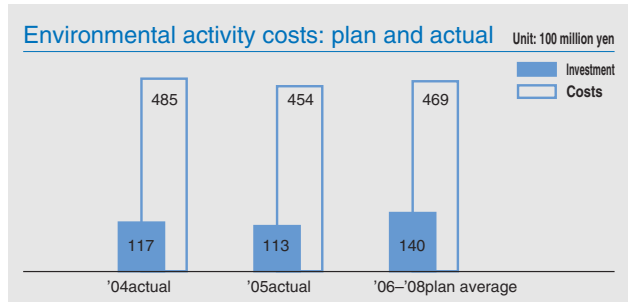
#### Cost plan for environmental activities

Carrying on from FY2004, Kyushu Electric Power formulated a group-wide cost plan for environmental activities aimed at optimal allocation of management resources.

From mandatory to voluntary measures, the costs and effects of environmental activities are various. That is why we have established a range of judgement criteria for each environmental activity and a cost plan for environmental activities determined based on deliberation regarding the appropriateness of cost standards.

#### Environmental efficiency

We calculate environmental efficiency as an easy understandable yardstick of success, when we measure and publish the achievement of our environmental corporate management.

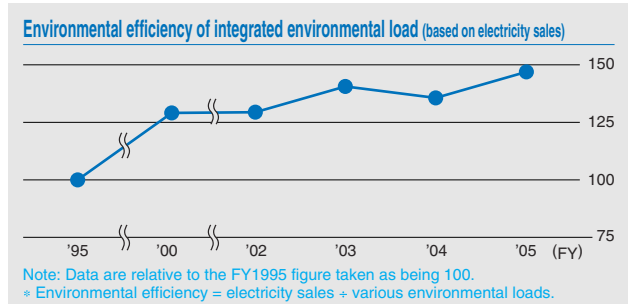
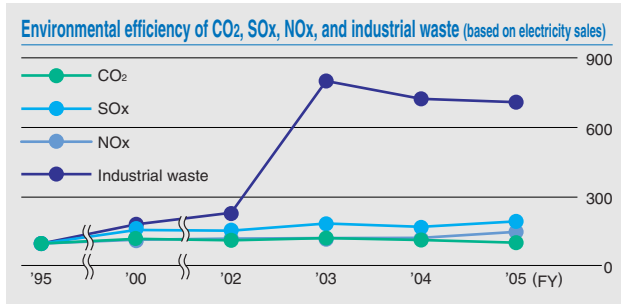


$$\text{Environmental efficiency} = \frac{\text{Product and service value}}{\text{Environmental load}}$$

#### Integrated environmental load

Using an integration coefficient\*, we integrate the various environmental loads.

\*The integration coefficient used is of the ELP method (developed by the Nagata Laboratory of Waseda University).



Note: Data are relative to the FY1995 figure taken as being 100.  
\* Environmental efficiency = electricity sales ÷ various environmental loads.

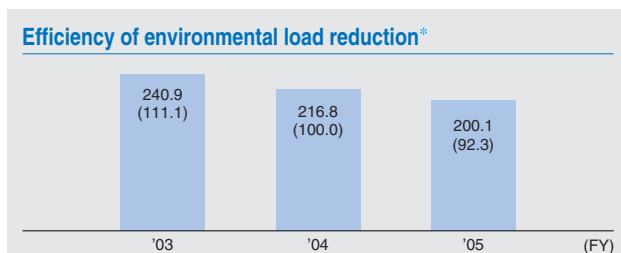
#### Efficiency of environmental load reduction

We calculate the “quantity” of integrated environmental activity benefits that lead directly to the reduction of environmental load, and divide this by the cost of those environmental activities to attain the figure that represents efficiency of environmental load reduction.

$$\text{Efficiency of environmental load reduction} = \frac{\text{Quantity of environmental load reduction}}{\text{Cost of environmental activities}}$$

**Integrated environmental activity benefit**  
Using an integration coefficient\*, we integrate the various benefits of environmental activities.

\*The integration coefficient used is of the ELP method (developed by the Nagata Laboratory of Waseda University).



Note: FY1990 is the base year for CO2 efficiency calculation.  
Environmental activity costs and effects have been partially revised beginning in FY2003.  
The figures in parentheses denote figures that are relative to the FY2004 figure, which is taken as being 100.  
\*Efficiency of environmental load reduction = integrated environmental activity benefits (CO2, SOx, NOx, particulate, wastewater, industrial and general waste) divided by cost of environmental activities (excludes depreciation costs).

#### Analysis of trial calculation results

Trial calculations showed that integrated environmental load reduction effects were down by approximately 8% from FY2004. This comes as a result of reduction in hydro-generated electricity due to droughts and a subsequent drop in CO2 amount reduced, as well as an increase in power purchasing costs in conjunction with the introduction of new energy sources and an increase in environmental activity costs for CO2 reduction.



#### Web-based environmental accounting system introduce

#### TOPICS

Introduced in FY2000 as a means of promoting environmental management, the environmental accounting system has thus far been used to calculate and create a database of information pertaining to each business site's environmental load and environmental activity costs. However, in view of our desire to step up our environmental corporate management, a new web-based environmental accounting system, which allows for data entry and calculation over the internet, has been built and implemented in April 2006. The new system improves data accuracy and raises the level of environmental management, and also aims to increase work efficiency. We hope to achieve further reinforcement of the system through its use.



# Our Commitment to Environmental Activities

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Establishing a Recycling Society	28
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Volunteers plant trees at Fugen Forest on Mt. Unzen (Shimabara City, Nagasaki)



Below from left  
Prof. Masaru Kitano (Doctor of engineering;  
professor at Shukutoku University) gives a  
lecture during Environment Month.  
Eco Cute  
Garden fertiliser made using driftwood



## 1 Reduction of Greenhouse Gases

### Overall View of Kyushu Electric Power's Measures against Global Warming

Kyushu Electric Power contributes to the fulfilment of the Japanese government's Kyoto Protocol commitments by controlling GHGs emitted in the course of business.

#### Target for CO<sub>2</sub> emission reduction

We have established CO<sub>2</sub> emission reduction targets for 2010 in order to do our part to meet Kyoto Protocol requirements.

<b>Commitment</b>	20% reduction in FY2010 end-use CO <sub>2</sub> emission intensity from FY1990
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#### CO<sub>2</sub> emissions during power generation

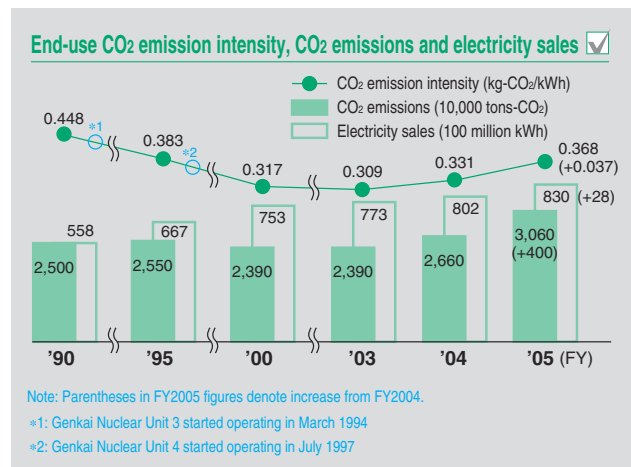
CO<sub>2</sub> emission intensity in FY2005 was 0.368kg-CO<sub>2</sub>/kWh - 18% less than FY1990 levels.

In the 15 years since FY1990, electricity sales have increased 1.5-fold while CO<sub>2</sub> emissions increased 1.2-fold.

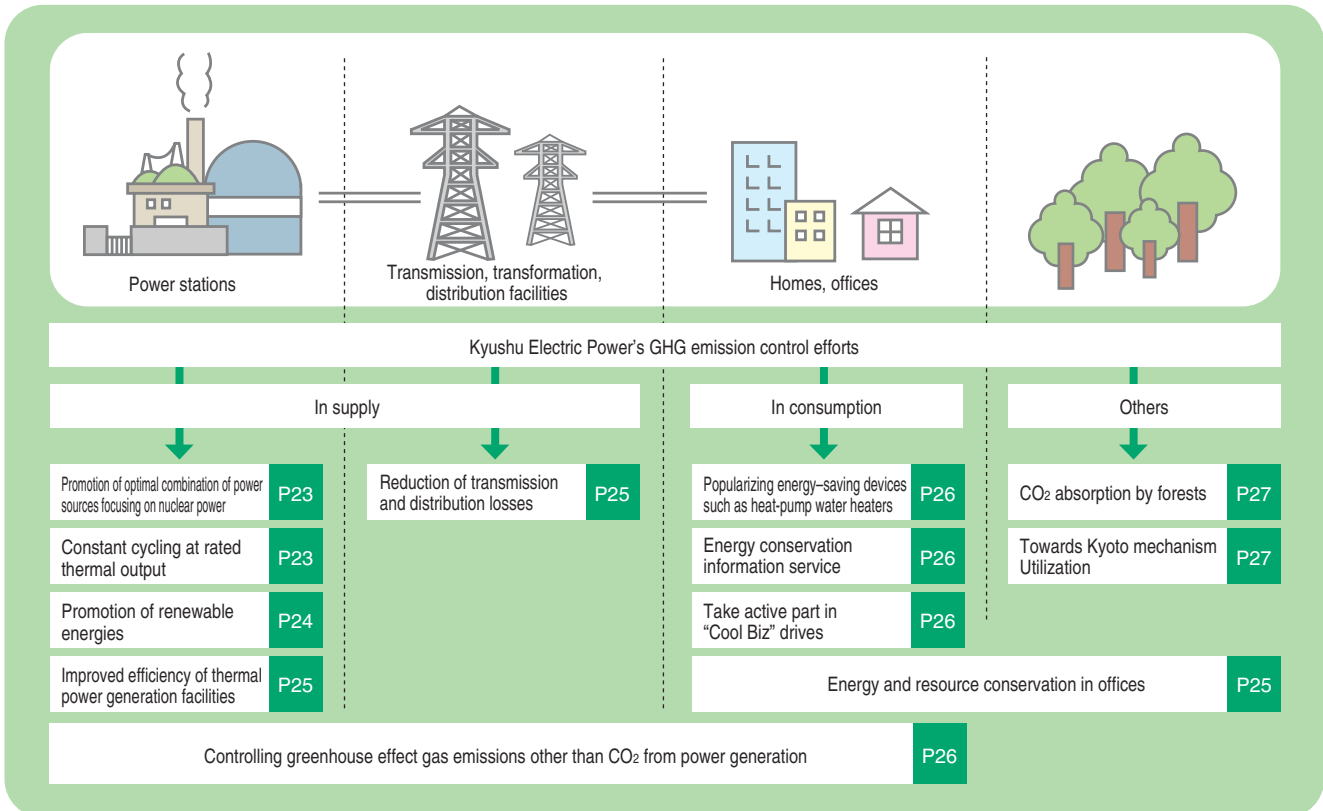
Such results were achieved by promoting well-balanced power source development, with nuclear power as a core source supplemented by LNG thermal and the natural energy of hydroelectric and geothermal power. Other contributors include the improvement of nuclear power capacity factors and the total thermal efficiency of thermal power stations through the introduction

of high-efficiency thermal power stations, which reduce CO<sub>2</sub> emissions per unit output. The development of two nuclear plants (2.36 million kW) offered particularly significant benefits.

CO<sub>2</sub> emissions increased by four million tons-CO<sub>2</sub> (+15%) over the previous year. This was attributable mainly to an increase of 2.8 billion kWh in electricity sales despite an increase in nuclear power usage from 86.2% to 86.8%, and to increased use of thermal power generation to cover the drop in hydro power generation caused by droughts. As a result CO<sub>2</sub> emission intensity rose 0.037kg-CO<sub>2</sub>/kWh (+11%).



### Working to minimise GHG emissions





### Efforts in Electricity Supply

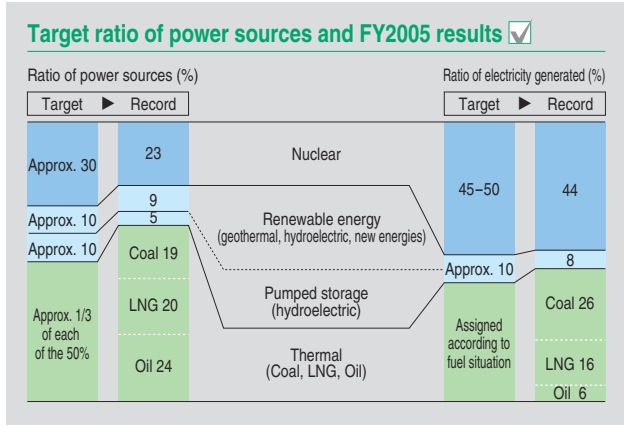
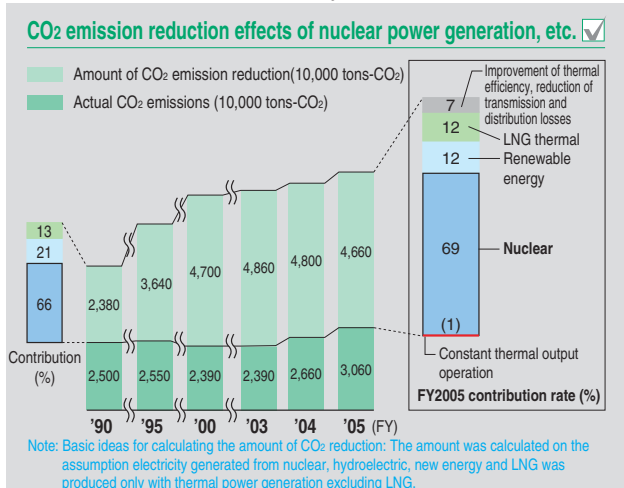
#### ■ Promotion of optimal combination of power sources focusing on nuclear power

We are committed to CO<sub>2</sub> emission reduction through the optimal combination of power sources by promoting a balanced development of sources around our core source of nuclear power and through introduction of new energy sources, with comprehensive consideration of power supply stability, economic efficiency and environmental conservation.

Nuclear power accounts for 44% of total power generation and does not produce CO<sub>2</sub> during its power generation process, thus contributing to CO<sub>2</sub> emission reduction. Improving nuclear power capacity therefore leads to a reduction in the overall volume of CO<sub>2</sub> emissions from the power supply.

Since demand for power is expected to grow slowly but constantly, we feel existing nuclear power stations must be utilized in the most efficient manner, which must also ensure safe, stable operation, and that it is necessary to develop next-phase nuclear power stations and pluthermal utilisation.

We are aiming to develop next-phase nuclear power stations by the latter half of the 2010s; we calculate that this will reduce GHGs by some nine million tons-CO<sub>2</sub> annually.



### Characteristics of power sources

Power sources	Characteristics
Nuclear	<ul style="list-style-type: none"> <li>○ Superior in fuel supply stability and economic efficiency (fuel needs no replacing for one year, wide distribution of supply areas, nuclear fuel cycle makes fuel reusable).</li> <li>○ No CO<sub>2</sub> emissions during power generation</li> </ul>
Renewable energy (geothermal, hydroelectric, new energies)	<ul style="list-style-type: none"> <li>○ Totally domestic renewable energy</li> <li>○ No CO<sub>2</sub> emissions during power generation</li> </ul> <ul style="list-style-type: none"> <li><b>Geothermal</b> <ul style="list-style-type: none"> <li>○ Limited development sites (and volumes)</li> <li>○ Building dams affects the environment</li> </ul> </li> <li><b>Hydroelectric</b></li> <li><b>Wind</b> <ul style="list-style-type: none"> <li>○ Output fluctuates with weather conditions</li> <li>○ High-cost</li> </ul> </li> <li><b>Photovoltaic power</b></li> </ul>
Pumped storage (hydroelectric)	<ul style="list-style-type: none"> <li>○ Superior output adjustability in accordance with demand</li> <li>○ Building dams affects the environment</li> </ul>
Coal-fired thermal	<ul style="list-style-type: none"> <li>○ Superior in fuel supply stability and economic efficiency (many fuel reserves, wide distribution of supply areas)</li> <li>○ CO<sub>2</sub>, SO<sub>x</sub> and NO<sub>x</sub> emitted during power generation</li> </ul>
LNG-fired thermal	<ul style="list-style-type: none"> <li>○ Relatively superior in fuel supply stability (wide distribution of supply areas)</li> <li>○ Lower CO<sub>2</sub> emissions during power generation compared to other fossil fuels</li> </ul>
Oil-fired thermal	<ul style="list-style-type: none"> <li>○ Easy storage and transportation of fuel</li> <li>○ Dependent on the Middle East for most of oil supply</li> <li>○ CO<sub>2</sub>, SO<sub>x</sub> and NO<sub>x</sub> emitted during power generation</li> </ul>

#### ■ Constant cycling at rated thermal output

The term “constant cycling at rated thermal output” refers to the operation of generation facilities at the rated reactor thermal power (100%) approved by the government. In FY2005, this led to an increase in usage of nuclear generation of 1.5% — equivalent to a reduction of 550,000 tons-CO<sub>2</sub>.



We're conserving more energy and resources than ever before.

**Hideo Kashiwagi** Environmental Management Group, Environmental Affairs Department

### VOICE ● Energy and resource conservation in offices

I am assigned to the Environmental Affairs Department. There, we promote group-wide efforts aimed at the control and reduction of greenhouse effect gas emissions—efforts which are a part of the whole Kyushu Electric Power Group's business activities.

Naturally, it is important to minimise CO<sub>2</sub> emissions upon power generation—which make up the bulk of emissions—in order to make a contribution to achieving Japan's GHG reduction targets under the Kyoto Protocol, but I feel it is just as important for each and every member of staff in our offices to be aware of energy conservation in their part of the office and to do what they can.

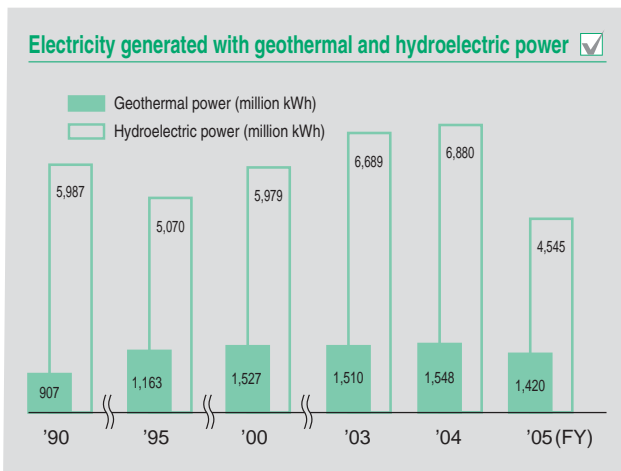


I try to play my part by shutting down my computer when away from my desk and pausing a little before I make photocopies so as to avoid mis-copies.

## Promotion of renewable energies

### Promotion of geothermal and hydroelectric power generation

Geothermal and hydroelectric power generation are highly eco-friendly power generation methods that harness valuable energy sources available in Japan, and are CO<sub>2</sub> emission-free during the power generation process. Since utilization of such power sources is developed in rich natural environments, we pursue the effective use of such technology while paying close attention to the natural landscape and surrounding environment. Geothermal generation facilities located in Kyushu represent about 40% of national installed capacity, taking advantage of Kyushu's rich geothermal energy.



### Promotion of wind and photovoltaic power generation

New energy sources such as wind and photovoltaic power provide clean and inexhaustible energy, although they do have some issues such as high dependency on weather.

#### In-house installation of wind and photovoltaic power generation facilities

We have installed some such facilities at our business sites, including 11 wind power generation units with a capacity of 3,250 kW and 21 photovoltaic power generation units with a capacity of 325 kW, with a total capacity of 3,575 kW as at the end of FY2005.

#### Purchases of electricity from customers and businesses

By purchasing surplus electricity generated by wind power generators installed at customers' homes or businesses, we help promote the spread of renewable energies.

