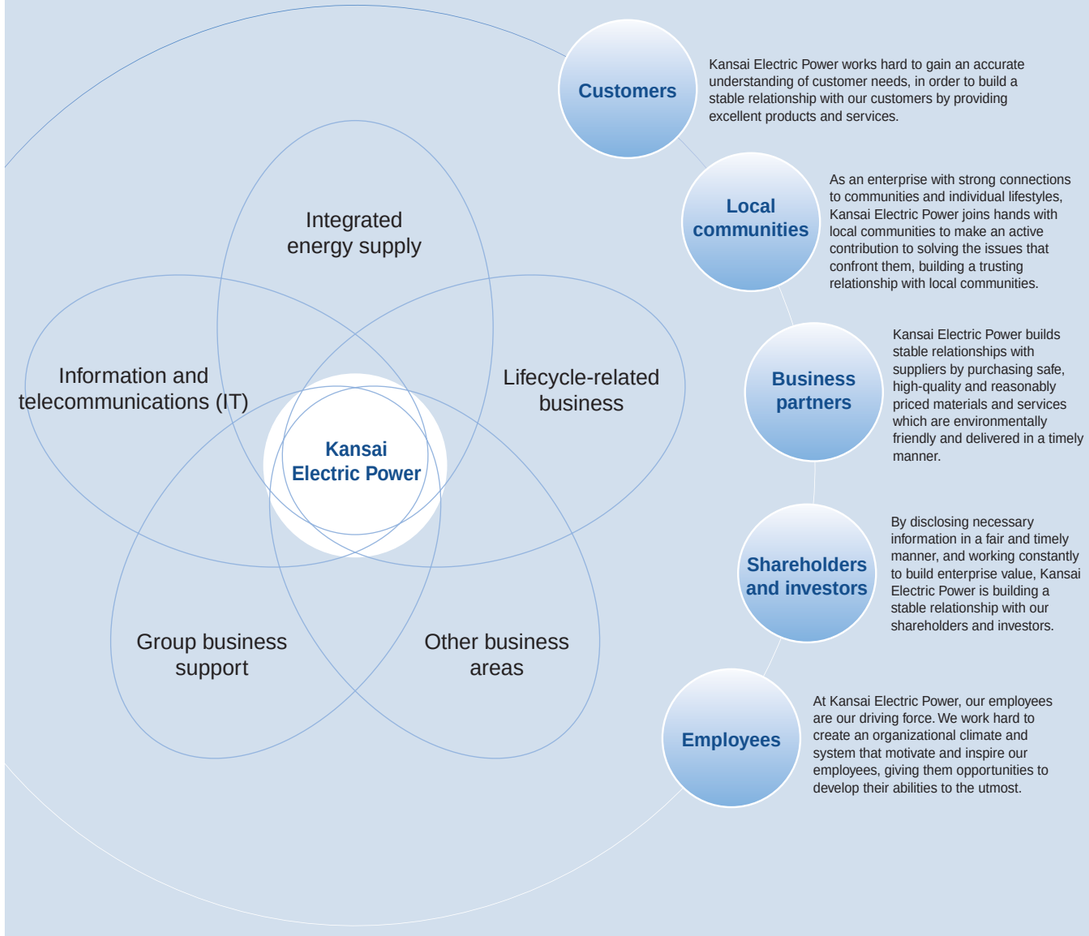
Kansai Electric Power Group

CSR Report 2008

THE KANSAI ELECTRIC POWER CO., INC.

Kansai Electric Power Group and its pledge to stakeholders



Customers

Kansai Electric Power works hard to gain an accurate understanding of customer needs, in order to build a stable relationship with our customers by providing excellent products and services.

Local communities

As an enterprise with strong connections to communities and individual lifestyles, Kansai Electric Power joins hands with local communities to make an active contribution to solving the issues that confront them, building a trusting relationship with local communities.

Business partners

Kansai Electric Power builds stable relationships with suppliers by purchasing safe, high-quality and reasonably priced materials and services which are environmentally friendly and delivered in a timely manner.

Shareholders and investors

By disclosing necessary information in a fair and timely manner, and working constantly to build enterprise value, Kansai Electric Power is building a stable relationship with our shareholders and investors.

Employees

At Kansai Electric Power, our employees are our driving force. We work hard to create an organizational climate and system that motivate and inspire our employees, giving them opportunities to develop their abilities to the utmost.

Group companies (Consolidated subsidiaries and companies to which the equity method is applied) (as of March 31, 2008)

Integrated energy supply
- Kanden Energy Solution Co., Inc.
- SAKAI LNG Corp.
- Kanden Energy Development Co., Inc.
- Osaka Bioenergy Co., Ltd.
- ECHIZEN ENELINE CO., INC.
- Two other companies

Information and telecommunications (IT)
- K-Opticom Corp.
- K Cable Television Corporation
- Kansai.com, Inc.
- Kanden System Solutions Co., Inc.
- Five other companies

Lifecycle-related business
- KANDEN FUDOSAN CO., LTD.
- Clearpass Co., Ltd.
- KANDEN Security of Society, Inc.
- Kanden E House Corp.
- KANSAI Medical Net Co., Inc.
- Kanden Joy Life Co., Ltd.
- KANDEN AMENIX Corp.
- Three other companies

Group business support
- Kanden Engineering Corp.
- NIHON NETWORK SUPPORT CO., LTD.
- Kanden Plant Corp.
- The Kurobe Gorge Railway Co., Ltd.
- NEWJEC INC.
- Institute of Nuclear Safety System, Inc.
- Nuclear Engineering, Ltd.
- THE GENERAL ENVIRONMENTAL TECHNOS CO., LTD.
- The Kanden Services Co., Inc.
- Kanden CS Forum INC.
- Kanden Office Work Corp.
- Kanden Power-Tech Corp.
- The Kanden L & A Co., Ltd.
- Kanden Business Support Corporation
- ENEGATE Co., Ltd.
- KINDEN CORPORATION
- Eight other companies

Other business areas
- KANDEN GEO-RE Co., Ltd.
- Kansai Power International Corp.
- Kansai Power Venture Management Corp.
- Kanden L-Heart Co., Inc.
- Kansai Electric Power Australia Pty Ltd.
- LNG Ebisu Shipping Corporation
- Kansai Electron Beam Co., Ltd.
- Three other companies

Editorial policies

- This report on the Kansai Electric Power Group's work related to the economy, society, and the environment is for our customers and stakeholders that support our businesses.
- We have undergone inspections by a third-party organization to provide assurance of the objective reliability of the environmental information provided in this report. As a result of these inspections and fulfilling the Environmental Report Inspection Registration Mark Allowance Standards of the Japanese Association of Assurance Organizations for Sustainability Information (http://www.j-sus.org/), we are allowed to use the mark shown below.