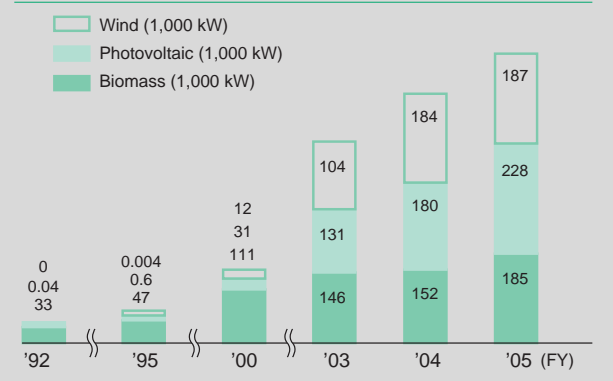
### Excess wind-, photovoltaic- and biomass-generated power contract numbers

 ✓

Unit: contracts

Fiscal Year	1992	1995	2000	2003	2004	2005
Wind	0	1	15	32	42	44
Photovoltaic	2	126	7,642	32,353	45,060	57,296
Biomass	9	11	18	27	31	33

### Excess wind-, photovoltaic- and biomass-generated power contracts

 ✓


Note: Contract numbers and contracted power figures show the relevant portion of power sources subjected to RPS.

### Addressing the Renewable Portfolio Standard

Thanks to these measures, we achieved 450 million kWh of electricity generated using new energy sources in FY2005, or the standard amount of new energy utilisation (minimum requirement) set under the Renewable Portfolio Standard.

### Changes in the standard amounts of new energy utilization (minimum requirement)

 ✓

Unit: 100 million kWh

Fiscal Year	2003	2004	2005	2006	2007	2008	2009	2010
Japan	32.8	36.0	38.3	45.5	61.2	75.6	94.6	122.0
Kyushu Electric Power	3.9	4.2	4.5	5.0	6.3	7.4	8.9	11.1

Note 1: Values for between FY2003 and FY2005 are final values.

Note 2: National values for FY2006 and after are currently (as at May 31, 2006) being revised (source: RPS Law Re-evaluation Subcommittee Report). Kyushu Electric Power values for this period are based on the national figures being revised.

### Contributing to the Kyushu Green Power Fund

We cooperate with the Kyushu Green Power Fund in an effort to promote the use of natural energy. We are happy to meet the amount of donations made by customers (one share: ¥500 per month), and we actively support the fund in areas such as promotion and acceptance of applications.

The Kyushu Green Power Fund was established in 2000 to offer financial assistance towards the installation cost of wind or photovoltaic power generation facilities, and it is managed by the Kyushu Industrial Advancement Center.

The Kyushu Green Power Fund has attracted 10,870 shares or 0.17%\* of electric light contracts as of the end of FY2005. This participation ratio is relatively high compared to green power funds of other regions in Japan.

Over the five years through FY2005, the fund has dispensed a total of 400 million yen in assistance including 165 cases of subsidies with installed capacity of approximately 220,000 kW.



\* The number of shares was divided by the total number of electricity subscribers.

The Aso Kurumagaeri Power Station (one of our wind power plants which received a subsidy)

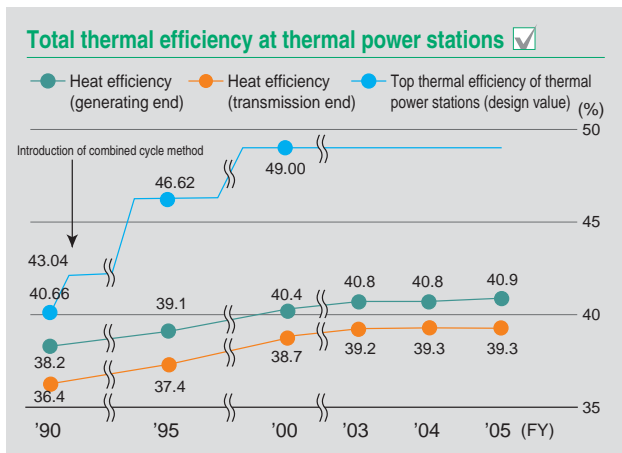
### Improving generation facility efficiency

#### Improved efficiency of thermal power generation facilities

Improved thermal efficiency of thermal power stations will lead to less fuel used for generation, resulting in a reduction of CO<sub>2</sub>, SO<sub>x</sub> and NO<sub>x</sub> emissions.

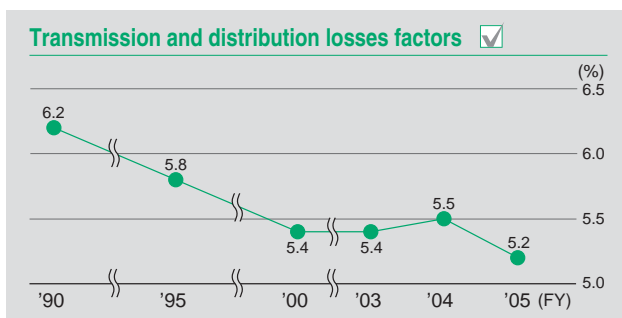
In FY2005, the total thermal efficiency of the company's thermal power stations maintained the highest level in our history. This is attributable to the operation of the new and advanced Reihoku Power Station Unit No.2 and the greater use of highly-efficient power stations employing the combined cycle power generation method, such as Shin-Oita Power Station.

If the total thermal efficiency of our thermal power stations improves by one point, CO<sub>2</sub> emissions can be reduced by 400,000 tons annually.



#### Reduction of transmission and distribution losses

We are striving to reduce the energy lost between power stations and customer premises, called transmission and distribution losses.



### The measures of public welfare and transportation section

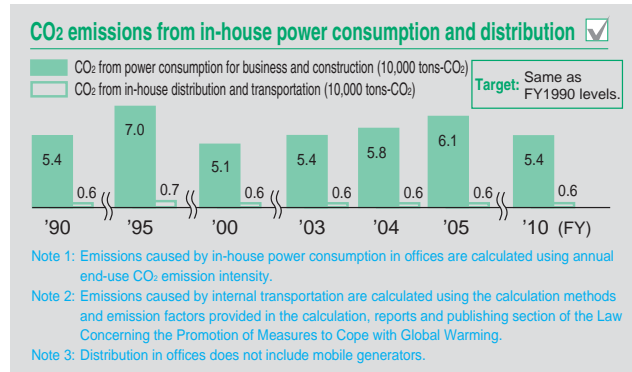
In light of the Kyoto Protocol Target Achievement Plan, we are working to step up our energy and resource conservation activities in offices. Meanwhile, in order to ensure proper compliance with the revised Energy Conservation Law enacted in April 2006, we are laboring to draw up guidelines and manuals relating to the obligations of shippers.

#### Energy and resource conservation in offices

We work to engage in eco-friendly actions to reduce environmental load in our daily operations.

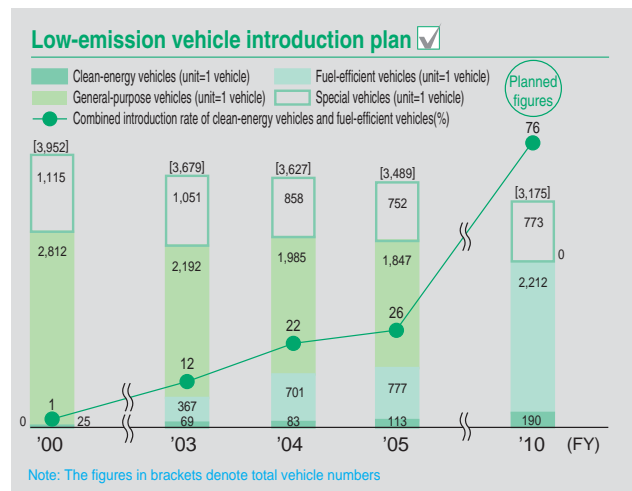
#### CO<sub>2</sub> emission targets for in-house power consumption and distribution

Beginning in FY2006, we have set ourselves targets for reducing CO<sub>2</sub> emissions for company head office, branch offices, customer service offices and power system maintenance offices, and electricity used to build power stations and for other construction, as well as by in-house distribution. Naturally, we are working hard towards meeting these goals.



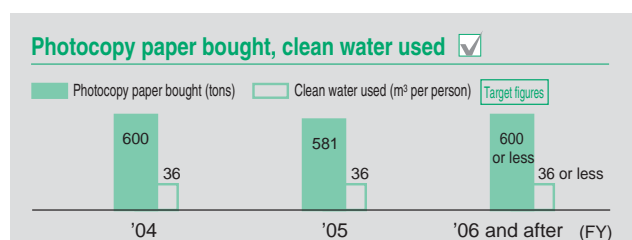
#### Low-emission vehicle introduction plan

We are continually introducing more clean-energy and fuel-efficient vehicles to our fleet.



#### Reduction of paper purchases and clean water use

Beginning in FY2006, we have set ourselves targets for reducing the volume of photocopy paper we buy and clean water we use as part of our efforts to further conserve energy and resources.



## ■ Popularizing energy-saving devices such as heat-pump water heaters

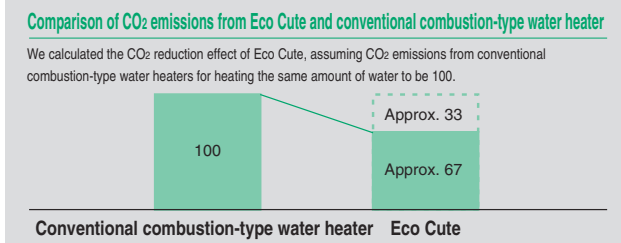
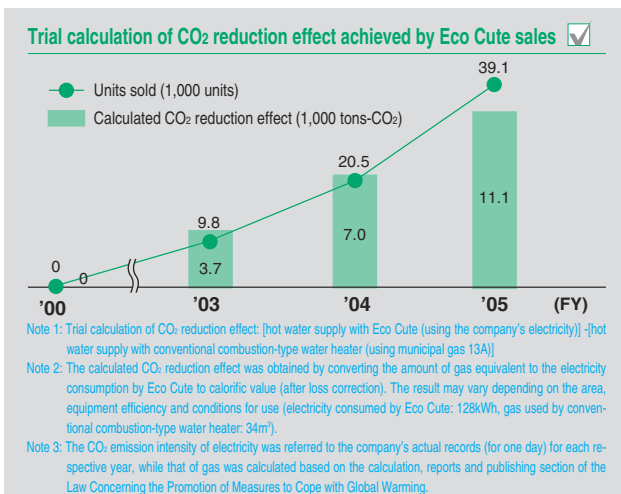
We encourage the use of heat-pump water heaters so as to promote the use of energy-saving equipment. But our efforts are not limited to heat-pump devices; we also offer suggestions to our customers to promote energy conservation, including consultations on the efficient use of energy.

Furthermore, we strive to boost the spread of energy-saving devices such as by expanding our air-conditioning business to include regular electric air conditioners.

### Eco Cute heat-pump water heater

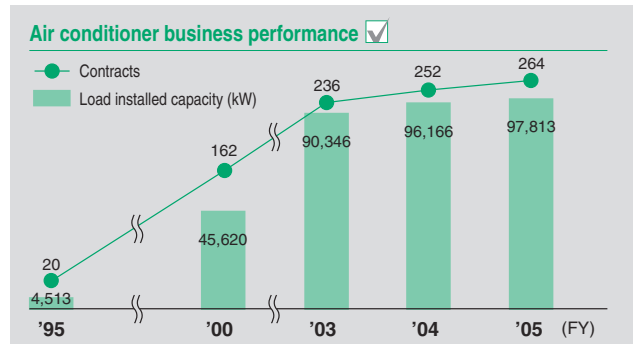
“Eco Cute” is a high efficiency heat-pump type electric water heater that realizes better energy conservation and co-existence with nature. Eco Cute requires approximately 24% less energy than conventional combustion-type water heaters (calculated on a primary energy-base\*), offers economic benefits by utilizing less expensive nighttime electricity, and utilizes CO<sub>2</sub> as a coolant, which is found in natural environment.

\*Energy-saving effect was calculated by converting electric energy to calorific value. For the conversion, we used the figure (9.28MJ/kWh) set forth in a notice issued by the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure and Transport of 2006 and the criteria for building owners and specific building owners regarding streamlined energy usage.



### Developing the air-conditioner business

In 1993, Kyushu Electric Power began what was called a “heat storage business”, in which we installed heat source facilities such as energy-efficient heat pumps and heat storage tanks in customers' premises and retained and operated them on the customers' behalf. In FY2005, the business was expanded to include regular electric air conditioners, and was consequently renamed the air-conditioner business.



### ■ Energy conservation information service

In addition to our efforts thus far, such as including previous-month and previous-year electricity usage figures in monthly meter reading slips, we also launched a service through our “Kirei Life” website in March 2006 where customers can look up the amount of electricity they have used as well as their power bills.

### ■ Take active part in “Cool Biz” drives

Cool Biz is a movement started by Team Minus 6%, in which air conditioners are set no lower than 28°C and people wear cooler summer attire to work. We calculate that Cool Biz has led to a reduction of 3,000 tons-CO<sub>2</sub>\* (approximately eight million kWh) in Kyushu alone.

\*Equivalent to the annual CO<sub>2</sub> emissions caused by electricity use of around 2,200 households.

### Controlling Greenhouse Effect Gas Emissions other than CO<sub>2</sub> from Power Generation

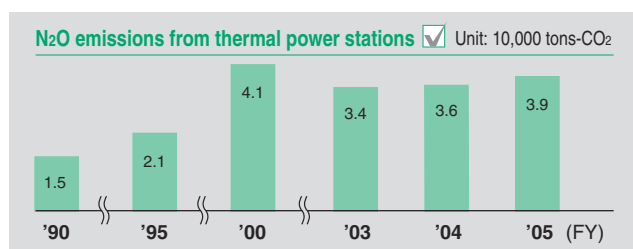
Although over 99% of GHG emissions are CO<sub>2</sub> generated during power generation, we also take measures to locate and reduce the other GHGs such as N<sub>2</sub>O and SF<sub>6</sub> emitted in the course of our business operations.

#### Methane (CH<sub>4</sub>)

Because the concentration of CH<sub>4</sub> in emissions released as a result of the combustion of fuel at thermal power stations is lower than the concentration in the atmosphere, in effect Kyushu Electric Power emits no methane at all.

#### Dinitrogen monoxide (N<sub>2</sub>O)

Some N<sub>2</sub>O is emitted during the combustion of fuel at thermal power stations, but we endeavor to minimize these emissions by improving power generation efficiency.



### Sulfur hexafluoride (SF<sub>6</sub>)

We use SF<sub>6</sub> as an insulation material for some electrical equipment, and take precautions not to release SF<sub>6</sub> gas into the atmosphere when the equipment is overhauled or dismantled.

#### SF<sub>6</sub> gas recovery record (FY2005) Figures in parentheses show CO<sub>2</sub> converted volume\*

	SF <sub>6</sub> gas transaction	SF <sub>6</sub> gas recovery	Recovery rate
At equipment overhaul	14.98 tons (358,000 tons)	14.85 tons (355,000 tons)	99.1%
At equipment dismantlement	4.07 tons (97,300 tons)	4.04 tons (96,600 tons)	99.3%

\*Figures are obtained by converting the weight of SF<sub>6</sub> gas to the weight of CO<sub>2</sub> by applying the global warming potential (23,900) for SF<sub>6</sub>.

### Hydrofluorocarbon (HFC)

HFC used as a coolant in air conditioners is mostly recovered during inspection and removal, with very little released to the atmosphere.



### Perfluorocarbon (PFC)

PFC is utilised in some transformers as a refrigerant or as an insulation medium, but Kyushu Electric Power does not use PFC.

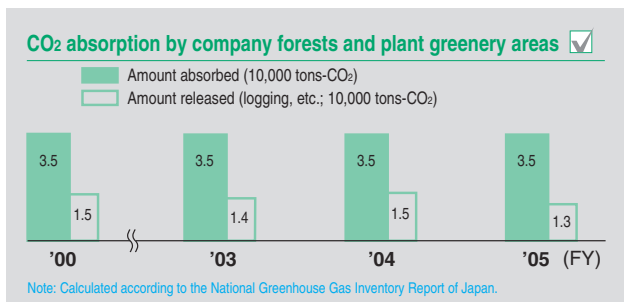
### CO<sub>2</sub> absorption by forests

We own 4,448 hectares of Forest Stewardship Council-certified forests that are managed and maintained to protect water resources and 254 hectares of greenery area around power stations to create harmony with the surrounding environment.

These forests together absorbed 35,000 tons-CO<sub>2</sub> in FY2005—22,000 tons after subtracting the potential CO<sub>2</sub> released from the forests (by logging and shipping of Japanese cedar and cypress for timber from artificial forests).



A table made using wood gained from the thinning of our forests. These tables are used at company headquarters.



Note: Calculated according to the National Greenhouse Gas Inventory Report of Japan.

### Towards Kyoto Mechanism Utilization

The Kyoto Mechanisms are an international framework approved to fulfill the commitments under the Kyoto Protocol, where countries jointly work to reduce GHG emissions in a cost effective manner.

#### Outline of Kyoto Mechanisms

Joint Implementation (JI)	Developed countries jointly implement projects, and that reduction in GHGs can be put towards the investing country's targets.
Clean Development Mechanism (CDM)	Developed countries implement joint projects with developing countries and that reduction in GHGs can be put towards the investing (i.e., advanced) country's targets.
Emissions Trading (ET)	Developed countries trade emissions limits in order to meet their reduction targets.

As part of our use of the Kyoto Mechanism, we invest in the World Bank's Prototype Carbon Fund (PCF) and Japan GHG Reduction Fund (JGRF) to attain GHG emission allowances and gain further insight into the workings of the Kyoto Mechanisms.

#### World Bank's Prototype Carbon Fund (PCF)

The fund is managed by the World Bank to provide financing to GHG emission reduction projects and return GHG emission allowances to investors.

- Total fund: 180 million dollars (eight million dollars funded by Kyushu Electric Power).
- Investors: governments from six countries and 17 companies

#### Japan GHG Reduction Fund (JGRF)

The fund was established by the Development Bank of Japan and the Japan Bank for International Cooperation, in cooperation with Japanese companies, for the reduction of GHG emissions. It offers financing to GHG emission reduction projects and returns GHG emissions allowances to the investors.

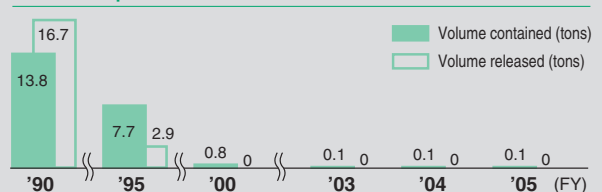
- Total fund: 141.5 million dollars (three million dollars funded by Kyushu Electric Power).
- Investors: Development Bank of Japan, Japan Bank for International Cooperation and 31 Japanese companies

## 2 Ozone Layer Protection

Freons used in air conditioners, refrigeration and freezer equipment deplete the ozone layer and cause serious impact on global warming when released into atmosphere. We take every action to eliminate freon emissions.

We also install regulated freon-free equipment when replacing or installing new equipment.

#### Volume of specific freons contained and released



Note 1: Specific freons refer to specific freons and carbon tetrachloride.

Note 2: "Volume released" is the amount actually used to replenish equipment.

Note 3: Natural leakage was calculated in the year when it was detected during inspections or when switching to alternative freons.

## 1 Industrial Waste

Industrial waste we generate during the course of our business includes coal ash from operation of coal-fired thermal power stations and gypsum from exhaust gas desulfurizers.

We practice the 3Rs (Reduce, Reuse and Recycle) in order to minimise these waste substances.

### “Reduce” Measures

At thermal and nuclear power stations, intervals between equipment inspections are extended to reduce the number of parts (seals, bearings and gaskets, etc) to be replaced with the proviso that safety and soundness of equipment are first secured. Intervals for changing lubricating oil in equipment are also extended to reduce waste oil.

### “Reuse” Measures

For electricity-related materials and equipment removed during power distribution works or other engineering works, we reasonably determine whether they are reusable based on our criteria to see if they have sufficient capability and quality for reuse. We put those materials to reuse either as they are or after repair.

### “Recycle” Measures

The overall industrial waste generated in FY2005 was approximately 690,000 tons, of which around 634,000 tons (92%) was recycled. This represents a reduction of approximately 1.6% of the total amount of final disposal waste in Japan.

(source: the 2005 White Paper of the Recycling Society, the volume of annual final disposal waste in Japan totalled approximately 40 million tons).



Raising the awareness of each and every employee.

**Ai Tomozoe** General Affairs Group,  
General Affairs Department,  
Kumamoto Branch Office

## VOICE ● Rising to the zero emissions challenge

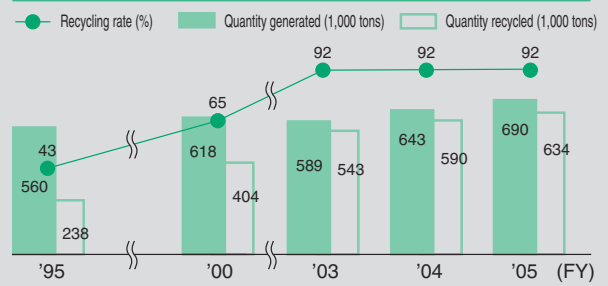
The action oriented to totally eliminating emissions that I feel is the most relevant to me is reducing and recycling waste paper. These days, a lot of work processes are being computerised and are becoming paperless, so the volume of waste paper produced is already less than before, but there are still a lot of things that need to be printed out. This year—better late than never!—the Kumamoto Branch Office got a printer that is capable of printing on both sides of each sheet of paper, but I am convinced that we will not see the true effects of the new printer until each and every person in the office is dedicated to the zero emissions goal.

I have been involved with environment-related work since last year, and it struck me that all employees (myself included) must improve their individual awareness of the situation and work diligently everyday to eliminate emissions.

It is my intention as someone engaged in environment-oriented work to create the kind of approach that will act as a catalyst for an improvement in the awareness of each and every staff member.



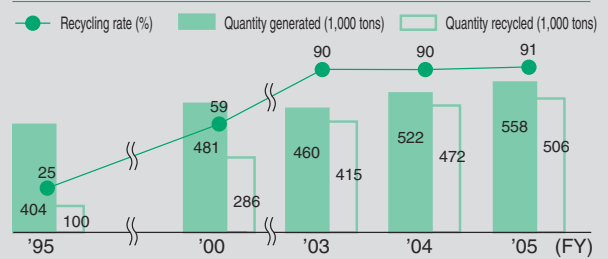
### Volume of industrial waste generation and recycling rate



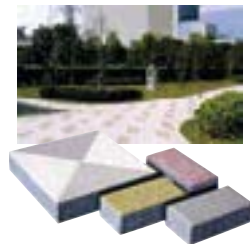
### Coal ash

Coal ash makes up approximately 80% of industrial waste; three Kyushu Electric Power coal-fired thermal power stations generate some 500,000 tons of it. However, we make effective use of coal ash's properties to create cement and other soil improvement materials.

### Amount of coal ash generated and recycling rate



The paving block “Cool Tone” made from recycled clinker ash, a type of coal ash, is used in sidewalks within and outside of company premises.

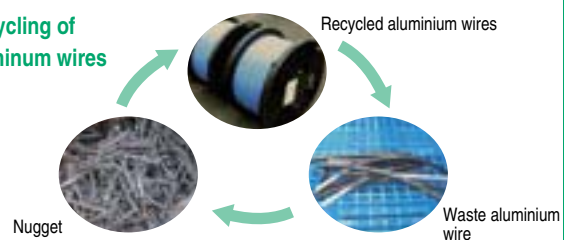


### Other industrial waste

We are proactive in the reuse and recycling of switches, pole-top transformers and concrete power poles removed during wiring work, and all other materials.

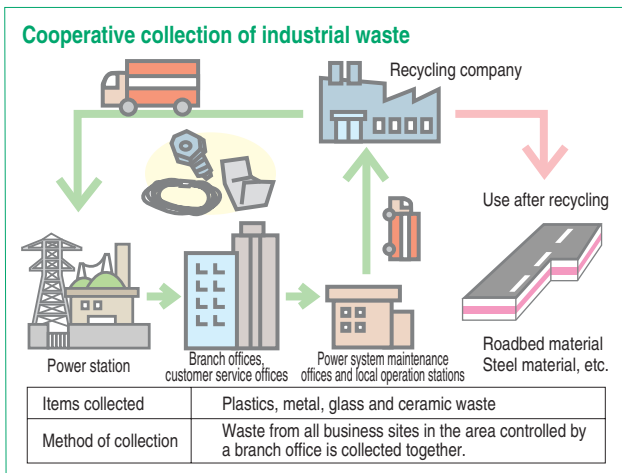
For instance, we developed recycled aluminium wires using waste aluminium wires from our electric works, which have been employed since FY2005.

### Recycling of aluminum wires



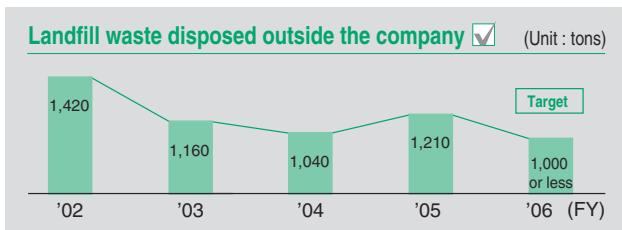
### Cooperative collection of industrial waste

We introduced a cooperative collection system for industrial waste in FY2005, under which certain types of the industrial waste generated from electric works under direct management of power stations and customer service offices are collected in bulk by area and delivered to a recycling company.



### Minimizing landfill waste disposed of outside the company

By practicing the 3Rs, we are endeavoring to reduce the annual amount of landfill waste disposed of outside the company to under 1,000 tons.



## 2 General Waste

The general waste resulting from our operation includes used paper, empty bottles and cans, plastic bottles, and kitchen garbage from cafeterias, along with shells from power stations and driftwood from dams.

Such general waste is subjected to the 3Rs just as industrial waste is.

### “Reduce” Measures

We are playing our part to reduce kitchen garbage and compost it wherever possible by installing kitchen garbage treatment units in our business sites with cafeterias. The fertilizer produced by our



A kitchen garbage treatment unit at the Miyazaki Branch Office.

kitchen garbage treatment units (i.e., composters) is fermented and put to effective use on the saplings being grown at our Research Laboratory Bioresource Research Center.

### “Reuse” Measures

We utilize the blank side of used paper as well as used stationery including document files.

### “Recycle” Measures

#### Used paper

In FY2002, we began to make company-wide efforts to achieve a used paper recycling rate of 100%. We have succeeded in maintaining that rate ever since.



Products made from used paper

Some of the paper collected is recycled by Kyushu Environmental Management Corporation to produce photocopy paper, paper string, and toilet paper bearing the Kyushu Electric Power corporate logo.

#### Other general waste

Recycling of general waste other than used paper is actively encouraged. Bottles, cans and plastic bottles are collected separately. Driftwood from dams and shells such as barnacles collected during periodic inspections of power stations are subjected to crushing and other treatments, and efficiently utilized as fertilizer.

### Recycling of shells and driftwoods, etc. from dams (FY2005) ✓

	Quantity generated (tons)	Quantity recycled (tons)	Recycling rate (%)	Main use after recycling
Driftwoods, etc.	8,028	6,707	84	Substitute goods for straws, gardening compost
Shells, etc.	1,494	1,178	79	Material for compost

All used work clothes of our employees are recycled in principle. In FY2005, 4,437 pieces of expendable clothing were recycled and made into felt materials for automobiles and work gloves. Eco work gloves that are commercially offered as original Kyushu Electric Powers goods are used at our business sites.

### Recycling work clothes



### 3 Challenges in Recycling Activities

We at Kyushu Electric Power operate a waste recycling business with the cooperation of all group companies, and are working hard to minimize waste and environmental load.

For details of recycling business of our group companies, see page 50.

#### Fluorescent Tube Recycling Business

Japan Recycling Light Technology & System recycles used fluorescent light tubes—most of which are otherwise disposed of in landfills.

In FY2005, the company treated around 8.4 million fluorescent tubes, making (by outsourcing) and selling some 90,000 recycled lights.

Compared to landfilling, its business results in the reduction of approximately 380 tons-CO<sub>2</sub>, and contributed to the reduction of other environmental loads such as mercury.

#### Confidential Document Recycling Business

Kyushu Environmental Management Corporation collects and recycles confidential documents that had been usually shredded and burned. In FY2005, the company recycled approximately 4,200 tons of confidential documents, and sold approximately 650 tons of recycled photocopy paper and 170 tons of recycled toilet paper.

### 4 Promotion of Green Procurement

The green procurement system was introduced in FY2002. Under the system, the company promotes green procurement by purchasing eco-friendly goods and encouraging the cooperation of suppliers.

The company employs comprehensive criteria for procurement. Environmental assessment is additionally included when purchasing goods, besides conventional economic considerations (such as quality, price and delivery time).

#### Commodities (Office supplies)

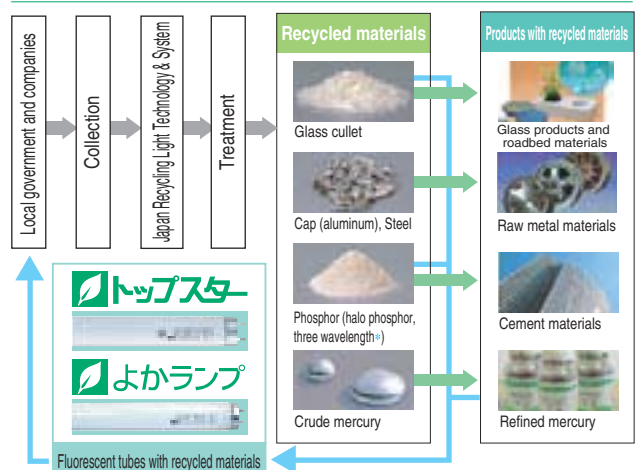
When purchasing commodities such as office supplies, the company selects eco-friendly products that meet the respective Kyushu Electric Power purchase standards. Since May 2006, we have put our efforts to increase the rate of green procurement by committing to purchasing eco-friendly products through use of the Electronic Catalog purchasing system\* that forms part of the new online materials system.

\* Products are chosen from an internet-based catalog and orders placed online (products other than eco-friendly items are not listed).



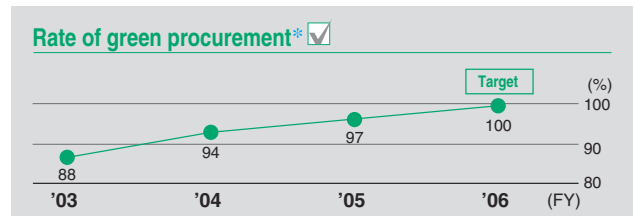
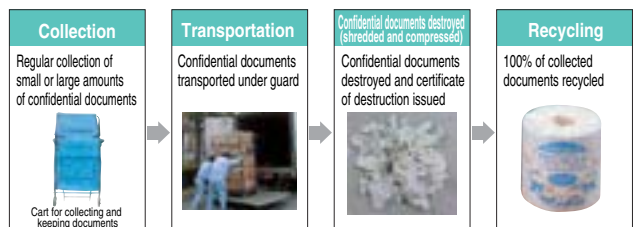
New materials system

#### Flow of recycling for used fluorescent tubes



\*Halo-type phosphor is used in white or daylight lamps.  
Three-wavelength phosphor is made up from red, green and blue phosphor.

#### Flow of confidential document recycling



\* The rate of eco-friendly products in commodities purchased.

#### Electricity—related materials and equipment

We assess electricity—related materials and equipment offered to us by our suppliers from a multi-faceted viewpoint—including environmental consideration. Products that satisfy that assessment are designated as Green Products, and we actively promote their procurement.

In FY2005, recycled aluminum wires joined the list of Green Products, increasing the designated items to six.

##### Designated Green Products (as of the end of FY2005)

Waste cloth, radiation shielding material, optical transmission equipment, microwave multiplex radio equipment, eco work gloves, and recycled aluminum wires.

#### Green Suppliers

We welcomed eight companies working hard to protect the environment to our line-up of Green Suppliers, increasing the registered total to 162.



# Harmoniously Coexisting with the Local Environment

## 1 Environmental Assessment

Three types of environmental surveys are conducted on the premises of Sendai Nuclear Power Station towards the development of new nuclear power facilities in the latter half of the 2010s. The surveys include an environmental impact assessment, geological survey\*1 to examine the geologic structure and faults inside and outside the premises, and meteorological survey\*2 to examine wind direction and speed above the premises.

### Specifications for the surveys

Location	Gumizaki-cho, Satsuma-sendai City, Kagoshima (inside the premises of Sendai Nuclear Power Station)		
No. of units	One unit		
Output	1.5 million kW-class	Nuclear reactor type	Advanced pressurized water reactor

\*1: Geological survey



Performed to confirm the rock mass has enough seismic stability as a foundation for a nuclear reactor building.

\*2: Meteorological survey



Performed to examine how radiation dose and spread changes in and around the power station in the case of accidents, as well as the method to ensure safety against radiation.

### Status of Environmental Assessments

#### Environmental impact assessment scoping document

In August 2005, we submitted an environmental impact assessment scoping document to the Minister of Economy, Trade and Industry, the Governor of Kagoshima Prefecture, and the mayors of Satsuma-sendai and Ichikikushikino Cities.

During the subsequent inspection period, we sought the environmental-protection-related opinions of all involved, and submitted our responses to those in November 2005.

#### Opinions received (from 149 reviewers)

Item	No. received	Opinion subjects
Business plan	9	Necessity of nuclear power, public water body reclamation, underwater discharging, etc.
Environment in general	5	Co-existence with the environment, environmental impact assessment items, etc.
Noise, vibration	1	Surveyed items
Water environment	6	Water temperature survey, thermal pollution impact, impact on fisheries, etc.
Fauna and flora habitats	5	Bird survey items, impact on marine fauna and flora, etc.
View	1	Surveyed items
Forum for people to experience nature	1	Surveyed items
Total	28	

Kyushu Electric Power received recommendations from the Minister of Economy, Trade and Industry pertaining to the environmental impact assessment scoping document in February 2006. We subsequently revised the items to be assessed in line with the recommendations.

### Kyushu Electric Power's reaction to the recommendations from the Ministry of Economy, Trade and Industry (METI)

Subject	Recommendations from METI	Kyushu Electric Power's reaction (reflection in survey of existing conditions)
	Outline	
Addition of items to be assessed for environmental impact	1. Landfill soil dissolution test and estimate & assessment of water quality impact where this is likely.	Review of assessment items
Investigation of survey, estimate, and assessment methods	2. Estimation & assessment of impact on air quality of nitrogen oxide from working vessels. 3. Survey, estimate and assessment of impact on greater spotted eagle. 4. Survey, estimate and assessment of impact on sea turtles.	Review of assessment methods

### Survey of existing conditions

In light of the recommendations issued to Kyushu Electric Power by the Minister of Economy, Trade and Industry, we reviewed our survey plans and began surveys of existing conditions (literature searches and on-site surveys based on the environmental impact assessment scoping document) in June 2006, and we are looking into estimates and assessments of environmental impact and taking any subsequently necessary environmental protection measures.

### Main items of the survey for the current situation

Items	Content
Atmospheric environment	Nitrogen oxides, noise, vibration, etc.
Water environment	Water temperature and quality, etc.
Marine organisms	Marine algae and seaweed, fish, plankton, etc.
Terrestrial organisms	Animals, plants and ecosystem
Social environment (literature study)	Status of population, industry and land use, etc.

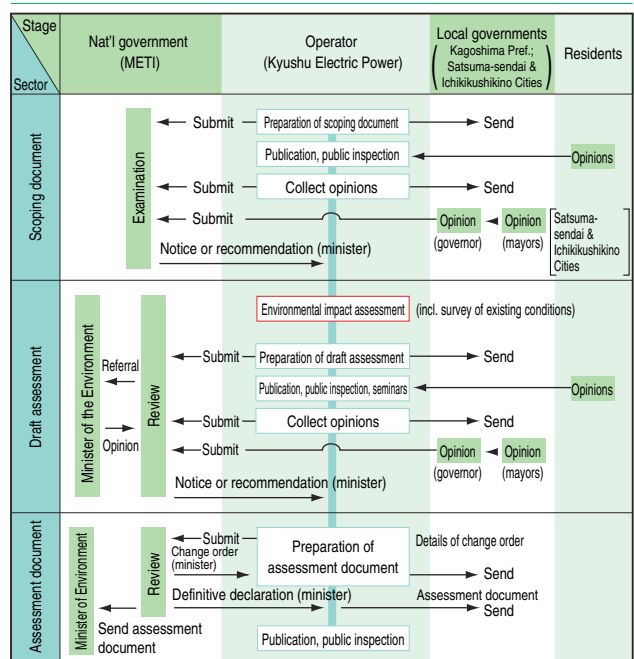


Survey of noise and vibration



Survey on water environment (quality)

### Environmental assessment procedures



## 2 Prevention of Air, Water and Noise Pollution

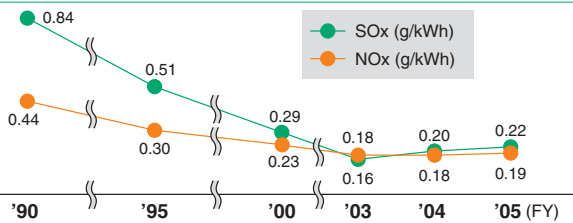
In operating our power stations and other facilities, we conform not only to laws and regulations, but also to environmental conservation agreements concluded with related local governments.

### Air Pollution Measures

We have adopted various measures to minimize sulfur oxides (SOx) emissions from our thermal power stations.

Measures for reducing sulfur oxides (SOx)	<ul style="list-style-type: none"> <li>○ Use of heavy and crude oil with a low sulfur content</li> <li>○ Promotion of the use of sulfur-free liquefied natural gas (LNG)</li> <li>○ Installation of desulfurization facilities that remove SOx from exhaust gas</li> <li>○ Adoption of the in-furnace desulfurization method, which removes SOx within the boiler.</li> </ul>
Measures for reducing nitrogen oxides (NOx)	<ul style="list-style-type: none"> <li>○ Combustion method improvement for boilers, etc.                             <ul style="list-style-type: none"> <li>• Adoption of the two-stage combustion method</li> <li>• Adoption of the exhaust gas recirculation combustion method</li> <li>• Adoption of low NOx burner and combustors</li> </ul> </li> <li>○ Installation of denitration facilities that remove NOx from exhaust gas</li> </ul>
Measure for reducing particulates	<ul style="list-style-type: none"> <li>○ Promotion of LNG use that does not generate particulates</li> <li>○ Installation of high-efficiency precipitators that remove particulates from exhaust gas</li> </ul>

SOx and NOx emissions intensity (per kWh thermal electric power production)



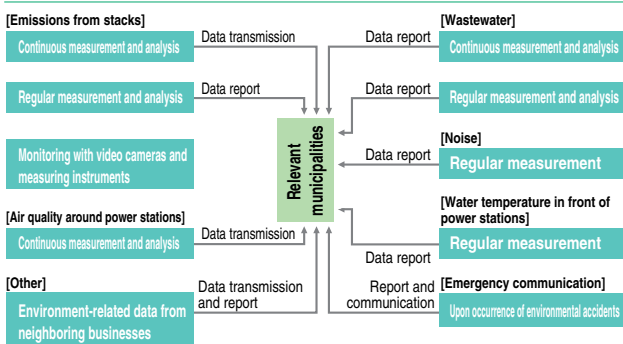
## 3 Environmental Protection Management

Environmental monitoring and chemical substance control, etc. are strictly managed to ensure environmental protection at our power stations.

### Environmental Monitoring

The environment surrounding our power stations are rigorously managed in cooperation with relevant municipalities and neighboring businesses.

### Environmental monitoring and reporting



### Environmental radiation monitoring around nuclear power stations

At nuclear power stations, the ambient radiation dose and the level of radioactivity in the environmental samples of seawater and agricultural and marine products are measured in addition to regular environmental

### Water Quality Control

Wastewater from equipment, and other internal wastewater, is processed using treatment systems at all of the company's thermal and nuclear power stations, and are discharged after quality confirmation.

Quality analysis is conducted regularly for reservoir water at hydroelectric power stations. We endeavor to protect water quality by treating it for eutrophication, freshwater red tide, and selective water intake when water gets turbid, as well as supporting projects for improving devastated neighboring forests.

### Measures against Noise and Vibration

We address noise and vibration problems by adopting low-noise, low-vibration equipment, employing mufflers and soundproofing walls, and installing noise-producing equipment indoors.