J-SUS

Scope of report

Period covered: April 1, 2007, to March 31, 2008.
(Important items from outside this period have also been included in the report.)
Companies covered: The Kansai Electric Power Co., Inc., and Kansai Electric Power Group companies.
Areas covered: economic, social, environmental

Report publication date

Published October 2008
[2007 edition published October 2007.
2009 edition to be published in the autumn of 2009.]

- The following symbol and the relevant URL appear in this report when related information is available on our Web site.

Web Kansai Electric Power Group Management Vision
http://www.kepco.co.jp/corporate/vision/index.html

Web site for information about the Kansai Electric Power Group's work related to corporate social responsibility:
http://www.kepco.co.jp/english/action/index.html

Web site for detailed financial information:
http://www.kepco.co.jp/english/ir/index.html

Contents

Message from our President

Our mission:

Continue to serve customers and communities

Since the Kansai Electric Power Group was established in 1951, for over half a century we have continued to fulfill our primary mission to our customers and society through the safe, reliable provision of electricity.

The business environment in which we operate has changed greatly in recent years with, for example, the unprecedentedly high levels of oil price, intensifying worldwide competition for resources, and the increasing seriousness of global-scale environmental problems. Nevertheless, as a business with responsibility for maintaining our customers' lifelines, we will make the best use of the Group's overall power to ensure energy security and to respond proactively to global environmental issues—which are urgent issues faced by humanity—while at the same time supporting the diverse lifestyles of consumers and their economic activities as we continue to contribute to the sustainable development of society.

Our corporate social responsibility:

Fulfilling our mission with trust as the foundation

The business activities of the Kansai Electric Power Group are founded on the trust placed in us by our customers, the local communities where we operate, our shareholders and investors, our business partners, and our numerous other stakeholders.

We have reflected deeply on the accident at Mihama Power Station Unit 3, and the entire company is now engaged in rebuilding a culture of safety. We are also striving to reduce our environmental impact and create links with local communities by means of consistently rigorous compliance and the assurance of transparency. We will redouble our efforts to fulfill our corporate social responsibility (CSR) and obtain an even greater level of trust by responding proactively and in good faith to the expectations of society at large.

Toward the promotion of CSR:

Forward-looking action by every employee

We regard it as vital for every employee to be involved in promoting CSR in an "autonomous, forward-looking manner," and are engaged in developing both staff perceptions and our corporate culture.

I am personally pursuing a vigorous program of visiting workplaces on the front line to deepen communication concerning the concept and importance of CSR, while CSR key persons in each workplace will develop and implement a range of educational activities. I hope that this initiative will lead to every employee thinking about how to respond in an autonomous, forward-looking manner to the expectations of society and of our various stakeholders in implementing these ideas. This will improve both the quality of our operations and customer satisfaction, leading to the motivation and growth of individual employees.

We will continue to progressively implement these initiatives, responding to the opinions of our stakeholders. By so doing, we aim to make powerful strides toward the realization of our corporate image—that of being the top company in terms of customer satisfaction.

Our communication goal for this CSR Report:

We want to keep moving forward together with you

Our aim is to deepen communication with you by means of this report. It follows our six action principles developed for the implementation of CSR, and describes the challenging initiatives undertaken by the Kansai Electric Power Group in as practical a way as possible. I hope that after reading this report you will offer your frank feedback regarding future issues and your expectations.

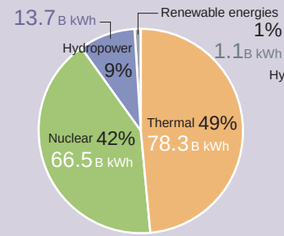
Shosuke Mori
President and Director

Overview of Kansai Electric Power

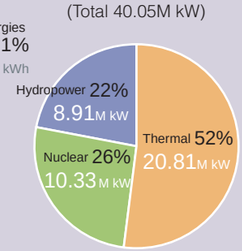
FY 2007, as of March 31, 2008

Company name:	The Kansai Electric Power Company, Incorporated
Headquarters:	3-6-16 Nakanoshima, Kita-ku, Osaka 530-8270
Date of establishment:	May 1, 1951
Paid-in capital:	¥489,300 million
Shares of stock outstanding:	962,690,000
Main business:	Electric power industry
Number of group companies:	58 consolidated subsidiaries, 2 affiliates accounted for by the equity method
Number of employees:	30,040 (consolidated), 20,184 (non-consolidated)
Electricity sales:	150,400 million kWh
Operating revenues:	¥2,689,300 million (consolidated), ¥2,478,500 million (non-consolidated)
Total assets:	¥6,789,600 million (consolidated), ¥6,135,000 million (non-consolidated)

Power source composition:
(Total 159.6B kWh)

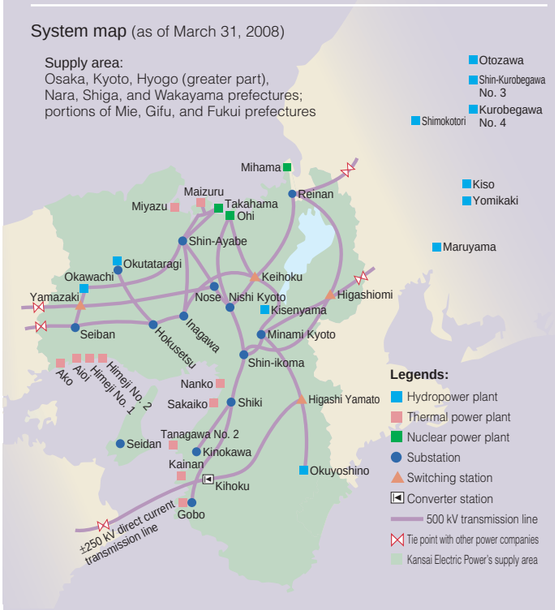


Fiscal year-end power source composition:
(Total 40.05M kW)



Notes: 1. Power source composition and fiscal year-end power source composition include power received from other companies (interchange power and pumped-storage hydropower are not included).
2. Due to rounding, the totals may not equal 100%.