### Measures against Land Pollution

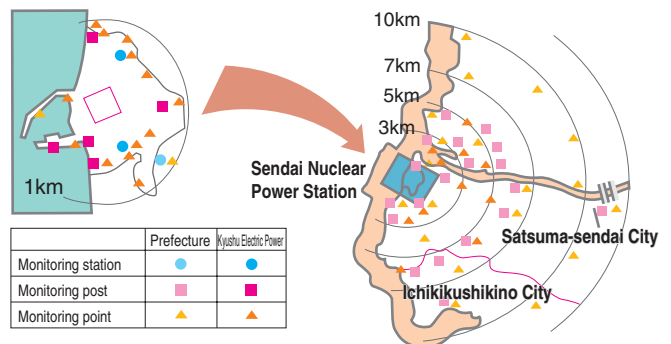
We prevent discharge and leakage of toxic substances into the ground, and conduct voluntary surveys on soil contamination for sites sold or purchased in order to avoid risks from land pollution.

Existing company-owned land is no exception, either: we take steps to prevent pollution by conducting groundwater contamination surveys based on government survey results in possibly contaminated areas in the vicinity of company-owned land. The findings revealed there was no groundwater contamination attributable to Kyushu Electric Power.

monitoring. Similar measurements are also performed in prefectures where nuclear power stations are located.

- We have been reporting the results of measurement to relevant prefectures. The prefectures in turn review and evaluate the reports under guidance and with advice of academic experts, and publicize the findings periodically in their public relations magazines.
- The radiation dose on people living near power stations is less than 0.001 millisievert (mSv) per year, which is much lower than the statutory dose limit of the 1mSv per year and the annual 0.05mSv target set by the Nuclear Safety Commission.

### Radioactivity inspection in vicinity of Sendai Nuclear Power Station



Monitoring stations and posts: conducted sequential measurements of ambient radiation.

Monitoring points: conducted measurements of the accumulated radiation for a certain period.

## Management and Disposal of Radioactive Waste

Radioactive waste includes low-level radioactive waste incurred at nuclear power stations and high-level radioactive waste incurred in the process of spent fuel reprocessing, each requiring different management and disposal methods.

Plutonium and uranium recycled through reprocessing are reused as useful compounds in MOX and uranium fuel.

Kyushu Electric Power held approximately 2.1 tons of fissile plutonium as of the end of FY2005.

### Low-level radioactive waste

Of the waste products generated at nuclear power stations, those with minimal levels of radioactivity are called "low-level radioactive waste management." Its volume is reduced by incineration or compression, and sealed in drums, which are stored securely in the solid waste storage facility located within power station sites. They are then transferred to the Low-level Radioactive Waste Disposal Center of Japan Nuclear Fuel Limited (located in Rokkasho-mura, Aomori Prefecture) where they are buried and stored until the waste ceases to have any effect on the human living environment.

### Accumulated amount of radioactive solid waste stored (as of the end of FY2005)

Unit: container (each equivalent to one 200-liter drum)

	Waste stored in power station sites	Waste transferred
Genkai Nuclear Power Station	25,728 (23,495)	6,536 (6,536)
Sendai Nuclear Power Station	11,748 (11,740)	—
Total	37,476 (35,235)	6,536 (6,536)

Note: Parentheses denote as of the end of FY2004 figures.

\*Waste transferred to the Low-level Radioactive Waste Disposal Center

### Disposal of high-level radioactive waste

The high-level radioactive liquid waste generated in the process of spent fuel reprocessing is mixed with glass matrix and solidified. High-level radioactive waste is stored at the High-level Waste Storage Management Center of Japan Nuclear Fuel Limited in Rokkasho-mura, Aomori Prefecture, for cooling storage for 30 to 50 years. As of the end of FY2005, the High-level Waste Storage Management Center had accepted a cumulative total of 95 canisters of glass-solidified waste from Kyushu Electric Power.

The glass-solidified waste is to be finally disposed of in a stable geological stratum more than 300 meters below ground. The Nuclear Waste Management Organization of Japan (NUMO), a METI-approved organization, will implement the final disposal.

Final disposal is scheduled to begin in around 2035, and applications have been sought from municipalities nationwide for preliminary survey sites since December 2002 for the purpose of selecting a suitable final disposal site.

### Reducing radioactive waste by reducing the use of fuel assemblies

By using high burnup fuel (55,000 MWd/t), which has a higher concentration level of uranium 235, we contribute to the extension of the fuel life and, by reducing the amount of spent fuel produced, minimizing the amount of radioactive waste generated.

### Status of spent fuel storage (as of the end of FY2005) Unit: pieces

	Accumulated generation	Accumulated emission	Quantity stored	
			Quantity stored as of the end of FY2005	Storage capacity
Genkai NPS	2,859	1,217	1,642	3,278
Sendai NPS	1,900	374	1,526	2,374
Total	4,759	1,591	3,168	5,652

## Chemical Substance Control

Chemical substances we use at power stations are properly managed at each site in full accordance with related laws and regulations.

### Pollution Release and Transfer Register (PRTR) system

We investigate, collect and voluntarily disclose data on the amounts of designated chemical substances emissions and transfers.

### PRTR investigation results (FY2005) Unit: kg [dioxins: mg-TEQ]

Index No.	Chemical substance	Applications	Qty. handled	Qty. released into the air	Qty. transferred
30	Bisphenol A type epoxy resin	Coating material for equipment	4,400	88	0
40	Ethylbenzene	Coating material for equipment	3,800	3,800	0
63	Xylene	Coating material for equipment	16,500	16,500	0
179	Dioxins	Waste incinerator	—	69	6.2
253	Hydrazine	Feed water processing agent	30,800	1.5	0
304	Boron and boron compounds	Reactivity control in nuclear reactors	2,300	0	0
353	Tris phosphate (dimethyl phenyl)	Turbine control oil	6,400	0	4,600

Note: Aggregated the data for one ton or more of Class 1 Designated Chemical Substances and 0.5 tons or more of Specific Class 1 Designated Chemical Substances handled by business sites annually (effective digits aggregated: 2 digits). All dioxins are calculated regardless of the amount.

### Dioxins

We endeavor to reduce the use of waste incinerators, which are considered contributing to dioxin emissions. We possessed three incinerators at the end of FY2005, two of which were not in use. The remaining one unit is operating with emissions level below the emission regulation index set forth in the Law Concerning Special Measures against Dioxins.

### Polychlorinated biphenyl (PCBs)

Equipment held by Kyushu Electric Power utilizing PCBs (1,511 units of high-voltage transformers, capacitors, and the like) is stored and administered strictly in special storage areas pursuant to the Waste Disposal and Public Cleaning Law. We plan to treat the equipment and render it harmless between 2007 and 2013 in the PCB waste treatment facilities established by the Japan Environmental Safety Corporation under the supervision of the national government.

The national investigation committee has been discussing basic policies to address the issue of minute amounts of PCBs that seep into insulation oil of heavy electrical equipment such as transformers. Since equipment with traces of PCBs cannot yet be identified, we conduct examinations to detect the presence of PCBs whenever handling insulation oil, for instance when dismantling equipment. So far we have discovered 1,485 contaminated pieces of equipment, and these are kept under strict control in accordance with pertinent regulations.

## Asbestos

We use some products that contain asbestos in our buildings and facilities. Most of these are non-dispersing.

Places in which spray-on asbestos (which is considered to be dispersing) are used are machine rooms, transformer rooms, and other places where people other than pertinent staff have no access. Therefore, we believe that our use of asbestos has no impact on the surrounding environment.

### Major asbestos use in buildings and facilities (as of the end of FY2005)

Category	Location	Current status (usage, etc.)	Notes (measures, etc.)	
Sprays containing asbestos	Used in wall and ceilings of some machine room and transformer room, etc. as sound and heat insulation, fire-proofing	<ul style="list-style-type: none"> <li>Ascertaining all areas of use and implementing measures systematically.</li> <li>Company buildings: 27; transformer sound insulation: 7.</li> </ul>	<ul style="list-style-type: none"> <li>Regular inspections; notice of locations of asbestos use; protective gear worn during inspections.</li> <li>Places where use or non-use of asbestos is unclear are being checked.</li> <li>Measures in such locations as stated left scheduled to be implemented by FY2007.</li> </ul>	
Products containing asbestos	Building materials	Fire-proof boards and flooring in buildings	<ul style="list-style-type: none"> <li>As molded products, these do not disperse asbestos particles in normal conditions. Therefore, these will not be replaced with non-asbestos products urgently, but upon repairs or other work performed in the pertinent locations.</li> </ul>	
	Sound insulation	Transformer sound insulation (transformation units, hydro power generators)		<ul style="list-style-type: none"> <li>Approx. 70</li> </ul>
	Asbestos cement pipes	Material for subterranean wiring pipes (transmission and distribution lines)		<ul style="list-style-type: none"> <li>Length: approx. 180 km</li> </ul>
	Heat insulation	Generation facilities (thermal and nuclear)	<ul style="list-style-type: none"> <li>Remaining products containing asbestos: approx. 30,000 m<sup>2</sup> (around 30% of total)</li> </ul>	
	Sealant, joint sheets	Generation facilities (thermal and nuclear)	Remaining products containing asbestos: <ul style="list-style-type: none"> <li>Thermal: approx. 380,000 (around 80% of total)</li> <li>Nuclear: approx. 170,000 (around 90% of total)</li> </ul>	<ul style="list-style-type: none"> <li>As molded products, these do not disperse asbestos particles in normal conditions. Therefore, these will not be replaced with non-asbestos products urgently, but upon repairs or other work performed in the pertinent locations.</li> <li>Switch to non-asbestos products is to be carried out upon technical assessment.</li> </ul>
	Shock absorber	Suspension insulators (transmission lines)	<ul style="list-style-type: none"> <li>Suspension insulators: approx. 1.47 million (around 40% of total). (Products containing asbestos are used as shock absorbers inside suspension insulators, but are not used in the magnetic portion of the insulator surface.)</li> </ul>	<ul style="list-style-type: none"> <li>As molded products sealed inside insulators, these do not disperse asbestos particles in normal conditions. Therefore, these will not be replaced with non-asbestos products urgently, but upon repairs or other work performed in the pertinent locations.</li> </ul>
Thickener	Wire for overhead power lines (transmission lines)	<ul style="list-style-type: none"> <li>Wire anti-corrosive; length: approx. 17 km (approx. 0.2% of total overhead power line length)</li> </ul>	<ul style="list-style-type: none"> <li>Because the asbestos is integrated into the anticorrosive grease, it does not disperse asbestos particles in normal conditions. Therefore, these will not be replaced with non-asbestos products urgently, but upon repairs or other work performed in the pertinent locations.</li> </ul>	

When dismantling buildings and facilities, we implement extremely thorough measures in line with relevant laws and regulations to prevent dispersion of asbestos particles, and go about disassembly, removal of materials and treatment in the most appropriate manner. Furthermore, we are steadily replacing products that contain asbestos with alternatives.

As of the end of FY2005, three former Kyushu Electric Power employees had applied for worker's compensation for asbestos-related illnesses.

## 4 Harmony with the Surrounding Environment

When designing facilities, we take into consideration the natural environment and urban landscapes of the surroundings areas, and implement environmental measures such as tree planting.

Since FY1986, we have been promoting the underground power distribution system for the benefit of urban landscape and to ensure safe and pedestrian-friendly pavements. It has been a systematic undertaking with the close cooperation of related road administrators, other local parties involved, and distribution line administrators.

### Underground distribution system installation (within Kyushu Electric Power's jurisdiction)

	Underground Distribution System Installation Plan			New Underground Distribution System Installation Plan	Pole-free Power Distribution Promotion Plan	Cumulative total
	1st phase (1986-1990)	2nd phase (1991-1994)	3rd phase (1995-1998)	4th phase (1999-2003)	5th phase (2004-2005)	
Underground distribution line installed (km)	97	73	117	210	54	551

### Landscape before/after system installation (Kagoshima Prefecture)



Before

After



## TOPICS

### Ota Power Station designated a Civil Engineering Heritage Site by the JSCE

In October 2005, the Ota Power Station, a hydroelectric power station located in Ijuin-cho, Hioki City, Kagoshima, was designated as the Japan Society of Civil Engineers choice as Civil Engineering Heritage Site for 2005. The JSCE Civil Engineering Heritage system was established in 2000 with the aim of contributing to the preservation of historical civil engineering structures by presenting awards to such heritage sites. FY2005 saw 20 such sites nationwide added to the list.

The Ota Power Station came on line in 1908 as the home power plant of the Shimazu estate; Kyushu Electric Power took over operation in 1951. It is a stone structure and features a hexagonal turret on the purlin of the gabled roof, making it unique anywhere in Japan. The gable wall displays the Shimazu family crest, which features a bridle motif.



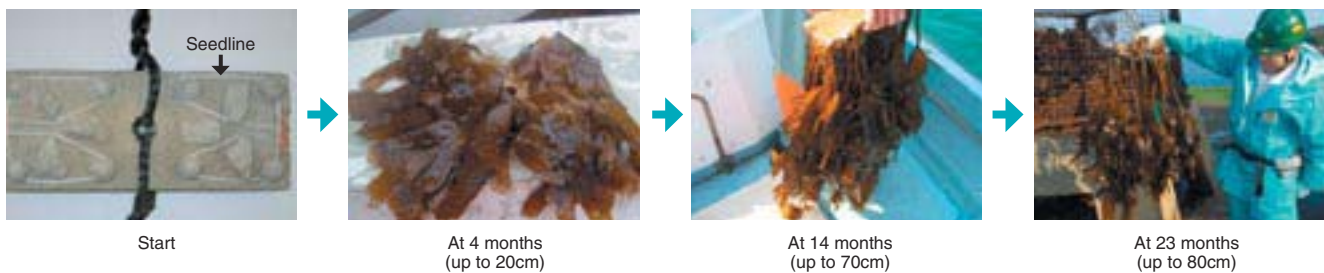
Ota Power Station

## 5 Environment-related Research and Development

### Research on Environmental Restoration of Seas

It is generally known that algae forms a community and functions to foster the growth of marine animals, sequester CO<sub>2</sub> and purify water. However, due to various reasons including global warming, a decrease of algae communities known as rocky-shore denudation has become a grave issue.

In order to restore the disappearing algae communities, we are conducting research on technologies for the rehabilitation of the natural environment to address this situation. Already, we have confirmed algae growing on the environments we created, and the supply of seeds and the budding of baby algae.



Furthermore, in line with our stance to encourage recycling in the community, we make effective use of coal ash by using cultivation plates generated from our thermal power stations.

### Research into Treatment Technology to Render Asbestos Harmless

At present, most asbestos recovered is disposed of in landfills. However, increasing paucity of final disposal sites means that new treatment methods are in needs.

In light of this, we are engaged in research with the aim of contributing to ongoing environmental protection for the future by looking into technology to render asbestos harmless and carrying out technical feasibility of the process.



Removal of spray-on asbestos



Double packaging for waste asbestos

### Research on Rare Plant and Native Plant Cultivation

There are 1.4 million species of known living organisms on this earth. When those species unknown to us are included, the estimated total extends to 3 million to 30 million species. Among them, approximately 40,000 species are said to become extinct every year, which makes the preservation of threatened wild species an urgent issue requiring worldwide attention.

We survey existing rare plants in the company-owned forests and research technology for their cultivation and propagation for the purpose of species preservation.

We also collect and cultivate around 30,000 acorns a year from native trees found in Kyushu, and offer the seedlings for tree planting in the Kyushu Homeland Forestation Project. We have also created an exhibition garden of the 27 species of acorn found in the local countryside. In these ways, we are committed to using these natural teaching aids for cultivation research and environmental education.



Growth survey of Cymbidium Kanran Makino



The acorn exhibition garden at the Bioresources Research Center, Research Laboratory



We aim to replenish stocks of rare plants through my research.

**Kunio Oyama** Agricultural Product Cultivation Group Manager, Bioresources Research Center, Research Laboratory

### VOICE ● Research into cultivation of rare and native plants

The protection of endangered plants is a challenge for all of mankind. The calanthe, Cymbidium Kanran Makino and other members of the orchid family that used to abound throughout the countryside are now scarce. Their flowers are a major attraction for botanists and so are deliberately picked and plundered, thus leading to their current predicament. We are engaged in research that aims to restore rare plants in order to bring back the true enjoyment that the countryside can offer. I hope the day will come soon when we can once again see calanthe decorating the mountain landscape.



## 1 Communication

We make a proactive effort to disclose environmental information to the public and we encourage two-way communication by asking for the opinions and requests of customers.

### Environment Action Report Number of issued

We at Kyushu Electric Power have issued an Environment Action Report since FY1996 as part of our environmental efforts. We also issue a Site Report, which aims to bolster dialog with our neighboring communities, and which debuted in FY2003.

	FY2005	FY2006*
Environment Action Report	8,000	8,000
Environment Action Report Digest	24,000	Incorporated into CSR report
English Version	400	400
Site Report	1,100 (Omarugawa Hydro Power Plant Construction Office)	1,100 (Hitoyoshi Power System Maintenance Office)

\*Number of copies planned to be issued

### Distribution of the Environment Action Report



### Exchanging Opinions with Local University Students

We are delighted to have welcomed three students from the Fukuoka University of Education Environment and Information Education program as interns. Through their training, we have elicited numerous valuable opinions and ideas about uniquely Kyushu environmental activities.

We were also fortunate to host the students of Kansai University Faculty Commerce tutor Michiyasu Nakajima, and to watch their presentation on their research into the efforts of local governments and companies to be environmentally considerate, a forum at which we exchanged opinions on Kyushu Electric Power's efforts.

### Lectures and Study Tours

In order to further understanding of environmental and energy issues, we are proactive in having our employees visit schools and local governments as lecturers upon request from those quarters, and also in conducting tours of our facilities.

In FY2005, we sent speakers to 24 lectures at elementary, junior, and high schools and universities, as well as those held by local governments, attended by a total of approximately 1,300 people. Furthermore, the Genkai and Sendai Nuclear Power Stations hosted tours attended by around 100,000 people.



Environmental & energy lectures

### TV Commercials

Kyushu Electric Power airs a TV commercial focusing on our environmental initiatives.

This commercial was produced focusing on the Kyushu Homeland Forestation Program, in which our staff members planted trees with local residents in various parts of Kyushu. The commercial conveys our desire to work together with people to realize people's hopes to pass on our local natural environment to the future.



A scene from our TV commercial



## Kyushu Electric Power received TOPICS first prize at the Green Reporting Awards

Kyushu Electric Power was honored with the excellence award at the 9th Green Reporting Awards held jointly by Toyo Keizai Inc., and the Green Reporting Forum for our FY2005 Environment Action Report. The award came in recognition of the clarity of our top commitment and our unique efforts to disclose information about environmental performance.

The Green Reporting Award was established in 1998 in the hope of popularizing environmental reporting and raising its standards; our prize was the first top award ever awarded to a company from the electricity or gas industries.



President Shingo Matsuo accepts the award



## Kyushu Energy Hall Welcomes TOPICS its Five millionth Visitor

July 2005 marked a special occasion for us as Kyushu Energy Hall, the Kyushu Electric Power exhibition facility in Yakuin, Chuo-ku, Fukuoka, welcomed its five millionth visitor.

Opened in 1982 to commemorate our 30th birthday, Kyushu Energy Hall is the venue of a range of environment and energy related exhibitions and events, and hosted around 280,000 visitors in FY2005.



Children have fun at the hands-on experience area

### Eco Mothers Activities

We aim to promote environment-related communication with mothers responsible for environmental education at home. We pay visits to local daycare centers, kindergartens and other places where children and parents gather, and read out the picture board shows to provide information on environmental issues and raise awareness about energy conservation efforts at home. We also operate the Eco Mothers project, in which we seek opinions and requests about our environmental activities.

Indeed, the Eco Mothers act as liaisons between the company and the community. As actual mothers, the Eco Mothers project allows the Eco Mothers to band together to come up with ideas and hold a range of unique activities that allow them to make use of their various skills and areas of expertise.

### Records of Eco Mothers' activities

	FY2003	FY2004	FY2005
Number of visits (times)	61	141	209
Number of participants (persons)	2,840	7,097	12,583
Questionnaires returned (%)	32.2	32.2	39.1

See page 55 for questionnaire results.



A hand made "apron theater"



Kids have fun taking part in the project



The kids' determined expressions are what makes it all worthwhile.