System map (as of March 31, 2008)



CSR policies

We have set out the Kansai Electric Power Group Action Charter, made up of our six action principles, and the Kansai Electric Power Group CSR Action Standards, which enable all Group employees to implement these actions for themselves.

The Kansai Electric Power Group CSR Action Charter

The business activities of the Kansai Electric Power Group are supported by our customers, shareholders, business partners, investors, and employees, as well as the residents of the region and many other people throughout society. The trust that the Kansai Electric Power Group has received from our stakeholders is the foundation for fulfilling our business mission and achieving continuous growth.

At Kansai Electric Power, we see our Group-wide corporate social responsibility—CSR—in two ways. First, our CSR is to fulfill, with absolute assurance, our responsibilities as a member of society through rigorous compliance, transparency, etc. Second, our CSR is to contribute to ongoing social development by responding, in good faith, to the expectations that society embraces toward our Group-wide business activities.

Based on the foregoing understanding, in March 2004 we drew up the Kansai Electric Power Group CSR Action Charter. It includes the following six principles to serve as guidelines in the performance of business activities.

Kansai Electric Power Group CSR Action Charter

CSR Action Principles

1. Safe, Stable Delivery of Products and Services
2. Progressive Approach to Environmental Problems
3. Proactive Contributions to Development of Local Communities
4. Respect for Human Rights, Development of Favorable Work Environments.
5. Highly Transparent and Open Business Activities
6. Strict Enforcement of Compliance

Web Kansai Electric Power Group CSR Action Charter
http://www.kepco.co.jp/corporate/csr/charter.html

The Kansai Electric Power Group CSR Action Standards

We set specific standards at the individual level in the Kansai Electric Power Group CSR Action Standards in May 2005 to help individual employees, as members of society, fulfill their own responsibilities reliably and be able to respond to the expectations of society. Individual employees are carrying out their work duties in accordance with our CSR Action Standards.

Carrying the Conduct Card: keeping the Action Standards close to employees' hearts

Every employee has been issued with a Conduct Card to carry, which is printed with the Kansai Electric Power Group management vision and CSR Action Standards. Employees fill in their own action targets on the reverse side and use the card to check their actions and targets in their everyday business activities.

Conduct Card, printed with the CSR Action Standards.

Web Kansai Electric Power Group CSR Action Standards
http://www.kepco.co.jp/corporate/csr/standards.html

CSR Procurement Policy

Basic Philosophy of Procurement Activities

Aiming at the best suited formulation, maintenance and operation of our equipment, Purchasing Department of Kansai EP timely and ecologically procures equipment, materials and services that excel in safety, quality and price. Through these procurement activities, we would like to drive forward Corporate Social Responsibility (CSR).

As our procurement activities are supported by all of you, our valued business partners, we believe that working to build mutual trust and forging the stronger-than-ever partnership will directly lead to the promotion of CSR activities. Purchasing Department of Kansai EP will set and practice "Behavioral Standards for the Procurement Activities." We would like you to understand the "Behavioral Standards for the Procurement Activities" and practice "Requests for the Suppliers" in a proactive manner.

Behavioral Standards for the Procurement Activities

1. Highest priority to the safety, maintenance and improvement of quality and technical strength
   Giving the highest priority to the safety, we work on a rock-solid footing on the approaches and measures required for ensuring public safety and sanitation and for preventing industrial accidents.
   Also aiming at the best suited formulation, maintenance and operation of our equipment, we take approaches and measures that contribute to the maintenance and improvement of quality and technical strength.
2. Being environmental-friendly
   We push forward the procurement of environmental-friendly equipment, materials and office supplies (green purchasing) in order to contribute to building up a recycle-oriented society in cooperation with our suppliers.
3. Establishment of fiduciary partnership
   Through joint efforts on the improvement of the whole procurement supply chain, from our suppliers to our company, we establish a fiduciary partnership for the benefit of mutual growth and development.
4. Transparent, open business activities
   For the purpose of purchasing equipment, materials and services that excel in safety, quality and price in a timely manner, we keep the door widely open both nationally and internationally. Thus we are continuously exploring ourselves the possibility of introducing new products and new technologies, and businesses with new corporations as well.
   In choosing the supplier, we stick to being fair and impartial while pursuing both economic and social rationalities, based on safety, quality, technical strength, environmental-friendliness, fiduciary relationship with our company, price, certainty of delivery deadline & construction schedule, implementation of maintenance and management, after-sales service, response to accidents or malfunctions and other factors.
5. Full compliance
   We observe all the applicable laws and regulations and follow the spirit of the laws. In particular, we give due consideration to the observance of the safety-related laws, respect for human rights (including child labor and forced labor prohibition) and strict management of personal data and confidential information.

Web Kansai Electric Power Procurement Activities
http://www.kepco.co.jp/english/procurement/index.html

Corporate governance

Kansai Electric Power and its Group companies view improvement of corporate governance as a vital element of operational management, and are working towards that goal. This will improve corporate value in the long term, as well as maintaining the transparency and soundness of its business operations.

Assurance of appropriate handling of business matters

Kansai Electric Power takes proactive steps to enhance its corporate governance capability on an ongoing basis. Board of Directors meetings are convened regularly once each month, complemented by extraordinary meetings held when deemed necessary, and it is here that matters of essential importance to Group management are deliberated and decided. In addition, all Directors are continuously audited through regularly issued reports on the execution status of the duties incumbent upon them.

In executing important business matters, the Company implements swift and proper decision-making by convening meetings of the executive directors regularly—in principle once every week—in order to implement efficient and effective corporate management. The system of executive officers was introduced in order to separate the executive and auditing functions of management and to boost the speed and efficiency of business execution.

Assurance of transparency and soundness

Kansai Electric Power uses a system of Corporate Auditors. The Corporate Auditors attend important meetings, including Board of Directors meetings and executive meetings, where they state their opinions, listen to explanations by the Directors pertaining to matters of importance to Company management, and look into the business and assets status of the Company's main bases of operation and Group companies. By auditing the Directors' execution of their duties from the perspectives of legal conformity and propriety, the Corporate Auditors ensure the transparency and soundness of the Company's business operations. In addition, meetings are regularly convened between the Corporate Auditors and Managing Directors, et al., as a way of promoting exchanges of opinion.