**Yuka Umemoto**

Kyushu Electric Power Eco Mother (Kumamoto staff)

### VOICE ● Eco Mothers Activities

I have been an Eco Mothers staff member here in Kumamoto since October 2005. I have a 7-year-old boy and a 4-year-old girl, so as you can imagine I am right in the thick of it as far as child-raising is concerned, and I have a lot of friends in similar situations. Using that network, I gain introductions to kindergartens and daycare centers through other caregivers, and hold picture board shows for the kids. The teachers react positively to the show's theme of environmental issues and usually accept my idea to put on the show gratefully, so my Eco Mothers activities are full-on.

At every kindergarten I go to, the kids watch me so intently as they listen, and I am deeply moved by their determined expressions every time. The environment is a complicated issue, but if I explain simply for the kids they can understand, and they give the desired reaction every time. Sometimes there are even kids who say "I want to meet Mr. CO2!"

Moving forward, I want to focus on holding events where caregivers can listen to the message together with their



### Local Eco Mothers

#### Kitakyushu staff



**Mika Kamimura (left)**  
**Mayumi Morita (center)**  
**Michiko Hirakawa (right)**

CO<sub>2</sub> is our keyword; don't miss out on the Kitakyushu Eco Mothers' enjoyable eco-education featuring picture board and panel theater shows, as well as quizzes.

#### Fukuoka staff



**Midori Machino (left)**     **Mitsue Nozaki (right)**  
**Kyoko Mitsumaru (center left)**  
**Kayoko Mori (center right)**

New staff members have made us bigger and better. We look forward to communicating with the kids and their mothers every time.

#### Saga staff



**Miyuki Saito (left)**     **Tamie Ezoe (right)**  
**Miyoko Baba (center left)**  
**Yasuko Yamaguchi (center right)**

Our eco-action stories make effective use of the "apron theater" medium, and are very popular. Our new paper puppet theater is the ideal way to teach kids below kindergarten age and caregivers about environmental protection together.

#### Nagasaki staff



**Yoko Nakao (left)**  
**Yoko Hashimoto (right)**

Children's minds are young and absorbent, and we aim to seep out message thoroughly into those minds using picture board theater.

#### Oita staff



**Kumi Kudo (left)**  
**Nozomi Ashikari (right)**

With our unique personalities, we make a great combination. We hope to expand our activities in future.

#### Kumamoto staff



**Yuka Umemoto (left)**  
**Eiko Iwami (center)**  
**Mayumi Takai (right)**

Our pop-up picture book, The Door from Anywhere to Everywhere, propels the kids into eco-action. Next we aim to learn the techniques and expertise to wow the grown ups as well as the children.

#### Miyazaki staff



**Yasuyo Kuroki (left)**     **Kazumi Moriya (right)**  
**Satoko Ishida (center left)**  
**Chikako Iwamoto (center right)**

Taking lessons from typhoon damage, we communicate a message of not wasting water, reducing the amount of garbage produced, and using electricity sparingly, in a way that kids find easy to understand.

#### Kagoshima staff



**Kazumi Kawakita (left)**  
**Yumiko Maeda (right)**

In our new eco-activities, the environmentally-themed picture board and paper puppet theater shows are followed by an exciting hands-on experience workshop and quiz using fruit-shaped batteries and other props.

## 2 Community Activities

We at Kyushu Electric Power conduct and support environmental activities in the community in a range of ways: the Kyushu Homeland Forestation Program, support for environmental education, public service, training for Green Helpers, and participation in local events are just a few of these.

### Planting One Million Trees under the Kyushu Homeland Forestation Program

To commemorate our 50th anniversary, we began the Kyushu Homeland Forestation Program to plant one million trees throughout Kyushu in 10 years (100,000 trees/year) starting FY2001 in cooperation with local people. In FY2005, approximately 105,000 trees were planted in 57 locations, bringing the five-year total to about 540,000 trees.

While the seedling trees are growing, the people who planted them are kept busy with maintenance activities such as thinning out undergrowth.



Creating a green promenade filled with birdsong in Hibikinada (Wakamatsu-ku, Kitakyushu City)



Kyushu Homeland Forestation Program (Kunisaki City, Oita)



Akira Miyawaki, professor emeritus at Yokohama National University, takes part in the Forestation for Water Source Cultivation project in Tano-cho (Miyazaki City, Miyazaki)



Kyushu Homeland Forestation Program in Takatoge (Tarumizu City, Kagoshima)

### Supporting Green Helper training

We have been supporting training of Green Helpers since FY1998 through an NPO, the Interchange Association for Promoting Forestation.

In FY2005, training sessions were held in Nagasaki and Kagoshima for 135 participants, increasing the total number of participants in Kyushu area by the end of FY2005 to 793. Trained Green Helpers take part in local forestation projects as volunteers and cooperate with the Kyushu Electric Power for Kyushu Homeland Forestation Program.

We also support the Forestation Program for 100 Years, a citizen's activity to restore forests in urban areas, led by the Interchange Association for Promoting Forestation.



Here's hoping these forests, guardians of our children's future, grow big and strong.

**Shiho Kai** General Affairs Group,  
General Affairs Department,  
Miyazaki Branch Office

### VOICE ● Working together with local communities Kyushu Homeland Forestation Program

In FY2004 and FY2005, I took a part of the tree-planting festival at the Forestation for Water Source Cultivation project in Tano-cho. Fortunately, the event was blessed with good weather in both years, and the arid, brown expanses of the mountainside near water sources was buried under a riot of navy and red sweat suits, worn by junior and high school pupils, and gray and beige work clothes. A total of 2,900 people banded together to lay a veritable carpet of saplings, which are now sprouting their green leaves. When the little hands that planted those trees become large, adult hands, the trees will have grown into a mighty forest protecting our invaluable water sources.

Bringing so many people together at once is a logistical challenge: transportation must be secured, lunch must be provided, and while none of that is a walk in the park, the encouraging words and radiant smiles of the participants makes my work fostering environmental awareness among people very rewarding.

We are committed to furthering the Kyushu Homeland Forestation Program hand-in-hand with the people of the community.



## TOPICS

### Kyushu Electric Power thanked for cooperation with Bogatsuru burn-off ceremony

At the ceremony marking the Kuju Bogatsuru (Taketa City, Oita) and Tadewara (Kokonoe-cho, Oita) wetlands' registration under the Ramsar Convention in November 2005, the Kyushu Electric Power Oita Branch Office was presented with a certificate of gratitude from Takeda City, Oita for its ongoing cooperation with the wetland protection activities.

The Oita Branch Office launched the Bogatsuru Burn-off Committee together with local groups in 1999, since then staff have operated the committee and helped out with the burn-off each year on a voluntary basis.

The registration of the wetlands under the Ramsar Convention means that the burn-off increases in importance, and it is our full intention to continue working with locals to do what we can to protect the wetlands.



The Bogatsuru burn-off



### Supporting Environmental Education Activities

Since FY2002, we have been offering environmental education support activities in the Onagohata Recreation Forest located near the dam of the Onagohata Power Station in Hita City, Oita Prefecture.

Classes are held in cooperation with local citizens' groups, and include nature watch, classes in forests that involve a range of activities like clearing underbrush in areas where trees have been planted and hydro power station tours to utilize our abundant natural environment.

In FY2005, we hosted eight groups totaling 371 participants, making a cumulative total of 27 groups comprising 973 participants as of the end of FY2005.



Naturewatch activity



Pamphlet and field guides for Onagohata Recreation Forest

### Environment Month Programs

June is designated Environment Month, and at Kyushu Electric Power, we consider June to be a time to recognize anew the necessity and importance of environmental preservation activities. We are proactive in this area, with activities including tree planting and community services such as cleanup drives.

#### ■ Tree planting

A total of 3,547 seedlings and trees were planted at 17 business sites. The Saga Power System Maintenance Office part of the Saga Branch Office, planted some 500 Hirado Azalea and other seedlings at Takatori-yama Park in Sefurimachi, Kanzaki City, together with people from the community.



Tree planting (Saga Power System Maintenance Office)

#### ■ Lectures

We held lectures on environment and energy related topics for customers at three business sites. Attendance reached 674. In Fukuoka, Prof. Masaru Kitano (Dr. of engineering; professor at College of Cross-cultural Communication and Business, Shukutoku University) was invited to speak on "Curiosity about the Earth—Thinking about environmental issues on a global scale" at a lecture that attracted around 450 people.

#### ■ Voluntary activities

Our 86 business sites organized the cleanup of roads, parks, and coasts around their premises, while 37 sites joined cleanups led by local governments.

The Hitoyoshi Power System Maintenance Office, part of the Kumamoto Branch Office, took part in a project to release young yamame trout together with children from nearby Miura Elementary School and the Kumagawa Fisheries Association.

Another four business sites held community agriculture events and opened up their greenhouses for public access.



Community farm (Genkai Nuclear Power Station)

#### Illegal garbage dumping patrols

Our 22 business sites concluded and implemented agreements with 77 local governments on measures against illegal dumping of waste, which require a person who witnesses illegal dumping of waste during patrol or other occasions to inform the respective local government.



Sticker on a company vehicle to promote elimination of illegal dumping



## TOPICS

### Car-sharing pilot program period passes

In October 2002, we started supporting a car-sharing project using electric and low-emission vehicles in Fukuoka City, which was organized in collaboration with Fukuoka City and environmental NGOs. At the end of September 2005, the initial three-year period elapsed, bringing the project to a close.

Thereupon, and in light of Fukuoka City's designation as an eco-friendly car-sharing zone in July 2005, Mazda Car Rental Corporation (HQ: Hiroshima City), which already has a car-sharing scheme, took over operation of the project in October 2005 from the NPO, which formerly operated it, in order to maintain the service for members.

Given the receipt of a commendation from the minister of the environment in November 2004 for our efforts to prevent global warming in recognition of operation of the project using electric cars, we are confident that we attained a measure of success as a pioneer in the car-sharing field by successfully educating people about its benefits. We would like to thank all who participated in or supported the project.



An electric car used in the car-sharing project

### 3 International Cooperation

We actively develop overseas projects and consulting business mainly including specialist dispatches and trainee acceptance through Japan International Cooperation Agency (JICA) and other organizations, information exchange with overseas electric suppliers and independent power producer (IPP) projects.

As part of our overseas IPP projects, we give consideration to environmental issues as evidenced by the construction of a high-efficiency thermal power station using natural gas as fuel to control CO<sub>2</sub> emissions.

Meanwhile, we strive to contribute to environmental protection by

conducting research and transfer of technologies that contribute to the reduction of CO<sub>2</sub> emissions.

#### Overseas IPP projects

Project name (country)	Power generation method (fuel)	Output (10,000 kW)	Start of commercial operation
Tuxpan Unit No. 2 IPP (Mexico)	Gas combined cycle method (natural gas)	49.5	Dec. 2001
Ilijan IPP (Philippines)		120.0	Jun. 2002
Phu My Unit No. 3 IPP (Vietnam)		71.7	Mar. 2004
Tuxpan Unit No. 5 IPP (Mexico)		49.5	Sep. 2006 (planned)

#### Achievement of consulting (FY2005)

Country	Content	Notes	
Indonesia	Development of small-scale distributed generation system with <i>Jatropha curcas</i> oil	<ul style="list-style-type: none"> <li>Contracted in July 2004; completed in February 2006</li> <li>NEDO's Joint Research and Development Support Program</li> </ul>	
Vietnam	Feasibility study for Nho Que hydroelectric power plant construction project	<ul style="list-style-type: none"> <li>Contracted in August 2005; completed in January 2006</li> <li>A JETRO Study for the Global Environment and Plant Revitalization Program</li> </ul>	
China	Installation verification of system for promoting energy conservation in buildings in China's metropolises	<ul style="list-style-type: none"> <li>Contracted in August 2005; completed in January 2006</li> <li>A JETRO J-Front Program</li> </ul>	
	Wind power generation set-up using CDM scheme in Inner Mongolia.	<ul style="list-style-type: none"> <li>Contracted in July 2005; completed in March 2006</li> <li>NEDO's Basic Survey for Promoting the JI/CDM</li> </ul>	
Taiwan	Investigation of avalanches and landslides for Da-cha-shi hydroelectric power plant Kou Tai Consultation for Taiwan Power's substation construction	• Contracted in July 2004; scheduled for completion at the end of June 2006	
		Tan Nan	• Construction began in January 2004; systems operated in June 2005
			• Construction began in June 2004; systems operated in October 2005
		Tai Ma	• Construction began in April 2005; scheduled for completion in May 2007
		Pu Ri	• Construction began in July 2005; scheduled for completion in October 2007

### 4 Employee Awareness Enhancement

We are proactive in providing environmental training for employees, as well as eco-themed lectures featuring speakers from within and outside the company.

#### Training and Lectures

A total of seven training sessions concerning environmental issues were held to provide necessary knowledge regarding environmental compliance, proper waste disposal, and EMS operation for 346 staff members including new employees, managers, and staff in charge of environmental tasks at business sites.

Moreover, a total of 275 employees from 38 business sites attended environment-related training and lectures organized by organizations outside the company.



Training of staff members in charge of environment-related tasks (forum with environmental managers)

Meanwhile, during Environment Month, in-house lectures were given by internal and external instructors at 12 business sites, attended by 691 employees. Head Office invited Yoshinori Yasuda, a doctor of science and professor at the International Research Center for Japanese Studies, to give a lecture on the impact of climate change on mankind and how to deal with it; the lecture was attended by 128 employees.

#### Fostering Specialists on Environment

We help our employees to obtain environment-related qualifications such as Qualified Person for Energy Management of Type 1 Designated Factory and Pollution Control Manager. To this end, various systems are established to assist with correspondence education fees, and to provide allowances to employees who obtain publicly-recognized licenses and qualifications.

#### Number of accredited employees (as of the end of FY2005)

Qualification	Accredited employees
Qualified Person for Energy Management of Type 1 Designated Factory (qualified under the old system)	990
Pollution Control Manager (incl. Senior Pollution Control Managers)	533
Engineering Manager for Waste Disposal Facilities	201
Specially Controlled Industrial Waste Manager	205
Internal Environmental Auditor	613

#### Support for Employees' Community Services

We have established an Award System for Local Community Contributors to encourage employee momentum to actively promote local community services, and to contribute to our communities.

#### Providing Information

Domestic and international news on environmental issues is provided through company broadcasting and in-house newsletters, and the company intranet is also being used effectively.

#### ■ Environmental Digest newsletter

Environmental information from inside and outside the company is provided monthly to our employees in this eco-themed newsletter.



#### ■ Environmental Affairs Department intranet

The company computer network is used to build an environmental database with the aim of improving employee awareness of environmental issues and to put environmental activities into action, as well as to provide support for managers.



# Environmental Management of Kyushu Electric Power Group

Promotion of Environmental Management \_\_\_\_\_ 42

Environmental Activities \_\_\_\_\_ 46

Fukuoka Clean Energy Corporation (Tobu Plant)



Below from left:  
Nagasaki Shika-machi Wind Farm  
Constructed by Kyudenko Co., Inc.

Paper made from recycled confidential documents  
Kyushu Environmental Management Corporation

Top Star, made from re-used fluorescent light tubes  
Japan Recycling Light Technology & System

# Promotion of Environmental Management

## 1 The Kyushu Electric Power Group Environmental Management Promotional Scheme

As of the end of FY2005, the Kyushu Electric Power Group environmental management scheme covered 46 member companies of the Group Management Association\*. Within the association is the Group Environmental Management Promotion Subcommittee, which aims to promote environmental management within the group.

\*The Group Management Association is comprised of all related companies of Kyushu Electric Power Co., Inc. except for those whose head offices are located outside Kyushu. The association examines and discusses various issues regarding the management of the group.



### IT and telecommunications business



- **Kyushu Telecommunication Network Co., Inc**
  - Provision of telecommunication lines (private, phone, and broadband lines, etc.)
- **Kyuden Infocom Company Inc.**
  - IT-related planning and consultation, and data center business
- **Nishimu Electronics Industries Co., Ltd.**
  - Manufacture, sale, installation and maintenance of telecommunication devices
- **Kyuden Business Solutions, Co., Inc.**
  - Development, operation and maintenance of information systems

### Environment and recycling businesses



- **Kyushu Environmental Management Corporation**
  - Recycling of confidential documents
- **Japan Recycling Light Technology & System**
  - Recycling of fluorescent tubes



### Consumer and community services business

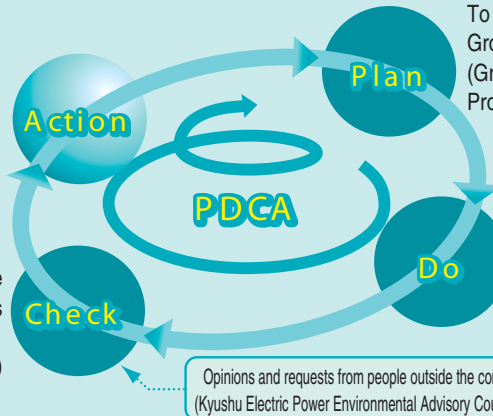


- **DENKI BLDG. CO., LTD.**
  - Real-estate management and rental business
- **Kyuden Good Life Kumamoto Company, Inc.**
  - Paid elderly nursing home management and nursing services
- **Kyuden Good Life Kagoshima Company, Inc.**
  - Paid elderly nursing home management and nursing services
- **Kyuden Good Life Company, Inc.**
  - Paid elderly nursing home management and nursing services
- **Shinrintoshi Co., Ltd.**
  - Real estate rental and land-related work
- **Kyuden Business Front, Inc**
  - Temporary personnel services and paid job placements
- **Kyushu Housing Guarantee Corporation**
  - Housing assessments and Building assessments
- **Kyuden Home Security Co., Inc.**
  - Home security and monitoring business
- **Kyuden Shared Business Corporation**
  - Accounting, human resources and labor-related work
- **Medical Support Kyushu Co., Ltd.**
  - Rental and lease of medical equipment, and managerial support for a diagnostic imaging clinic
- **Kyushu Captioning Co-Production Center Inc.**
  - Subtitle production for broadcasting
- **Reihoku Salt Co., Ltd.**
  - Production and sale of salt
- **Kyushu Highlands Development Co., Ltd.**
  - Management of hotels and golf courses
- **Ito Golf Co., Ltd.**
  - Golf course management

### PDCA Cycle

To incorporate items for improvement in the plan for the following fiscal year to upgrade the plan (Group Management Association)

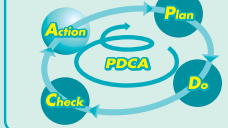
To analyze and evaluate actual environmental activities (Group Environmental Management Promotion Subcommittee)



To prepare the Kyushu Electric Power Group Environmental Activity Plan (Group Environmental Management Promotion Subcommittee)

To implement environmental activities

Each company implements PDCA



The Kyushu Electric Power Group (the "Group") engages in the total energy business as a mainstay, while developing a wide range of businesses including IT and telecommunications, environment and recycling, and consumer and community services, utilizing its technology and expertise.

## Total energy business



### Facility construction and maintenance

- **Kyushu Rinsan Co., Inc.**
  - Greening construction at power stations and other facilities
- **Nishinippon Plant Engineering and Consultation Co., Ltd.**
  - Construction and repair of power stations
- **Kyuden Sangyo Co., Inc.**
  - Environmental conservation-related work for power stations
- **West Japan Engineering Consultants, Inc.**
  - Survey and design of civil engineering and construction work
- **Kyudenko Co., Inc.**
  - Electrical work
- **Nishikyushu Kyodo Kowan Co., Ltd.**
  - Maintenance, management and operation of coal loading and handling facilities
- **Kyuken Co., Ltd.**
  - Construction and repair of transmission lines
- **Nishigi Kogyo Co., Inc.**
  - Conduit maintenance for hydroelectric power stations
- **Nishigi Engineering Co., Inc.**
  - Examination, design and construction management of electrical and mechanical facilities
- **Nishigi Surveying and Design Company, Inc.**
  - Examination, survey, design and drafting for civil engineering and construction work



### Wholesale electricity business and energy business

- **TOBATA CO-OPERATIVE THERMAL POWER COMPANY, INC.**
  - Electricity wholesale supply
- **Oita Co-operative Thermal Power Company Inc.**
  - Electricity wholesale supply
- **Oita Liquefied Natural Gas Co., Inc.**
  - Receipt, storage, gasification and delivery of LNG
- **Nishinippon Environmental Energy Co., Inc.**
  - Dispersed power source operation business and consultation on energy use



### Materials and equipment procurement

- **KYUKI CORPORATION**
  - Manufacture and sale of electrical machinery and equipment
- **NISHI NIPPON AIRLINES CO., LTD.**
  - Air cargo transportation
- **Kyushu Meter & Relay Engineering Corp.**
  - Repair and adjustment of electric instruments
- **Koyo Denki Kogyo Co., Ltd.**
  - Manufacture and sale of HV and LV insulators and other items
- **KYUHEN Co., Inc.**
  - Manufacture and sale of electrical machinery and equipment
- **Kyushu Koatsu Concrete Industries Co., Ltd.**
  - Manufacture and sale of concrete poles and other items
- **SEISHIN Corporation**
  - Sale of electrical machinery and equipment
- **Nishi Nihon Denki Tekkou Co., Ltd.**
  - Design, manufacture and sale of steel towers, structures and other items



- **KITAKYUSHU LIQUEFIED NATURAL GAS CO., INC.**
  - Receipt, storage, gasification and delivery of LNG
- **KYUSHU CRYOGENICS CO., LTD.**
  - Manufacture and sale of liquid oxygen, liquid nitrogen and liquid argon
- **Fukuoka Clean Energy Corporation**
  - General waste incineration and power generation business
- **Fukuoka Energy Service Company, Inc.**
  - Thermal supply business

● refers to an administrative company of the Group Environmental Management Promotion Subcommittee

## 2 Kyushu Electric Power Group Environmental Philosophy and Policies

The Kyushu Electric Power Group environmental philosophy sets forth the principles of the Group's commitment to environmental activities, while our environmental policies were established to prescribe our stance towards practical implementation of those activities.