To support the duties of the Corporate Auditors and Board of Auditors, an Auditing Office (13 members) has been established. This is a specially appointed organization in charge of actual auditing duties, operation of Board of Auditors meetings, etc. To ensure the Office's independence, it functions directly under the Board of Auditors and does not perform any other duties relating to the executive functions of the Group. Outside committee members have also been appointed: three Directors and four Corporate Auditors, the latter representing a majority among the seven Corporate Auditors in total. Outside Directors and outside Corporate Auditors have no special rights or interests in the Company.

Management of risk accompanying business activities

In line with the "Kansai Electric Power Group Risk Management Rules," risk accompanying business activities is basically managed autonomously by the executive section of each respective business division. As to risk deemed of importance across multiple organizational levels, risk management is strengthened by determining, when necessary, points in risk management that are special in nature, in which case experts provide advice and guidance to the various business execution divisions.

In addition, a Risk Management Committee has been formed to manage risk comprehensively. The Committee strives to manage risk accompanying Group business activities down to a level deemed appropriate. Based on this risk management system, the Company carries out appropriate financial reporting, as stipulated in the Financial Instruments and Exchange Law, to ensure its trustworthiness.

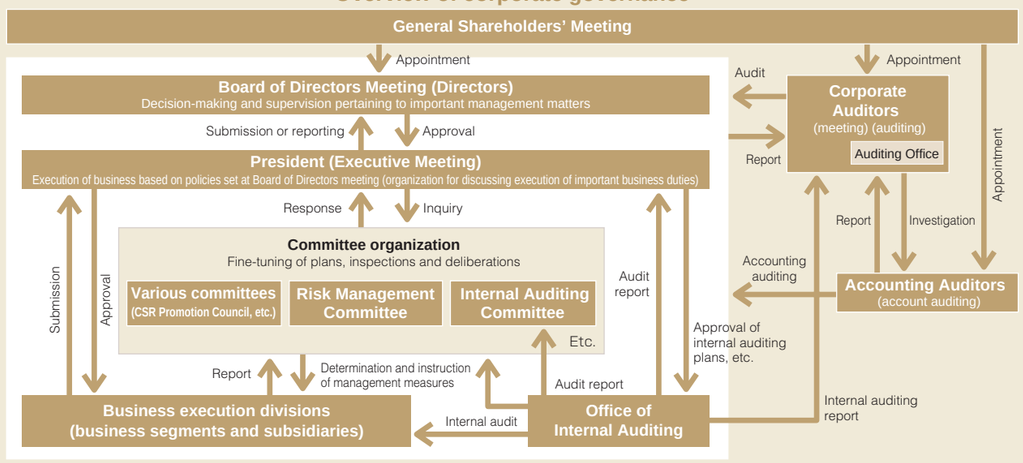
Enhancement of internal auditing functions

Kansai Electric Power has established an Internal Auditing Committee whose functions are to share and deliberate a broad range of management issues relating to quality or safety, secure views and information from outside the Company and, from an impartial and specialized standpoint, maintain proper internal auditing of the Kansai Electric Power Group as a whole.

An Office of Internal Auditing, consisting of 41 members, has also been established as an organization specially assigned to perform internal auditing. The office conducts regular auditing of risk management systems, risk management status, etc., and submits proposals or reports to the executive meetings concerning internal auditing plans and their results. At the various work areas, activities needed for making improvements in light of the auditing results are carried out in an ongoing quest to ensure proper business management.

As the vital overseers of corporate governance, the Office of Internal Auditing, Corporate Auditors, and Accounting Auditors coordinate, at their discretion, in the performance of auditing duties. They also maintain close ties for exchanging views regarding auditing results, etc.

Overview of corporate governance



Our mission and responsibility as a lifeline service provider

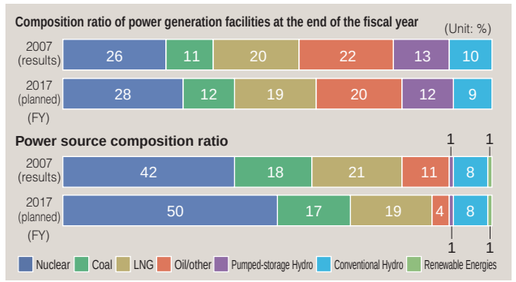
Providing electric power safely and stably to our customers—that in itself is our most important mission as a lifeline service provider. Kansai Electric Power takes responsibility for the entire process from power generation to sales, and is working to ensure a stable power supply and prevent accidents and disasters.

The "best mix" of power sources and its stable, long-term supply

As Japan is poor in natural resources, it has a fragile energy structure that is dependent on imported or specific energy sources. Kansai Electric Power has already made numerous efforts to create a suitable combination of multiple energy sources that is not too dependent on any specific one, including moving from oil to nuclear power, natural gas and coal.

Kansai Electric Power seeks an optimal combination of power sources that puts safety assurance first and takes comprehensive consideration of economic, energy security and environmental impact characteristics.

■ Power source composition comparison



Notes:
1. Fiscal year-end facility numbers and electric power generation amounts include electric power received from other companies (interchange power and pumped-storage hydro-power are not included).
2. Due to rounding, the totals may not equal 100%.

To provide higher-quality electric power

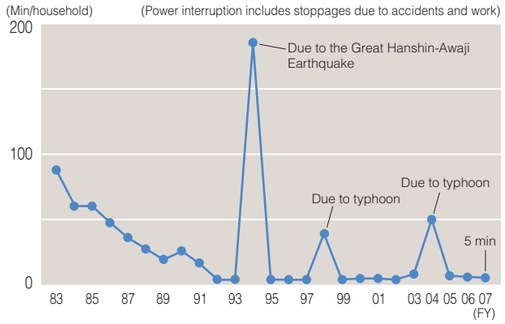
To provide electric power safely and stably, Kansai Electric Power works to operate power grids that link power stations with consumers reliably as well as for the optimal configuration of facilities. We are also engaged in rigorous efforts to prevent accident reoccurrence, as a result of which Kansai Electric Power's electricity achieved one of the world's highest levels in power supply reliability in 2007.

The Company is continuing to develop and install new technologies and construction methods to ensure that accidents are prevented and to enable swift recovery in the event an accident does occur. In addition, Kansai Electric Power is carrying out quantitative evaluations of the state of deterioration of its facilities, which were constructed during the period of high economic growth in the 1950s and 1960s, in order to deal reliably with the aging of these facilities. The Company is implementing the efficient, planned preservation and repair of facilities by such means as inspections and determination of repair periods in accordance with their conditions.

Maintenance and inspection work at a transformer station

The Company is also striving to ensure a fully operational supply system in terms of both speed and quantity in response to the demand from society, responding reliably to customer needs and contributing to the further development of the economically expanding Kansai region.

■ Annual power interruption time per household (including stoppages due to work)

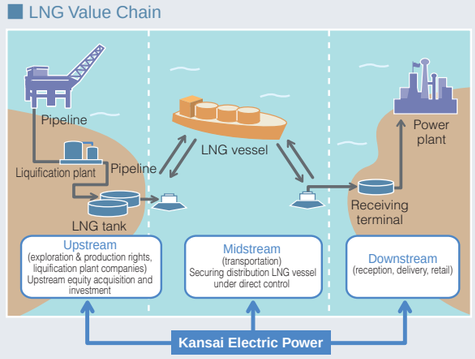


Structuring a fuel value chain, covering all stages from exploration to retail

In August 2007, Kansai Electric Power signed two contracts with Woodside Energy Limited, Australia's largest oil and gas development company. One was for the sale and purchase of Pluto LNG and another was for the sale and purchase of equity in the Pluto project. The Pluto LNG project, located in northwest Australia, is now being promoted by Woodside, Tokyo Gas, and Kansai Electric Power. The Company now owns its first LNG transport vessel, the LNG EBISU. Through such undertakings, we are seeking to structure a "fuel value chain" that extends from development and production to transportation and reception, in order to ensure stable, long-term procurement and price competitiveness.

LNG has superb characteristics in terms of supply stability, price competitiveness, and environment friendliness. Kansai Electric Power will continue to pursue the above LNG-related undertakings, while also continuing its efforts to ensure a stable, secure supply of both electricity and other forms of energy for customers.

■ LNG Value Chain



The Company is participating at every stage, from upstream to downstream, with the aim of stable, long-term procurement of fuel.

Measures for the safe operation of nuclear power plants

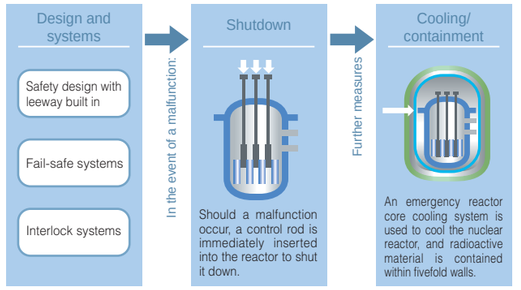
Attitude to safety at nuclear power plants

Kansai Electric Power is implementing a variety of measures to minimize risk and ensure sufficient safety at its nuclear power plants.

Design and function to maintain safety

The facilities at nuclear power plants are constructed to even stricter standards than those laid down by law, and their designs include fail-safe systems[1] and interlock systems[2] to prevent a malfunction or human error from resulting in an accident. In the unlikely event of a malfunction occurring, safety measures are implemented at multiple levels, and multiple safety functions come into action: the abnormality is detected at an early stage and the nuclear reactor shuts down automatically, and large amounts of water are injected to cool the fuel and radioactive materials being contained within fivefold walls.[3]

■ Safety measures in nuclear power plants

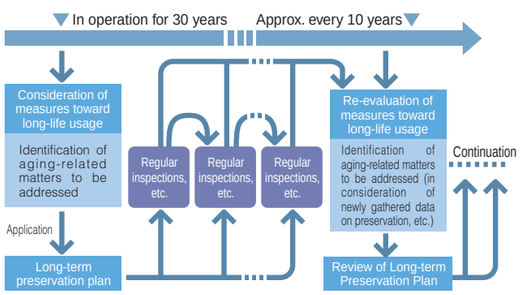


Notes:
1. Fail-safe systems are designed to shift in the direction of safety in order to avoid dangerous situations should a mechanical malfunction occur.
2. Interlock systems utilize a system whereby a mistaken operation is not transmitted to related equipment even in the event that a human being makes a mistake when operating it.
3. Fivefold walls consist of five layers of walls to contain radioactive substances, and are used in cladding pipes, nuclear reactor pressure vessels, reactor storage vessels, and reactor buildings.

Measures toward long-life usage

In order to ensure long-life usage of its facilities, Kansai Electric Power conducts technical inspections of nuclear power plants that have been in operation for more than 30 years, and has established a Long-term Preservation Plan that is reflected in preservation activities. These measures to deal with aging facilities are re-evaluated every ten years.

■ Flowchart of initiatives in long-life usage



Improvement of disaster control measures

Kansai Electric Power constantly monitors the flow of electricity that links power stations and customers. The Company has prepared a range of advance measures for dealing with disasters such as earthquakes, typhoons, snow damage, heavy rain, and lightning damage.

The Company is engaged in disaster control initiatives at this time when concerns are being raised about the occurrence of a major earthquake, such as the predicted Tonankai and Nankai earthquakes, in order to fulfill our social responsibility for the stable supply of power. These initiatives center on "a disaster control system to enable rapid recovery" and "strengthening facilities to withstand disaster."

Disaster control system to enable rapid recovery: comprehensive preparations for every eventuality

In the event that damage may have occurred to power generation facilities as the result of a disaster, or upon actually detecting such damage, a disaster control system (see table below) will immediately be established in-house to deal with the situation.

In the event of the occurrence of a disaster and the establishment of an Emergency Disaster Measures Headquarters, the Company will collaborate closely with disaster-related organizations such as government institutions, the police, fire department, and the media while carrying out safety measures at its facilities, assessing the status of damage and recovery, gathering information concerning the disaster, and engaging in recovery operations. The Company has also set up a mutual support system with other power generation companies that goes beyond the boundaries of its own area, for activities such as emergency power interchange and the exchange of staff, materials, and resources required for recovery operations.