Established in May 2002

### Kyushu Electric Power Group Environmental Philosophy

The Group recognizes the importance of environmental conservation in every aspect of energy supply and other businesses and works towards the realization of an affluent society and an improved global environment.



### Kyushu Electric Power Group Environmental Policies

1. We fulfill our social responsibility by complying with all environmental conservation laws and regulations.
2. For the creation of a recycling society, we work to reduce environmental load through the effective use of energy and resources as well as the recycling of waste.
3. We tackle all environmental issues aggressively and contribute to society through consistent environmental activities.
4. We disclose environment-related information and work for improved communication with society.

## 3 FY2006 Environmental Activity Plan

The FY2006 Kyushu Electric Power Group Environmental Activity Plan has been formulated to provide for the group's collective implementation of environmental management in accordance with the Kyushu Electric Power Group environmental philosophy and policies as well as the current social climate.

### FY2006 Kyushu Electric Power Group Environmental Activity Plan

#### I Group promotion of the environmental management

1. Establishment and reinforcement of Group's environmental management promotional scheme
2. Compliance with laws and regulations
3. Accurate understanding of environmental data and implementation of target management
4. Implementation of environmental education and sharing of environment-related information

#### II Measures for global environmental issues

1. Steady measures for reduction of GHG emissions
2. Steady measures for reduction of regulated freon emissions

#### III Measures for the creation of recycling society

1. Promotion of recycling
2. Promotion of green procurement

#### IV Coordination with society

1. Thorough disclosure of environment-related information



Environmental management needs decisiveness at the top.

**Norihiko Oka**, President  
Oita Liquefied Natural Gas Co., Inc.

### VOICE ● How Oita LNG is playing its part

Oita LNG was established in 1986 to receive, store, and supply liquefied natural gas—a clean energy.

We have long striven to minimize environmental load through our own activities, but determined that we needed to be more effective in our environmental protection. As a result, we built an ISO14001-based system in 2003.

Over the subsequent two years we have reached our energy conservation and waste recycling targets, improved employees' environmental awareness considerably, and effectively introduced the PDCA process to our business overall.

Moving forward, we are committed to protecting the environment and contributing to the advancement of society by maintaining a stable supply of natural gas and steadfast application of EMS.



## 4 Environmental Management System

The Group has introduced unified standards, the Kyushu Electric Power Group Standards for the Implementation of EMS, which divide the EMS development into six levels. Thereunder, all Group companies implement at least the first level of EMS, and each company conducts its environmental activities in accordance with its unique circumstances. In FY2005, the six companies marked with a ■ below worked successfully to raise their EMS levels.

### EMS implementation status

EMS level		Company name		Implemented	
6th level	ISO14001 certification acquisition	Nishinippon Environmental Energy Co., Inc.	Oct. 2000	West Japan Engineering Consultants, Inc.	Mar. 2005
		KYUKI CORPORATION	Mar. 2003	NISHI NIPPON AIRLINES CO., LTD.	Jun. 2005
		Kyushu Environmental Management Corporation	Sep. 2003	KYUHEN Co., Inc.	Oct. 2005
		KITAKYUSHU LIQUEFIED NATURAL GAS CO., INC.	Dec. 2004	—	—
5th level	ISO14001-based	Kyudenko Co., Inc. (Head Office)*1	Dec. 1999	Kyuken Co., Ltd. (Head Office)*1	Sep. 2005
		Kyuden Sangyo Co., Inc. (Environment Dept.)*1	Dec. 2002	Fukuoka Clean Energy Corporation (Tobu Plant)*1	Mar. 2006
		SEISHIN Corporation (Head Office)*1	Jan. 2004	—	—
4th level	ISO14001-based	Oita Liquefied Natural Gas Co., Inc. (whole company)	Dec. 2003	Fukuoka Energy Service Company, Inc. (whole company)*2	Scheduled for FY2006
3rd level	—	—	—	—	—
2nd level	—	KYUSHU CRYOGENICS CO., LTD. (whole company)	Mar. 2006	Koyo Denki Kogyo Co., Ltd. (whole company)	Mar. 2006
1st level	—	35 Group companies	Upon joining subcommittee	—	—

\*1: For companies in the 2nd through 5th levels of development, the development level of the business unit with the highest level within each company is used as the company's development level for listing (for the five companies marked with \*1). The 35 companies in the first level of development include these five companies.

\*2: Fukuoka Energy Service Company, Inc. was separated from Nishinippon Environmental Energy Co., Inc. in FY2005.

### Companies that raised EMS levels (i.e., that acquired ISO14001 certification)

#### NISHI NIPPON AIRLINES CO., LTD.

NISHI NIPPON AIRLINES provides helicopter coverage for the whole Kyushu area. Like any flyer, its primary mission is safety. To maintain safety and still contribute to environmental protection, NISHI NIPPON AIRLINES obtained ISO14001 in June 2005 to complement the ISO9001 certification it already has. The certification covers its whole organization and all business sites, including everything right down to temporary heliports.

NISHI NIPPON AIRLINES' environmental philosophy, policies and objectives have been brought into line with those of the Kyushu Electric Power Group, and the company places emphasis on meeting its environmental targets, which, given the nature of its operations, include aircraft noise and fuel management.



A Bell 412 helicopter

#### KYUHEN Co., Inc.

KYUHEN was established in October 1959 as a manufacturer and retailer of transformers and other electrical devices. The company was ISO14001 certified in October 2005. Its management systems were unified in order to integrate ISO9001 and 14001, and the company further illustrated its eco-considerate stance by computerizing all documents.

As a manufacturer, KYUHEN not simply concerned with quality. Through its comprehensive business activities—including the environmental aspects of creating products—the company also follows an aggressive environmental management policy with the aim of achieving quality-centric management, which is one of main KYUHEN's corporate philosophies, while simultaneously contributing to a sustainable society. Through such efforts, KYUHEN aims to become a company that is trusted by its customers.



The transformer production line

#### Kyuken Co., Ltd.

Kyuken was established in 1953 as a builder of transmission facilities. The company set up an environmental committee in 2001 to tackle environment issues. Starting with the 4Rs\* of waste and reducing the amounts of substances that place a burden on the environment in its offices, Kyuken began its EMS efforts in 2003 with the aim of securing ISO14001 certification. These efforts included a whole host of construction work-related activities and resulted in Kyuken obtaining its coveted accreditation in September 2005.

Under its environmental policy, Kyuken practices environmentally considerate construction, such as minimizing construction noise and vibrations, and disposing of construction by-products appropriately.



Wind noise reduction work on 220 kV transmission lines

#### Fukuoka Clean Energy Corporation

Fukuoka Clean Energy was set up by Fukuoka City and Kyushu Electric Power in October 2000 to construct and operate its Tobu Plant, a waste treatment facility. The Tobu Plant began operations in August 2005; staunch protection of the environment is very much a part of the plant's operation, with effective use of resources and energy a priority, and it is through this that Fukuoka Clean Energy contributes to the formation of a recycling society.

Building of EMS began during construction of the plant itself in order to ensure effective protection of the environment, and the Tobu Plant acquired ISO14001 certification in March 2006.



The Tobu Plant

\* A combination of the 3Rs (reduce, reuse, recycle) and "refuse", i.e., refuse to buy or accept unnecessary items.

# Environmental Activities

The table on the right shows the number of group companies that have taken part in environmental activities in each fiscal year.

Data from some companies was unavailable and has therefore not been included in the figures.

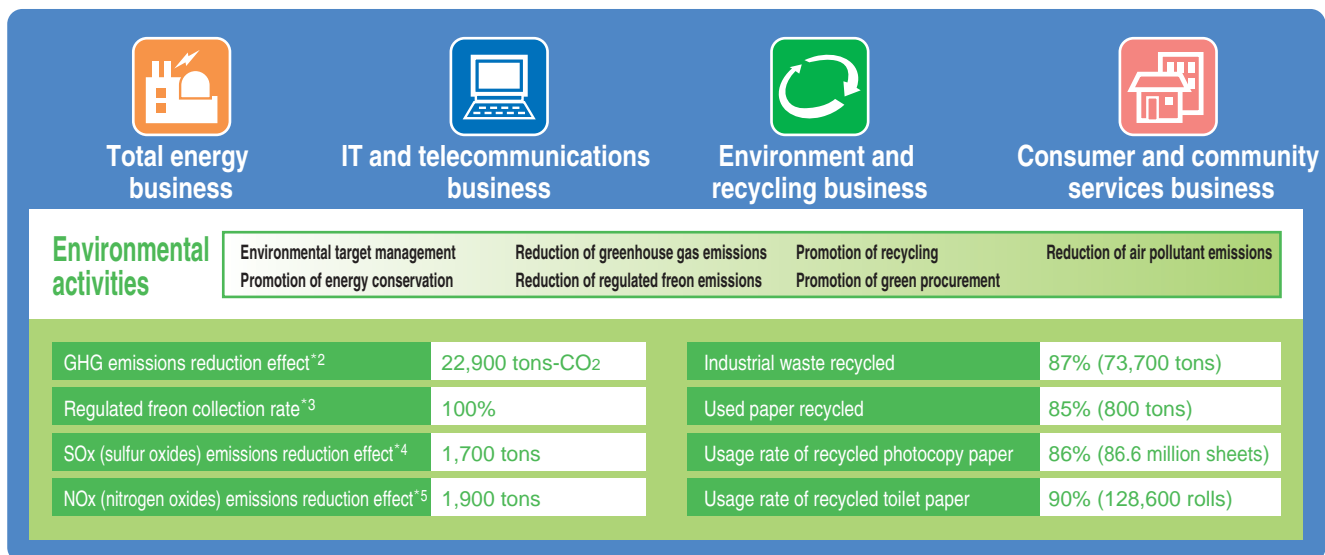
FY2003	26 member companies of the Group Environmental Management Promotion Subcommittee (Part of data for electricity and CO <sub>2</sub> was provided by 40 companies.)
FY2004	40 member companies of the Group Environmental Management Promotion Subcommittee
FY2005	44 member companies of the Group Environmental Management Promotion Subcommittee (Fukuoka Energy Service has been separated from Nishinippon Environmental Energy but here the companies are recorded as one)

## 1 Diagram of Environmental Load Flow (FY2005)

### Amount of resource input

Electric power	216.7 million kWh*1	Thermal (e.g., steam)	36.4 million MJ
Fuel (light oil, gas, A-heavy oil, etc.)	11,300 IR	Paper (photocopy paper)	101.0 million sheets
(LNG, LPG, etc.)	2,500 tons	(toilet paper)	143,000 rolls
Water	1,020,600 tons	Chemical substances designated under PRTR Law(quantity handled)	34.0 tons

### Business activities



### Amount of environmental load

GHG emissions	150,000 tons-CO <sub>2</sub>	NOx (nitrogen oxides) emissions	2,200 tons
Regulated freon emissions	4.9 tons	Industrial waste disposed	11,200 tons
SOx (sulfur oxides) emissions	1,900 tons	Used paper disposed	100 tons

\*1: Power purchased excludes power consumed at power stations.

\*2: Calculated assuming a baseline without the use of new or unused energy sources; figures only listed where reduction of emissions was confirmed

\*3: Percentage of equipment from which mandatory level was collected at the time of inspection (mandatory level of pressure required to dispose equipment)

\*4: Calculated assuming a baseline without desulphurization procedures or the use of low sulfur fuel in facilities emitting smoke (boilers, etc.); figures only listed where reduction of emissions was confirmed.

\*5: Calculated assuming the baseline to be the case without denitration procedures in facilities emitting smoke (boilers, etc.); figures only listed where reduction of emissions was confirmed.



## 2 Environmental Targets and Records

We have established goals for our environmental activities and, through these, aim to reduce environmental load. Indeed, the targets are beginning to produce steady results. In light of social circumstances such as the Kyoto Protocol coming into effect, the Kyushu Electric Power Group is reviewing its environmental targets for FY2006 and beyond.

### Environmental load — records and targets

Item		Unit	Record			Environmental targets		
			FY2003	FY2004	FY2005	FY2005	FY2006 onwards	
Measures for global environmental issues	Power consumption at offices	Quantity consumed	Million kWh	31.5	32.4	32.7	1% reduction compared with the previous year	—
		Quantity consumed per unit area	kWh/m <sup>2</sup>	—	—	139.7	—	137 or less (FY2010)
	In-house distribution (excludes special vehicles)	Rate of low-pollution vehicle use <sup>*1</sup>	%	—	—	28	—	50 or more (FY2010)
		Fuel consumption rate	kmR	—	—	10.2	—	11 or more (FY2010)
	SF <sub>6</sub> (sulfur hexafluoride) collection rate	Upon inspection	%	98	N/A <sup>*2</sup>	100	98 or more	98 or more
		Upon removal	%	N/A <sup>*2</sup>	N/A <sup>*2</sup>	N/A <sup>*2</sup>	99 or more	99 or more
	Regulated freon collection rate upon inspection of equipment		%	100	100	100	100	100
	Paper used <sup>*3</sup>		Million sheets	91.2	96.3	101.0	—	Reduction of office paper use
Clean water used		1,000 tons	186.6	180.1	179.9	—	Reduction of clean water use	
Establishing a recycling society	Recycling rate	Industrial waste	%	77	85	87	—	Approx. 85
		Used paper	%	56	74	85	100	100
	Green procurement (use of recycled paper)	Photocopy paper	%	72	84	86	100	100
		Toilet paper	%	93	93	90	100	100

\*1: This is the percentage of clean-energy vehicles and fuel-efficient vehicles in the company fleet for all the group companies.

\*2: Facilities owned but equipment yet to be inspected or removed.

\*3: Figures for paper use in FY2005 are expressed in terms of A4 sized paper, while those for FY2003 and FY2004 are simply the number of sheets of paper.

## 3 Compliance with Environmental Laws

The Kyushu Electric Power Group received no improvement advisories or orders, nor was subject to any fines in FY2005 for breaches of environmental laws on the part of any group company. We will continue to comply with environmental laws and Environmental Protection Agreements executed with local governments, and shall maintain our compliance-oriented management stance in accordance with proper corporate ethics.

## 4 Greenhouse Gas Emission

We take every measure to collect the required level of GHGs such as SF<sub>6</sub> and HFC from equipment at the time of inspection. We also strive to reduce GHG emissions by curbing the consumption of energy and resources.

Unit: 1,000 tons-CO<sub>2</sub>

	FY2003	FY2004	FY2005
CO <sub>2</sub> (Carbon dioxide)	74.0	104.5	117.4
CH <sub>4</sub> (Methane)	0.4	0.3	0.3*
N <sub>2</sub> O (Nitrous oxide)	—	—	0.01*
HFC (Hydrofluorocarbon)	73.3	40.4	32.3
PFC (Perfluorocarbon)	—	—	—
SF <sub>6</sub> (Sulfur hexafluoride)	0.2	0.02	0.01
Total	147.9	145.2	150.0

\* Includes CH<sub>4</sub> and N<sub>2</sub>O emitted upon fuel combustion.

## 5 Environmental Accounting

Environmental activity costs calculated at each Group company are summed on a Group basis in accordance with the Environmental Accounting Standards for the Kyushu Electric Power Group.

### Environmental activity costs

(Unit: million yen)

Classification of environmental activities	Main activities	FY2004		FY2005		Items	FY2005 environmental activity benefits
		Investment	Expense	Investment	Expense		
Global environmental conservation	Global warming prevention and ozone layer protection, etc.	33.6	59.2	6,877.0	281.9	GHG emission reduction	22,900 tons-CO <sub>2</sub>
						Regulated freon emissions	4.9 tons
Local environmental conservation	Air and water pollutant, noise and vibration prevention, etc.	22.1	661.1	0.0	623.7	SOx (sulfur oxides) emission reduction	1,700 tons
						NOx (nitrogen oxides) emission reduction	1,900 tons
Resource recycling	Appropriate treatment of industrial and general waste, etc.	5.6	552.1	1.5	790.7	Proper administration according to laws and bylaws	
						Industrial waste recycled	73,700 tons
						Industrial waste appropriately disposed of	11,200 tons
						Used paper recycled	800 tons
Green procurement	Additional costs incurred by green procurement, etc.	0.0	1.0	0.0	1.8	Used paper disposed of	100 tons
						Recycled photocopy paper use	86.6 million sheets
Environmental activity management	Environmental education, operation and maintenance of EMS, environmental load measurement and monitoring, etc.	1.0	150.0	0.0	162.1	Recycled toilet paper use	128,600 rolls
						Joint seminars on environmental management	Attendance: 42 people from 40 companies
Environment-related research	Effective use of waste products	0.0	18.0	0.0	30.5	Tours to model companies implementing advanced environmental activities	Attendance: 34 people from 34 companies
						Environmental lectures	Attendance: approx. 80 people in total from 2 companies
						ISO14001-accredited companies	12 companies
						Companies with ISO14001-based systems	1 company
						No. of companies conducting research	4 companies
						Number of items in environmental databases	858
Social activities	Greening of sites, support for local environmental activities, etc.	6.9	69.0	0.0	64.2	Tree planting under the Kyushu Homeland Forestation Project	Attendance: 616 people from 25 companies
						Environment Month lectures	Attendance: 71 people from 33 companies
						Local cleanup drives	29 companies
						Overseas tree-planting activities	Approx. 1,000 trees since 1995 (1 company)
Penalty for environmental damage	Pollution load levies under the pollution-related health damage compensation system	0.0	145.0	0.0	152.9	—	—
Total	—	69.2	1,655.4	6,878.5	2,107.8	—	—

## 6 Environmental Education and Sharing of Environmental Information

With the aim of further promotion of environmental management, the Kyushu Electric Power Group offers integrated group-wide environmental education. We also share information around the group by posting the Kyushu Electric Power Group Environmental Information bulletin on the Kyushu Electric Power Group Network.

### Environmental education programs offered

Joint seminars on environmental management	Dec.	The latest CSR trends and environmental management (Toshio Ariu, senior researcher at the Central Research Institute of the Electric Power Industry) Fukuoka Clean Energy tour
Tours to model companies implementing advanced environmental activities	Aug.	Sapporo Breweries, Ltd. (Shinkyushu Brewery)
Environmental lectures	Sep.	Nishinippon Plant Engineering and Construction Co., Ltd. (lecturer from Kyushu Electric Power)
	Feb.	Kyushu Telecommunication Network Co., Inc. (lecturer from Kyushu Electric Power)
Environment Month lectures	Jun.	Impact of Climate Change on Mankind and How to Deal With It (Prof. Yasuda, International Research Center for Japanese Studies)



Environmental activities start with employee awareness

**Hirota Kidou**

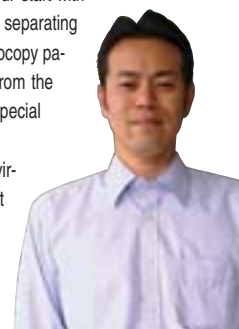
Accounting & Planning Section,  
General Affairs Department,  
Kyushu Rinsan Co., Inc.