Emergency Disaster Measures Headquarters at the head office

■ Disaster control system

Organization	Criteria for establishment
Disaster Alert Headquarters	• Predicted occurrence of a disaster
Emergency Disaster Measures Headquarters	• A disaster has occurred or is certain to occur • Occurrence of earthquake of magnitude six or greater on the Japanese scale within power supply area • Tokai earthquake advisory, Tokai earthquake prediction, or declaration of alert issued within an intensified earthquake disaster control measures area • Occurrence of Tonankai or Nankai earthquake (including the occurrence of an earthquake adjudged to be possibly on the same scale in terms of shaking, epicenter, tsunami alerts, and other factors) • Other necessary circumstances

Strengthening facilities to withstand disaster: preparing for a wide range of disasters

Power transmission facilities are designed to withstand even powerful typhoons, and the Company ensures that they also possess high earthquake resistance to prevent the occurrence of major damage in an earthquake.

The electric power system network encompasses the Kansai area by means of the transmission lines from power stations and the transmission line loops with which they connect. In the unlikely event of damage occurring to some of the routes on this network, even if they become unusable, power can be supplied quickly from alternative connecting routes.

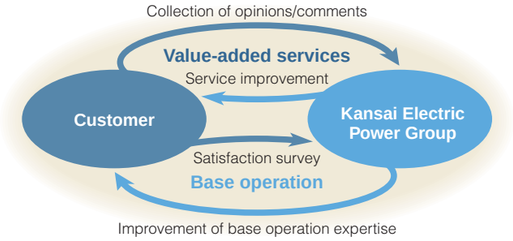
Providing services as a unified group

Our aim is to provide services that satisfy our customers. Starting from this concept, the Kansai Electric Power Group is responding to customer demands and developing a range of initiatives that will enable the Group as a whole to provide attractive services and products.

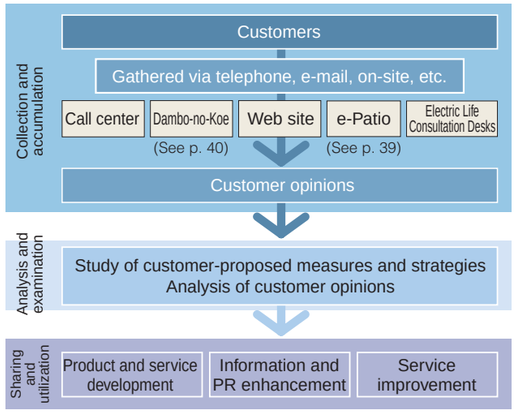
Toward improvement of customer service

In order to promote business activities that are responsive to our customers, Kansai Electric Power is developing a range of initiatives across the whole Group. One example is the collation and analysis of customer opinions gathered through the call centers and Electric Life Consultation Desks established by the Company to provide points of contact with customers. The customer needs identified in this way are reflected in improvements to products and service value.

■ Customer service improvement philosophy



■ Effective use of customer opinions



Implementation of customer satisfaction surveys

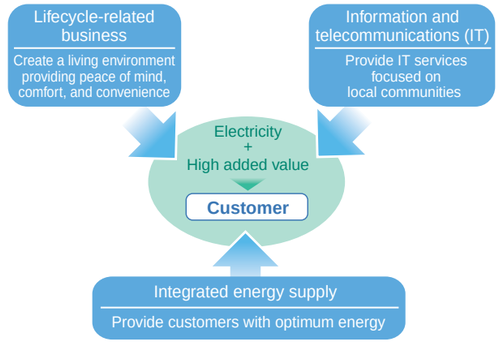
Kansai Electric Power employs specialist companies to conduct customer satisfaction surveys by telephone. We have implemented surveys of customers who have made various applications to our company continuously since 1993. In these surveys, customers are asked to give their impressions of our staff and evaluate the handling of their cases, and the results are reported to the sales centers concerned together with customers' opinions, dissatisfactions, words of praise, and other feedback. In this way, we are able to objectively assess the service levels of our sales offices, verify the results of efforts to improve our work, and discover areas for further improvement. These also provide useful information for setting targets and improvement actions for subsequent business periods as we strive to improve customer satisfaction levels further.

In addition, every company in the Kansai Electric Power Group also carries out regular customer satisfaction surveys. These enable us to assess customers' honest opinions and evaluations of the services offered by each Group company, leading to improvements in existing service content and the development of new services, as we endeavor to further improve the level of customer satisfaction as a unified group.

Comprehensive, advanced utility services supporting customers' living and business

The Kansai Electric Group is concentrating on the following three business areas: integrated energy supply, information and telecommunications, and lifecycle-related business. The Group provides unique, total solutions through its high value added services, which combine electricity and the Group's other services and meet a variety of customer needs.

■ All-round life-support provider



Providing lifestyle solutions

● Promotion of totally electric homes

Kansai Electric Power is engaged in a variety of initiatives to offer customers easy access to totally electric homes, which are not only safe, comfortable, and economical, but also environmentally friendly.

In practical terms, we are disseminating a variety of information on totally electric homes via our "Electric Life" Web site, as well as improving the "Hap-e Life Square" facility where people can experience a totally electric environment. In addition, since July 2007 we have collaborated with PanaHome Corporation on the development of a residential-type, totally electric model house, the EL PanaHome Shukugawa. In response to inquiries from customers, we have made telephone calls and visits to explain the concept in detail, and have also embarked on initiatives such as enhancing our collaboration with external partners, including sales agents, to make it easy for customers to consult us. Thanks to these and other initiatives, at the end of August 2007 there were already over 500,000 totally electric homes in the Kansai Electric Power area.

The EcoCute water heater, which is outstanding both environmentally and in terms of energy conservation, was mentioned in the Plan to Achieve the Targets of the Kyoto Protocol as meriting support for its accelerated market penetration, and the Company is engaged in promoting its widespread adoption both nationally and within the industry. Kansai Electric Power disseminates a variety of information when introducing or actually installing the EcoCute, including how to apply for a subsidy system, to help the product's use become widespread.

● Initiatives in the information and telecommunications field

K-Opticom Corp. is playing the central role in expanding Group services that use its own optical fiber network extending throughout the Kansai region. Under the integrated brand name of eo-HIKARI, our main FTTH service provides a bundle of three services: optical fiber Internet connection, optical fiber telephone, and optical fiber TV.

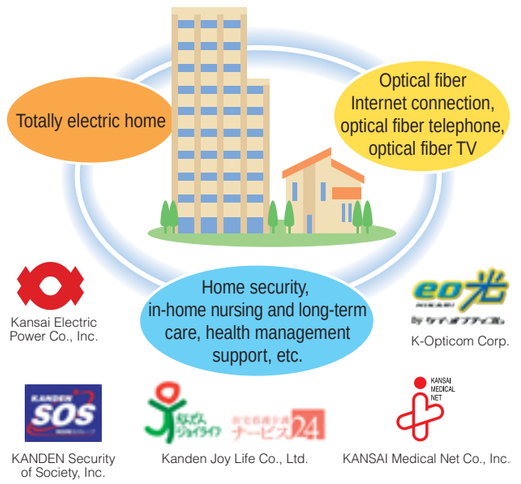
● Initiatives in the lifecycle-related business field

Kansai Electric Power is aiming to improve customer satisfaction by providing a range of lifecycle-related services, including real estate development focused on totally electric housing, home security, in-home nursing and long-term care, and health management support.

Development of Total Solutions

Kansai Electric Power is developing an even more attractive "totally electric home + α," which combines a totally electric home with optical fiber Internet connection and lifecycle-related services. This has been adopted in numerous detached residences and condominiums and helps create a safe, comfortable lifestyle with peace of mind for customers.

■ Example of Total Solutions based on the totally electric home



Providing solutions in the corporate field

Against the backdrop of heightened environmental awareness and high fuel prices, needs are increasing in areas such as reducing the burden on the environment (lowering CO_2 emissions), saving energy, and reducing costs. Installing equipment or facilities involves a process of planning, design, construction, operation, maintenance, and renewal, and Kansai Electric Power is responding to customer demand in a range of situations to offer solutions resulting in customer satisfaction.

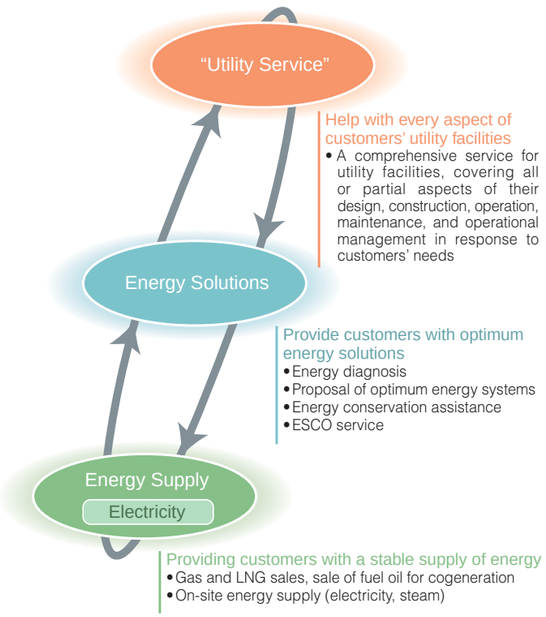

Diagnosing customer equipment

For example, in addition to proposing high-efficiency devices, mainly heat pumps, Kansai Electric Power offers system electric power with a low CO_2 emissions factor, which appeals to customers from the perspective of contributing to reduction in CO_2 emissions. Great interest is also being shown by many customers in converting their kitchens to use electricity alone, and examples of this being carried out are rising in number.

Further development of energy solutions

To provide customers with optimum solutions to their energy needs, Kansai Electric Power is working in collaboration with Kanden Energy Solution Co., Inc. to develop solution services that offer a wide-ranging response to our customers' diverse energy needs, spanning their entire use of energy. We are also proposing the "Utility Service," under which the customer's utility use contract is a comprehensive package, including everything from the design of utility facilities to operational management.

■ Development of energy solutions



We will continue to put the resources of the entire Kansai Electric Power Group into providing solutions that will result in customer satisfaction.

Web Kanden Energy Solution Co., Inc.
http://www.ke-sol.co.jp/index.html

2008 CSR Topics Special Feature

Rising to the challenge of technological development to achieve a low-carbon society

The first commitment period of the Kyoto Protocol (FY 2008–2012) has begun. Within the next five years, Japan has to reduce its emissions of greenhouse gases such as CO_2 by 6% in comparison with 1990 levels. In the long term, the entire world will be required to make major reductions. In the context of this situation, Kansai Electric Power has set itself an extremely high-level target for reductions, and is continuing to rise to the challenge of preventing global warming on the basis of the New ERA Strategy, a comprehensive package of measures to prevent global warming.

Basic attitude toward preventing global warming

At the G8 Heiligendamm Summit in 2007, Japan called for the long-term target of reducing worldwide greenhouse gas emissions by 50% by 2050. In 2008, at the Toyako Summit, the G8 Leaders' Declaration agreed to call for the United Nations to adopt this long-term target, marking a step forward in the movement to reduce greenhouse gas emissions worldwide.

At present, developed countries and developing nations each account for about half of global CO_2 emissions, and the amount of emissions from developing countries such as China and India that are undergoing dramatic economic growth is rapidly increasing. Even if developed countries were able to eliminate their emissions entirely, it would be impossible to reduce worldwide CO_2 emissions by 50% unless those from developing countries were restricted to around their current levels, making this target extremely difficult to meet.

Japan's own long-term target, announced in the Fukuda Vision in June 2008, is to reduce emissions by 60–80% compared with present levels by 2050.

The concrete policies required to make the Fukuda Vision a reality consist of four main pillars. These are the development of innovative technologies and the widespread adoption of existing advanced technologies; mechanisms to move the country as a whole in the direction of a low-carbon society; regional activities; and citizens playing a leading role in reducing carbon dioxide emissions. Among these, breakthroughs due to the development of innovative technologies will provide the key to achieving Japan's target, and the importance of technological innovation is emphasized in its position as the first pillar.

Now that long-term major reductions in CO_2 have become necessary, the importance is increasing for Japan of the widespread adoption of high-efficiency devices such as its world-leading heat pumps, as well as the development of innovative technologies for drastic reductions such as innovative solar power generation and advanced nuclear power generation.

In this environment, Kansai Electric Power is basing its endeavors to achieve a low-carbon society on the two pillars of establishing a low-carbon power grid and promoting an electric society, and is also actively engaged in the development of innovative technologies and overseas measures to prevent global warming.