### VOICE ● Kyushu Rinsan's efforts

At Kyushu Rinsan, our main line of business focuses on greening work and the maintenance and management of Kyushu Electric Power's company forests. We are inspired to perform our daily tasks by our corporate philosophy of protecting nature and creating a lushly verdant environment.

We introduced EMS in FY2003. It involves a range of efforts in all areas of our corporate activities from big to small—turning off unnecessary lights, reducing waste and using both sides of photocopy paper in order to reduce the amount of paper used to name just a few of our start-with-what's-nearest endeavors. In fact, in the process of separating rubbish or collecting data about electricity and photocopy paper usage, one notices the change in view—i.e., from the view of our environmental activities as something special to the view that they are completely normal.

The most important aspect here is to instill this environmental awareness among all employees, so that all can go about their environmental activities in the knowledge that even the smallest action will eventually have a major effect.



## 7 Measures for Global Environmental Issues

With group-wide environmental targets to aim for, we are united in our commitment to implementing these measures and addressing environmental issues.

- Reducing GHG emissions through office energy conservation and eco-drives.
- Thorough recovering SF<sub>6</sub> (sulfur hexafluoride).
- Thorough recovering regulated freons
- Developing and offering eco-considerate products and services.

### Energy

We work hard to minimize our use of energy by conserving energy and resources.

		FY2003		FY2004		FY2005			
		Unit	Companies	Qty. consumed	Companies	Qty. consumed	Companies	Qty. consumed	
Electricity	Offices	million kWh	31	31.5	32	32.4	35	32.7	
	Plants, etc.	million kWh	21	140.4	25	172.3	27	184.0	
* Fuel	Vehicles, etc.	Gasoline, etc.	1,000 kℓ	22	2.6	34	9.1	35	8.6
		Natural gas	1,000 m <sup>3</sup>	—	—	—	—	1	0.4
	Heating, cooling	Industrial	1,000 kℓ	12	0.4	13	0.4	12	0.3
		A-heavy oil, etc.	1,000 kℓ	3	2.3	5	2.5	10	2.4
	LNG, LPG	Industrial	1,000 tons	4	2.8	6	2.4	6	2.5
		Thermal	Steam, etc.	million MJ	—	—	—	—	3
Water	Offices	1,000 tons	15	186.6	18	180.1	17	179.9	
	Plants, etc.	1,000 tons	14	644.2	19	725.4	22	840.7	

\* Fuel data are total of raw usage figures grouped by fuels with the same unit of calculation.

### Ozone depletion substances

We employ a steadfast recovery program for freons and other substances that cause ozone layer depletion, and work hard to minimize emissions.

Unit: tons

		FY2003		FY2004		FY2005	
		Companies	Record	Companies	Record	Companies	Record
Specified freons (CFCs)	Qty. contained	2	8.1	3	15.7	4	16.0
	Qty. released		0.05		0.5		0.3
Alternative freons (HCFCs)	Qty. contained	22	46.0	25	51.2	26	56.0
	Qty. released		4.1		3.3		4.6
Halon	Qty. contained	6	5.2	7	12.3	7	12.2
	Qty. released		0		0		0

### Developing natural energies —Wind and photovoltaic power

At the Kyushu Electric Power Group, we are proud to provide a comprehensive service for wind and photovoltaic power generation facilities, including design (which includes wind state measurement), construction and maintenance.

So far, we have installed approximately 90,000 kilowatts' worth of wind and photovoltaics power generation facilities in 63 places such as elementary and junior high schools, local governments, and businesses. When compared to one years' worth of power generation from oil-

fired thermal power stations, a year of generation from these facilities is calculated (according to Kyushu Electric Power calculations)\* to save approximately 110,000 tons of CO<sub>2</sub> emissions over a one-year period.

The whole Kyushu Electric Power Group is looking forward to working as one to continue

- Companies engaged in wind and photovoltaic power generation
- Nishinippon Plant Engineering and Construction, Co., Ltd.
  - West Japan Engineering Consultants, Inc.
  - Kyudenko Co., Inc.
  - Nishinippon Environmental Energy Co., Inc.
  - Nishimu Electronics Industries Co., Ltd.
  - KYUKI CORPORATION

\* Calculated assuming wind power generation usage of 20% and photovoltaic power generation usage of 12%.

our development of natural energies.



Tsubakigahana Wind Power Station in Matsue-mura, Oita Prefecture (constructed by West Japan Engineering Consultants)

### The Miyazaki Biomass Recycling Power Station —Burning chicken droppings to generate power

Nishinippon Environmental Energy Co., Inc., provides comprehensive energy consulting and biomass electricity generation, making "energy and the environment" one of its major business themes.

In May 2003, the company set up Miyazaki Biomass Recycling, Co., Inc. in partnership with a local chicken farmer and broiler company with an eye to appropriate treatment of the chicken

droppings emanating from the farm. In May 2005, the company began biomass power generation operations at the power station by burning chicken droppings.

Apart from biomass power generation, the company hopes to apply its wealth of technical prowess into power generation from waste, as well as to the ESCO industry, so as to expand its business addressing environmental issues.



The Miyazaki Biomass Recycling Power Station

## 8 Measures for the Creation of a Recycling Society

By setting environmental targets for the whole of the Kyushu Electric Power Group we are contributing to the realization of a recycling society through implementation of the measures listed on the right.

- Promotion of recycling of industrial waste and used paper
- Promotion of green procurement
- Develop and offer environmentally considerate products and services

### Waste (recycling, etc.)

The Kyushu Electric Power Group strives to reduce waste and maintain and improve recycling rates.

			FY2003		FY2004		FY2005	
			Unit	Record	Companies	Record	Companies	Record
Industrial waste	Qty. generated	1,000 tons	23	38.2	27	55.9	30	84.9
	Recycling rate	%		77		85		87
Used paper	Qty. generated	1,000 tons	25	0.8	40	0.8	44	1.0
	Recycling rate	%		56		74		85

Note: Figures may not add up to the totals due to rounding.

### Paper products (green procurement, etc.)

The Group companies strive to reduce the consumption of paper products and improve green procurement rates (Usage rate of recycled paper).

			FY2003		FY2004		FY2005	
			Unit	Record	Companies	Record	Companies	Record
Photocopy paper	Qty. consumed*	million sheets	26	91.2	40	96.3	44	101.0
	Usage rate of recycled paper	%		72		84		86
Toilet paper	Qty. consumed	1,000 rolls	18	137.9	27	147.5	30	143.0
	Usage rate of recycled paper	%		93		93		90

Note: Figures may not add up to the totals due to rounding.

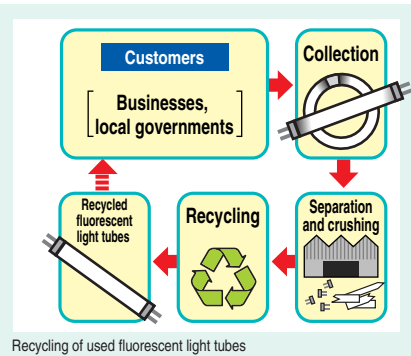
\* Figures for paper use in FY2005 are expressed in terms of A4 sized paper, while those for FY2003 and FY2004 are simply the number of sheets of paper.

### Japan Recycling Light Technology & System

#### – “New lamps from old”: Challenge of Recycling Material for Fluorescent Tubes –

Japan Recycling Light Technology & System recycles used fluorescent tubes collected from companies, schools, local governments and households. After the used fluorescent tubes are reduced to original materials such as glass, metal, phosphor and mercury, recycled fluorescent tubes are made using such original materials for sale (by outsourcing). In November 2002, the company became the first in

Japan to sell recycled fluorescent tubes manufactured using recycled phosphor, and the Yoka-Lamp, which is manufactured with recycled glass as well as recycled phosphor, made its debut in June 2004. Then, June 2005 saw the release of the Top Star, which is also made from recycled fluorescent tubes and satisfies the requirements of the Law on Promoting Green Purchasing.



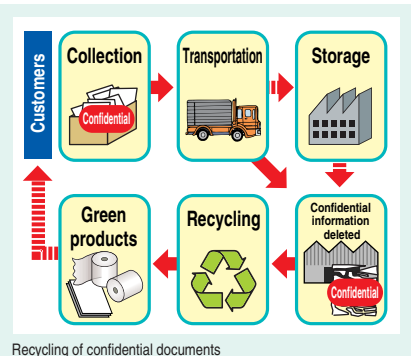
Recycling of used fluorescent light tubes

### Kyushu Environmental Management Corporation

#### – Contributing to the Realization of a Recycling Society by Recycling Confidential Documents –

Kyushu Environmental Management Corporation is engaged in paper recycling that involves the elimination of secret information from confidential documents that used to be shredded and burned. The company also sells recycled photocopy paper and toilet tissue under a private brand, as well as stores the documents. In particular, the company uses special boxes for the secure collection of documents from its

customers, and it uses special trucks which are equipped with devices to prevent theft or scattering of confidential documents during transportation. Its treatment facility meets the security criteria of Japan Quality Assurance Organization (JQA) and was the first facility in Kyushu to receive a certification for conformity to safety measures as a recycling and treatment center.



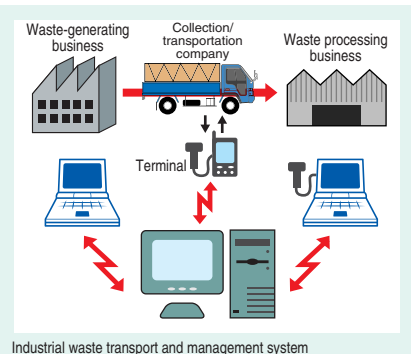
Recycling of confidential documents

### Nishinippon Plant Engineering and Construction, Co., Ltd.

#### – Reducing waste generated from dismantling of industrial facilities –

Nishinippon Plant Engineering and Construction dismantles industrial facilities, and its aim is to eradicate industrial waste generated in that dismantling process. For instance, the company successfully recycles all industrial waste with the exception of products containing asbestos, etc. when dismantling incinerators.

In partnership with Eco Tech1, an environmental NPO, Nishinippon Plant Engineering and Construction aims to improve reliability by using IC tags and GPS technology to trace industrial waste during the process from generation to processing.



Industrial waste transport and management system

## 9 In Harmony with the Local Environment

Each company of the Kyushu Electric Power Group uses and stores legally controlled substances in accordance with relevant laws.

### Specified chemical substances under the PRTR law

The Group companies are committed to the proper use and management of chemical substances covered by the PRTR Law in accordance with all related laws and regulations.

Unit: tons

	FY2003		FY2004		FY2005	
	Companies	Record	Companies	Record	Companies	Record
Qty. handled		26.1		30.6		34.0
Qty. released into the atmosphere	4	19.8	4	21.8	5	26.0
Qty. transferred		73.2		84.4		75.4

Note: Calculated using data about specified chemical substances required to be submitted under the PRTR Law

### Air pollutants

All group companies strive to control air pollutants SOx and NOx in line with relevant laws and regulations.

Unit: 1,000 tons

	FY2003		FY2004		FY2005	
	Companies	Record	Companies	Record	Companies	Record
SOx (Sulfur oxides)	3	0.7	3	1.3	4	1.9
NOx (Nitrogen oxides)		1.8		1.8		2.2

Note: Data listed herein is from those companies that are legally obliged to measure smoke volume and that have ascertained SOx and NOx emissions.

### Waste containing PCBs, etc.

Waste containing PCBs and other chemical substances are properly stored and controlled according to the related laws and regulations.

That with a high concentration of PCBs is slated to be treated and rendered harmless by the mandatory deadline of FY2016 as set forth in the Law Concerning Special Measures against PCB Waste. Some companies in the Kyushu Electric Power Group began such treatment processes in FY2004. Furthermore, we inspect equipment for trace amounts of PCBs whenever we handle insulation oil of the equipment, and, if they are detected, the equipment is stored and administered with the utmost care.

### Waste containing PCBs generated in FY2005

Unit: units

	High-concentrate PCBs				Trace amounts of PCB	
	Companies	Qty. contained	Companies	Qty. processed	Companies	Qty. contained
Transformers	3	35	2	10	4	15
Capacitors	13	62	1	4	1	2
Stabilizers	6	581				
Others	2	19	1	54*	1	2

\* 54 liters of insulation oil stored in containers were processed.

### Nishimu Electronics Industries Co., Ltd. — Aiming to make all products lead-free —

Electronic components connections on printed circuit boards have long contained soldering material that includes lead. These days, it is known that acid rain causes the lead in electronic devices disposed of in landfills to dissolve and leak into rivers and underground water tables, and therefore people are demanding lead-free soldering. Nishimu Electronics Industries produces around 40,000 printed circuit boards a year,

and is working to establish lead-free manufacturing technology to introduce when its circuit board manufacturing facilities are replaced.

Not only is Nishimu Electronics Industries replacing its electronic parts and other materials with those that are free of lead and other harmful substances, it also produces environmentally considerate products, such as those with energy-efficient designs.



Lead-free solder paste screen printer

### Kyuden Sangyo Co., Inc. Environmental Affairs Dept. — Creating a clean environment —

Kyuden Sangyo is engaged in a very wide-ranging business; electricity-related businesses such as operation of environment protection facilities for thermal and nuclear power stations, fuel administration, environmental measurements, effective use of coal ash, sales of gypsum and industrial chemicals, as well as insurance sales and freight, to make just a few.

The company's Environmental Affairs Department has made a clear statement about its quality and environmental efforts by acquiring ISO9001 and ISO14001. Certified measurers, work environment measurement experts, pollution prevention managers and nondestructive inspection

technicians are just some of the approximately ninety-strong team of technical staff that, together with Kyuden Sangyo's large-scale analytical equipment, makes the company a leader in environmental analysis and testing.

#### Main services include:

- Air environment surveys, exhaust gas measurements and analysis
- Water-quality, soil and odor surveys and analysis
- PCB, asbestos surveys and analysis
- Noise, vibration surveys
- Metal material testing, nondestructive inspection and assessments



Kyuden Sangyo staff busy themselves with analytical tasks

## 10 Environmental Activities in Cooperation with Local Communities

### Kyushu Rinsan Co., Inc. — Forest education —

Kyushu Rinsan maintains and administers Kyushu Electric Power's approximately 4,400 ha of forest land.

The company is a proud contributor to the Mirai Kids' Club\* organized by Kyushu Electric Power Oita Branch Office, providing a range of educational activities that make active use of Kyushu Electric Power's forests.

In the Forest Work Experience program of 2005, around 100 participants learned from Kyushu Rinsan about the role that forests play

and tried their hand at forest thinning and log-cutting.

These hands-on learning opportunities are just one part of Kyushu Rinsan's environmental education activities, which the company considers to be a major corporate social responsibility. Kyushu Rinsan is dedicated to proactively providing such opportunities in future.

\* Mirai Kids' Club is open to elementary school pupils throughout Oita Prefecture, and provides energy- and environment-themed events in long vacations in spring, summer, and winter that let the children roll up their sleeves and get stuck in. The club is part of the Kyushu Electric Power Oita Branch Office activities aimed at future generations.



Environmental education activities at the Mirai Kids' Club

### Oita Liquefied Natural Gas Co., Inc. — Local clean-up drives —

Twice a year Oita LNG, together with Kyushu Electric Power's Shin Oita Power Station, holds a cleanup drive on the revetment roads adjacent to their properties.

The event began in FY1997, and features the president and all other staff spending a couple of hours weeding the roads and

picking up the innumerable cans that litter the roadsides.

The company is also an active participant in the cleanup drives held by the city and neighboring areas, and is determined to maintain its environmental protection stance long into the future.



An Oita LNG cleanup drive

### Participation in Kyushu Homeland Forestation Program — Planting trees for the environment —

The Kyushu Homeland Forestation Program was started in FY2001 to commemorate the 50th anniversary of Kyushu Electric Power under a concept that one million trees should be planted in ten years. Personnel from each group company participate in the program as a voluntary activity.

In FY2005, a total of 616 employees from 25 group companies participated in the program and planted around 105,000 trees in 57 locations around Kyushu with local residents in the communities.



Creating a 100,000-tree Homeland Forest in Koga City

## 11 Active Disclosure of Environmental Information

Records of the Kyushu Electric Power Group's various environmental activities are disclosed in this report and on the Kyushu Electric Power website. The Kyushu Electric Power Group is committed to a comprehensive, team effort in promoting environmental management and disclosing information.



# Opinions on Environmental Activities

Principal Opinions of the Kyushu Electric Power Environmental Advisory Council \_\_\_\_\_ 54

Other Opinions \_\_\_\_\_ 55

Items Reflecting Opinions, Evaluations and Commendations from Outside the Company \_\_\_\_ 57

## Eco Mothers Activities



Below from left:  
Environmental Advisory Council  
A gathering of Eco Mothers  
Questionnaire postcards for readers

# Principal Opinions of the Kyushu Electric Power Environmental Advisory Council

The 6th Kyushu Electric Power Environmental Advisory Council meeting was held on Tuesday May 16, 2005. The council members discussed and presented various views on the environmental activities of Kyushu Electric Power and its group companies and the “2006 Kyushu Electric Power Environment Action Report”.

The following are some of the principal opinions of the Council.

## 1 Environmental Activities

### Global warming issues

- The first commitment period of the Kyoto Protocol is about to begin. Electric power companies have an obligation to provide a stable supply of power so minimizing the absolute amount of CO<sub>2</sub> emissions is not easy, but the council urges Kyushu Electric Power to continue its efforts to reduce its CO<sub>2</sub> emission intensity.
- In addition to frequency stability, CO<sub>2</sub> emission intensity is an important factor in the quality of electricity. Therefore, electricity companies and consumers alike must endeavor to revise their attitudes towards quality of electricity.

### Promotion of nuclear power generation

- The environmental superiority of nuclear power stations is clear, and the intensive promotion of nuclear power is necessary in reducing CO<sub>2</sub> emissions. To that end, efforts should be made to provide detailed information in response to each view and opinion.
- This year is the 20th year since the Chernobyl disaster; Kyushu Electric Power should promote its nuclear power station operation safety measures and track record more aggressively.

### Environmental communication

- One method of effectively communicating about environmental issues with the general public would be to plant commemorative trees at Kyushu Electric Power facilities such as on dam-top promenades and on the premises of thermal power stations.

### Environmental education

- The council would like Kyushu Electric Power to continue to send its employees into the community to give lectures about energy and the environment, and feels that the employees who give the lectures also benefit from the experience.
- The council urges Kyushu Electric Power to further boost its environmental education support program by making more use of company facilities such as the Yamashita Ike Dam and Onagohata Recreation Forest to contribute to further improvements in environmental education.

### Increasing employee awareness

- The response rate in the survey of employees' environmental awareness was a somewhat low 59%. Kyushu Electric Power needs to work to further improve employee awareness in this area.

### EMS in the Kyushu Electric Power Group companies

- Eco Action 21 is a vital aspect of compiling and publishing environment action reports, and it is likely a more advanced effort than levels 1 and 2 of the Kyushu Electric Power Group EMS framework. EMS is becoming a prerequisite for trading in some quarters and the council urges Kyushu Electric Power to make a concerted Eco Action 21 effort.
- The Ministry of the Environment is also recommending Eco Action 21 for small and medium-sized businesses, and the council believes Kyushu Electric Power should consider implementing the plan for some group companies of appropriate size.

### Others

- To promote deeper understanding of Kyushu Electric Power's environmental activities, the council feels the company should consider holding council meetings on the same day and at the same location as Kyushu Homeland Forestation Project events.

## 2 Environment Action Report

- To relieve fears about nuclear power generation, it is necessary for Kyushu Electric Power to provide information on how it goes about risk communication.
- Kyushu Electric Power should publish its ongoing actions in relation to the shipper's obligations under the revised Law Concerning the Rational Use of Energy.
- Kyushu Electric Power should publish its opinions exchanged with local university students.
- Kyushu Electric Power should publish its international activities, such as wind power generation in the Inner Mongolia Autonomous Region.

### Members of the Kyushu Electric Power Environmental Advisory Council

(In the order of the Japanese syllabary; titles and prefixes omitted)



**Ei Akagi**  
Writer



**Naohito Asano**  
Professor, Faculty of Law, Fukuoka University and a provisional member of the Central Environmental Council



**Nahomi Ishikubo**  
Lifestyle journalist



**Masao Otsuka**  
Environmental counselor (citizens' section), Ministry of the Environment



**Mami Oku**  
Professor, Urban Policy, Faculty of Urban Liberal Arts Tokyo Metropolitan University



**Takao Sawada**  
Deputy Chief Officer, Kitakyushu Headquarter Yomiuri Shimbun Western Head Office



**Yasuhiko Tsutsui**  
Essayist



**Satoshi Tsuruta**  
Vice Chairman, Kyushu Recycle and Environmental Industry Plaza



**Hidetaka Nakamura**  
President & CEO, Onga Shinkin Bank



**Akira Fukuizumi**  
Teacher, Fukuoka Prefectural Shuyukan High School



**Fuminori Marumoto**  
President, Kenmin Dept. Store Co., Ltd., Kumamoto Hanshin



## 1 Results of the Questionnaire from the Previous Report

As of the end of FY2005, we had received 242 invaluable opinions regarding the implementation of our environmental activities through the questionnaire attached in the 2005 Kyushu Electric Power Environment Action Report (including the digest version) published in June 2005.

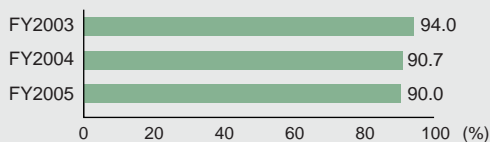
These included opinions to the effect that a bigger font size would make the report easier to read and we are confident that these have been addressed in the latest document.

### Understandability



Note: These figures are the total portion of those who said the report was "easy to understand" or "somewhat easy to understand".

### Rating of our environmental activities



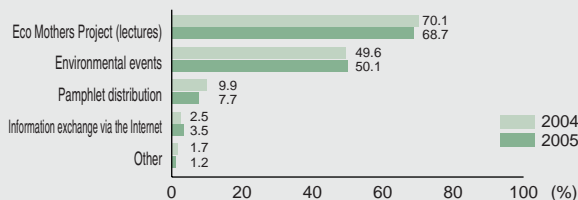
Note: These figures are the total portion of those who rated Kyushu Electric Power's environmental activities as "excellent" or "fair".

## 2 Results of the Survey of Mother's Awareness and Behavior on Environmental Issues

We conducted surveys on participants in Eco Mothers' activities (or guardians when such activities were held for children).

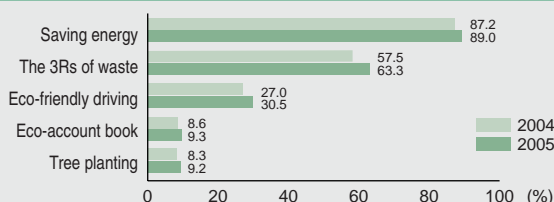
In FY2005, we distributed 9,713 questionnaires and received 3,795 responses (a response rate of 39.1%).

### Activity most effective for enhancing children's environmental education (multi-choice)



Note: Portion of total responses in which the pertinent answer choice was selected

### Activity respondents would try at home (multi-choice)



Note: Portion of total responses in which the pertinent answer choice was selected

## Which of our environmental activities impressed you the most and why?

(◆: Activities chosen by a large number of respondents; [ ]: Number of votes; ○: Main reasons)

### ◆ Activities we can all partake in [53]

- We can prevent global warming by saving electricity in our daily lives. Communicate this message to as many people as possible.
- There are specific examples showing how readers can participate in environmental activities.

### ◆ Efforts to address environmental issues [50]

- Lowering CO<sub>2</sub> emission intensity is a given; reducing overall emission volume is also necessary.
- I had thought that Kyushu Electric Power based its thinking around nuclear power, but it is also looking into natural sources of energy.

### ◆ Communication activities [26]

- The Eco Mothers Project allows for parent-and-child participation, and picture card theater shows make it easy for children to understand the message and, therefore, inspire them to participate.
- Kyushu Electric Power places importance on community ties, and has forums for public opinions.

### ◆ Local community activities [22]

- It will be vital for Kyushu Electric Power to protect the environment in cooperation with local communities.
- The message that the company would not try to save the Earth by itself but would enlist local help left an impression on me.

## Opinions and requests regarding the Eco Mothers Project and Kyushu Electric Power's environmental activities

- When we got home, my son told me about the Eco Mothers show. "CO<sub>2</sub> will come if you open the fridge or leave rubbish lying around" he said. Even a child of four was able to learn something. Thank you very much.
- If we don't change, the planet is in trouble... I had the general idea, but not enough to actually do anything about it. I was pleasantly surprised to find there was something I could do at home; I'll do my part from now on.
- Please come to talk to our kindergarten once more. My daughter said it was great fun. Next time I'd like to take part with her.
- We don't really talk about global environmental issues at home, so I think this kind of activity is good in raising children's interest.
- I hope Kyushu Electric Power continues to promote the Eco Mothers Project and its other environmental activities widely throughout the community so that, as is the case with Cool Biz, eco-beneficial things become norms of society.
- I'd like Kyushu Electric Power to not stop at picture-book readings, but to hold all sorts of events with environmental themes, such as those where we can see what kind of recycled items there are out there.

### 3 Results of the Nihon Keizai Shimbun 9th Nikkei Environmental Management Survey —Kyushu Electric Power places 4th in electricity and gas category—

The 9th Nikkei Environmental Management Survey was conducted in 2005, with Kyushu Electric Power ranked fourth among 17 companies in the electricity and gas category.

#### Outline of the Survey

Period	August through November 2005	
Survey method	Sending questionnaire by mail and reviewing environmental reports, etc. • Survey participants include listed companies: 1,747 manufacturers and 2,306 non-manufacturers (including those in the construction and energy sectors). • The valid response rates were 32.0% for manufacturers and 19.6% for non-manufacturers.	
Evaluation method	Companies in the electricity and gas category were ranked based on according to the total score attained by each company in the following six areas.	
6 categories for evaluation	Management structure	Systems pertaining to environmental management systems, environmental education, and information disclosure.
	Long-term goals	Implementation of a mid- and long-term vision for reduction of environment load.
	Measures against pollution	Conditions of air pollutant emissions; chemical substance management and measures against soil contamination.
	Resources recycling	Commitment to reduction of waste products and final disposal volumes, and to recycling; waste management.
	Measures against global warming	Track the company's greenhouse effect gas emissions and reduction targets; Kyoto Protocol-related activities.
	Offices	Environmental measures implemented at offices

#### Analysis of Results; Improvement Measures

From having been in top position in the previous fiscal year, the ranking of Kyushu Electric Power dropped in FY2004. One of the causes of this unfavorable result was that CO<sub>2</sub> emissions increased by 11% from FY2003 due to an increased volume of net system energy demand. Nevertheless, our CO<sub>2</sub> emission intensity for FY2004 was the lowest among the nine electricity utility companies.

### 4 Results of Employees' Environmental Awareness Survey

For thorough implementation of corporate environmental activities, it is essential for each employee to have high and constant environmental awareness. In discussing how to improve our environmental activities, Kyushu Electric Power utilizes what it has learned about employees' awareness and understanding of environmental activities, their involvement in the activities, needs, and changes in these aspects over the years.

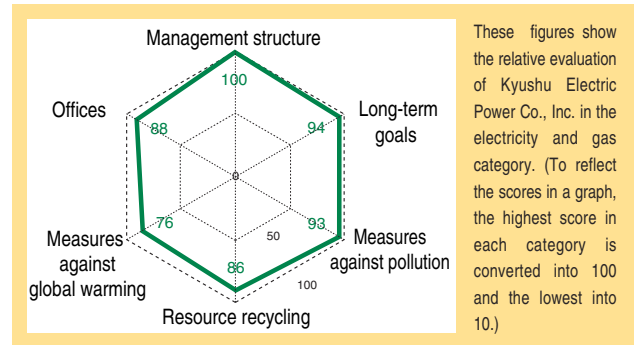
#### Outline of the Survey

Period	May 23 (Monday) through June 3 (Friday), 2005
Subjects	12,571 employees (All employees except executives and directors at the head office)
Responses	7,386 (response rate: 59%) [Response rate of the previous survey (FY2004): 56%]
Method	Questionnaire via e-mail using the intranet (anonymous survey)
Contents	The purpose of this survey was to understand employees' awareness and understanding levels of and involvement in each environmental activity. It focused mainly on activities ranked poorly in the previous survey and introduced measures to improve them.

Beginning in FY2006, we are working to improve areas surveyed in which environmental activities were deemed in need of improvement.

	Area for improvement	Action taken
Kyushu Electric Power	Reduction of company vehicle fleet CO <sub>2</sub> emissions	• Systematic replacement of fleet vehicles with fuel-efficient cars, and introduction of fuel management targets.
	Improve efficiency upon outsourcing of distribution	• Adjustments to bring this area in line with the revised Law Concerning the Rational Use of Energy.
Kyushu Electric Power Group	More robust information disclosure	• Data about companies producing large environmental loads is published through the Kyushu Electric Power website. • The occurrence or existence of environmental accidents, problems, and litigation are all made public.
	Investigate stronger environmental targets	• Incorporation of environmental targets to the business performance management system that better suits the circumstances of each group company. • Expansion of Kyushu Electric Power industrial waste landfill targets to include group companies.

#### Kyushu Electric Power's scores



#### Analysis of Results; Improvement Measures

Support from the Environmental Affairs Department for business units resulting from the FY2004 survey has led to improvements in understanding and implementation of environmental management. The company has received requests for continued support and supervision by the Environmental Affairs Department.

[Specific improvements]

- New specialist training for EMS (sat by 142 people)
- Support and supervision for reinforcement of internal environment auditing. (Support provided beginning in FY2006 under supervision of the Environmental Affairs Department.)

# Items Reflecting Opinions, Evaluations and Commendations from Outside the Company

## 1 Items Reflecting Opinions

The opinions and requests from customers and the Kyushu Electric Power Environmental Advisory Council with regard to environmental activities and the Environment Action Report of the Kyushu Electric Power Co., Inc. will be reflected in the content of future environmental activities and Environment Action Reports.

	Summary of opinions	Response items reflecting the opinions
Environmental activities	[Global warming issues] ○ In addition to frequency stability, CO <sub>2</sub> emission intensity is an important factor in the quality of electricity. Therefore, electricity companies and consumers alike must endeavor to revise their attitudes towards quality of electricity.	○ By offering ideas about ways to achieve energy conservation, we are working together with our customers to reduce CO <sub>2</sub> emission intensity. We hope to further highlight our achievements in this area through our Environmental Action Reports.
	[Promoting nuclear power generation] ○ Provide detailed information regarding the environmental superiority of nuclear power.	○ Kyushu Electric Power strives to publish detailed information relating to the upcoming nuclear power stations and their significant role in the reduction of CO <sub>2</sub> emissions by including the calculated reduction volume in our Environment Action Reports and in various occasions.
	○ Promote nuclear power station operation safety measures and track record more aggressively.	○ The Kyushu Electric Power CSR Report, which was first issued in 2006, contains information about how we ensure safety in nuclear power generation.
	[Environmental education] ○ Further strengthen environmental education support systems.	○ We have erected signboards on our nature walk at the Yamashita Dam surrounded by lush company forests, and we are looking into using these to map out nature walk routes. In the first half of FY2006, we are scheduled to hold nature walks through company-owned forests.
	[Improving employee awareness] ○ Further improve employees' environmental awareness	○ By providing EMS support to business units, as well as boosting and making better use of the digest version of our Environment Action Reports, we will endeavor to continue raising employees' environmental awareness.
	[EMS in the Kyushu Electric Power Group companies] ○ Consider implementing Eco Action 21	○ As part of the revision of group EMS assessment areas to be carried out in FY2006, we will consider the place that Eco Action 21 holds in our set-up.
Environment Action Report	[Nuclear power] ○ Provide risk communication information	○ Major activities to increase understanding have been added to our pluriannual plan (see p8).
	[Energy conservation] ○ Publish existing actions regarding shipper's obligations under the revised Law Concerning the Rational Use of Energy	○ Ongoing efforts are reported (see p25).
	○ Publish efforts regarding Cool Biz	○ Calculated CO <sub>2</sub> reduction has been listed as part of our energy conservation information campaign (see p26).
	○ Bolster publication of information about environmental activities in proximity to people's daily lives.	○ Information has been expanded on the "activities everyone can take part in" page of our website (Japanese only).
	[Environmental communication] ○ Publish information about opinion exchanges with local university students.	○ Our exchange of opinions with students from Fukuoka University of Education is reported (see p36).
	[International cooperation] ○ Publish information about international activities.	○ Consulting services provided overseas are reported (see p40).
	[Reader-friendliness] ○ Make report easier to read with larger font.	○ Font sizes and line spacing have been increased, and font face changed to make the report easier to read.

## 2 Evaluations from Outside the Company

Name	Sponsor	Time	Kyushu Electric Power' Evaluation
Fortune Global 500	Newsweek	Announced in Newsweek in June 2005	254th (58 th among domestic companies)
The 9th Nikkei Environment Management Survey	Nihon Keizai Shimbun	August 2005	4th of 17 companies (electricity and gas category)
FY2005 "Companies of Excellence" Ranking PRISM	Nihon Keizai Shimbun	October 2005	145th of 1033 companies
Environmental Rating	Tohatsu Evaluation and Certification Organization	November 2005	BBB (level 4 ranking out of 9)

## 3 Commendations from Outside the Company

Award	Recipient	Presented by	Date awarded	
Award of first prize at the 9th Green Reporting Awards	2005 Kyushu Electric Power Environment Action Report	Toyo Keizai Shimbun, Green Reporting Forum	April 2006	
Certificate of gratitude for contribution to Bogatsuru burn-off	Kyushu Electric Power (Oita Branch Office)	Takeda City, Oita Prefecture	November 2005	
Machinaka Art Village Concept certificate of commendation	Oita Branch Office	Oita University Machinaka Research Center	March 2006	
Excellent Energy Conservation Manager award	Certificate of merit from the director-general of the Agency for Natural Resources and Energy	Shin Oita Power Station staff	Agency for Natural Resources and Energy	February 2006
	Director General Prize of Kyushu Bureau of Economy, Trade and Industry	Karita Power Station staff	METI	February 2006
Chairman's Prize: Excellent Technician of Energy Conservation award	Shin Kokura, Karita & Tatsugo Power Station staff	ECCJ	February 2006	
Electricity workers' award	Shin Kokura, Matsuura & Ainoura Power Station staff	Kyushu Electric Association of Japan Electric Association	March 2006	

# Independent Review of the Environment Action Report

Since FY2002, the Environment Action Report (the "Action Report") of Kyushu Electric Power Co., Inc (the "Company") has been subject to independent reviews by Tohmatsu Environmental Research Institute Ltd. Both the Environmental Affairs Department of the Head Office and branch offices have been reviewed to improve the reliability of the Action Report.



Using basic materials to verify environmental activity data at Reihoku Power Station.



An environmental administrator gives on-site explanations at Hitoyoshi Power System Maintenance Office

## 1 Report on the Review Results

### Report on the Review of the 2006 Action Report

Tohmatsu Environmental Research Institute Ltd. conducted an independent review on the accuracy and completeness of significant environmental information contained in the 2006 Kyushu Electric Power Environment Action Report (the "Action Report") of the Kyushu Electric Power Co., Inc (the "Company")

Findings identified in the review process are described below, separate from those stated in the Independent Revision Report on the Environment Action Report.

Numbers in parentheses included in the description below represent page numbers in the Action Report.

#### 1. Matters Appreciated

##### (1) Tabulation of environmental information

The tabulation system for environmental information commenced operation this fiscal year, allowing centralized collection and tabulation of environmental data (see page 20). In this system, the tabulation process requires approval by section leaders, and various measures are implemented to ensure the accuracy of their environmental information. This system enables the Company to provide more reliable information regarding their environmental activities.

##### (2) Scope of the report

The Company started issuance of the CSR (corporate social responsibility) report this fiscal year, separate from the Action Report. The 2006 Action Report therefore contains concise information regarding the Company's environmental management, facilitating ease of reading.

#### 2. Matters to be Addressed

##### (1) Changes made in calculation standards for environmental accounting

It is noted in the Action Report that some of the environmental accounting standards were changed, and data in the previous year has been recalculated in order to ensure comparability of the same period (see pages 18 to 20). Because the environmental accounting data, which includes year-to-year changes and corporate comparisons provides useful information to readers, it is recommended that the Action Report describes the reasons for the changes in the calculation standards, as well as any possible outcomes of the changes.

##### (2) Environmental management system

In the environmental management system, a third-party certificate is awarded to model business establishment selected from each business type, and the compliant system is applied to other business establishments (see page 12).

However, while these other business establishments mainly focus their activities on achieving the environmental targets that were set according to the Action Plan, it is recommended that they set their own environmental goals after taking into consideration their regional characteristics, so that the Company shall be able to further enhance their environmental activities through the use of the environmental management system.

## 2 Independent Review on the Environment Action Report

(TRANSLATION)

### Independent Review Report

Mr. Shingo Matsuo,  
Representative Director & President  
Kyushu Electric Power Co., Inc.

June 12th, 2006

Tohmatsu Environmental Research Institute Ltd.  
President, Enoki, Hiroshi  
President, Sato, Tameaki

#### 1. Subject and Objective of Review

We have performed a review of certain significant environmental information, with “examination marks” attached therein, stated in the “2006 Kyushu Electric Power Environment Action Report” (“Action Report”) prepared by Kyushu Electric Power Co., Inc. (“Company”). The purpose of our review was to provide conclusions from an independent standpoint about whether such information in the “Action Report” was accurately measured and calculated in accordance with calculation methods, etc. adopted by the Company and whether significant items were disclosed without omission, with reference to Environmental Reporting Guidelines 2003 (issued by the Japanese Ministry of Environment) and Proposed Standards for Environment Report Compilation (issued by the Japanese Ministry of Environment in March 2004).

#### 2. Responsibility of Management and Persons Reviewing the “Action Report”

The “Action Report” is the responsibility of the Company’s management. Our responsibility is to provide our conclusions with respect to the “Action Report” from an independent standpoint.

#### 3. Summary of Review

To obtain an adequate and valid standard of basis for providing limited assurance with respect to our provided conclusions, we performed our review with reference to the International Standard on Assurance Engagements (ISAE) 3000 (issued by the International Federation of Accountants in December 2003), Proposed Environmental Report Review Standard (issued by the Japanese Ministry of Environment in March 2004) and Environmental Information Review Practices Guidance (issued by The Japanese Association of Assurance Organizations for Environmental Information in January 2006).

#### 4. Conclusions

With respect to the significant environmental information, with “examination marks” attached therein, stated in “Action Report”, our review did not identify items which were acknowledged to not be accurately measured or calculated in accordance with calculation methods, etc. adopted by the Company, or any significant items acknowledged to be omitted from disclosure, with reference to Environmental Reporting Guidelines 2003 (issued by the Japanese Ministry of Environment) and Proposed Standard for Environment Report Compilation (issued by the Japanese Ministry of Environment in March 2004).

#### 5. Special Interests

There are no interests between the Company and Tohmatsu Environmental Research Institute Ltd. or its engagement personnel, requiring disclosure based on the rules of The Japanese Association of Assurance Organizations for Environmental Information.

Note:

Tohmatsu Environmental Research Institute Ltd. is a subsidiary company of Tohmatsu & Co., a member firm of the international public accounting firm of Deloitte Touche Tohmatsu.



This symbol mark, designed after a four-leaf clover, represents the four business areas in which Kyusyu Electric Power Group is engaged: total energy, IT & telecommunications, environment & recycling, and consumer & community services. The "e" stem signifies energy and ecology. The mark expresses the stance the group takes in the promotion of environmental activities in its overall business activities.

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**Cover photo** Azaleas on Mt. Hiji, one of the Kuju Mountains

Much of the forestland owned by Kyushu Electric Power Co., Inc. is man-made, with sugi cedars and hinoki cypresses having been planted on the mountain ridge of Kyushu when it was put to pasture at the end of the Taisho Period (1912-1926) for watershed protection. Areas such as Mt. Hiji however, remain as lush natural environments, and we protect such places as part of our forestland in order that they may be preserved unchanged .

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Published in June 2006

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**Kyushu Electric Power's website**

[http://www.kyuden.co.jp/en\\_index](http://www.kyuden.co.jp/en_index)



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