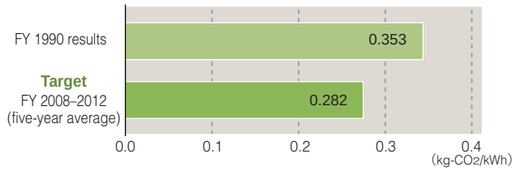
Kansai Electric Power's initiatives toward the achievement of a low-carbon society

● Establishing a low-carbon power grid

In order to provide economical, stable electric power while continuing to take environmental considerations into account, Kansai Electric Power is basing its future on nuclear power generation (with ensuring safety as a basic premise), and combining it in a well-balanced way with other power sources, such as thermal and hydropower generation, to create the optimum composition of electric power sources.

In terms of measures to prevent global warming, Kansai Electric Power is working to establish a low-carbon power grid in order to further reduce the CO_2 emissions factor of electrical power consumed (sold). In addition to efforts to increase the ratio of CO_2-free power sources such as nuclear power generation and renewable forms of energy, the Company is working on other initiatives such as increasing the heat efficiency of thermal power plants even further in the endeavor to reduce its CO_2 emissions factor, which is already one of the lowest in the industry, by a still greater margin.

■ CO_2 emissions reduction target for FY 2008–2012 (five-year average)



● Promoting an electric society

At present, fossil fuels account for over 80% of primary energy in Japan, an extremely high figure. In this situation, achieving significant CO_2 reductions will inevitably require breaking free from our society's reliance on fossil fuels. As one measure toward attaining this goal, we believe that moving away from the direct use of fossil energy and converting to the use of electricity, a low-carbon form of energy, to the maximum extent possible will have a major effect on reducing CO_2 production.

Kansai Electric Power is striving to reduce CO_2 emissions, providing customers with electric power with a reduced CO_2 emissions factor and encouraging the use of this electricity in high-efficiency electrical devices such as heat pumps and electric vehicles, thereby both supporting our customers' diverse lifestyles and enabling significant reductions in CO_2 emissions from society at large.

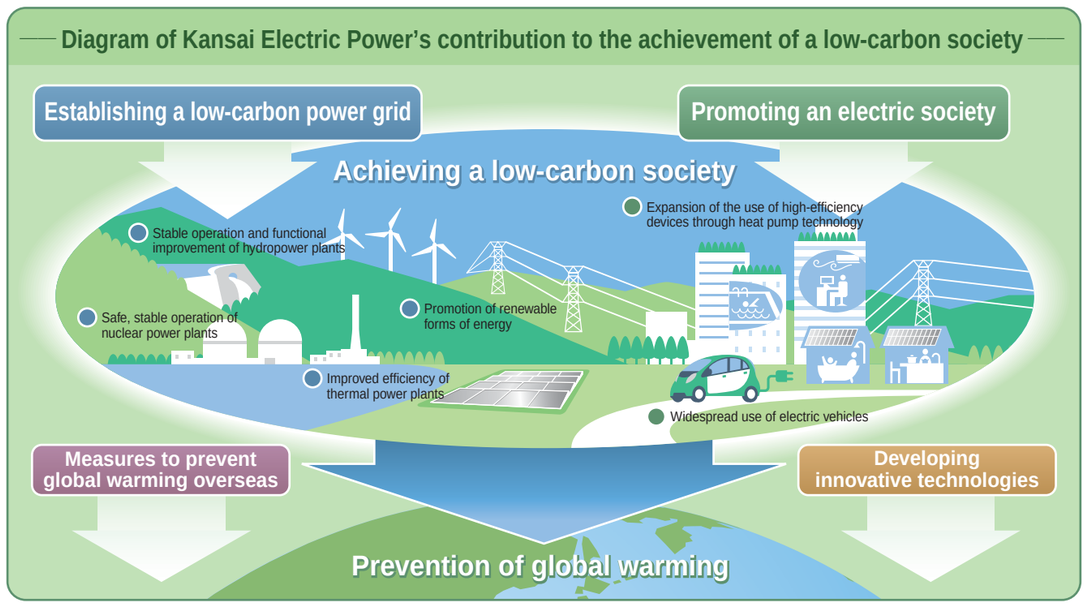
This combination of establishing a low-carbon power grid and promoting an electric society forms the basis of Kansai Electric Power's efforts to achieve a low-carbon society.

Dealing with global warming from a long-term, global standpoint

The development of innovative technologies will be indispensable if we are to achieve the high-level target of reducing worldwide greenhouse gas emissions by 50% by 2050. Kansai Electric Power is a leader in technological developments including the expanded use of renewable forms of energy such as biomass and wind power generation, research into high-efficiency devices such as heat pumps and electric vehicles, and CO_2 separation, recovery, and fixation. In recent years, the Company has also announced the expanded use of renewable forms of energy, such as solar power generation that is already among the world's largest, and intends to accelerate such efforts in the future.

Measures to prevent global warming will be effective if they are implemented on a global scale. For this purpose, Kansai Electric Power is using the technological capabilities, knowledge and expertise that it has gained through years of operation as an electricity supplier to participate in global warming prevention projects in countries around the world, using active promotion of measures to prevent global warming overseas.

Diagram of Kansai Electric Power's contribution to the achievement of a low-carbon society



The Group's technological developments for a low-carbon society and prevention of global warming

Establishing a low-carbon power grid

● The use of biomass for power generation

Atsuya Deguchi
Manager,
Construction Group,
Fossil Power Division

Since June 2008, Kansai Electric Power has been using biomass fuel at Maizuru Power Station Unit 1. The Maizuru Power Station is the only coal-fired thermal plant owned by Kansai Electric Power, and we are mixing biomass fuel known as "wood pellets" and burning them together with coal. Using biomass fuel in this way reduces coal consumption, and as a result, we can contribute to CO_2 emissions reductions. At Maizuru Power Station, we can reduce CO_2 emissions by around 90,000 t per year.

"The wood pellets used by Kansai Electric Power are made from sawdust and wood shavings generated at sawmills in Canada. Before Kansai Electric Power began using them as fuel, they were mostly being thrown away."

This quote comes from Atsuya Deguchi, manager of the Fossil Power Division's Construction Group. The amount of pellets used every year by the Maizuru Power Station comes to around 60,000 t.

However, the use of biomass with coal as fuel requires a variety of evaluations to be carried out concerning safety and efficiency aspects.

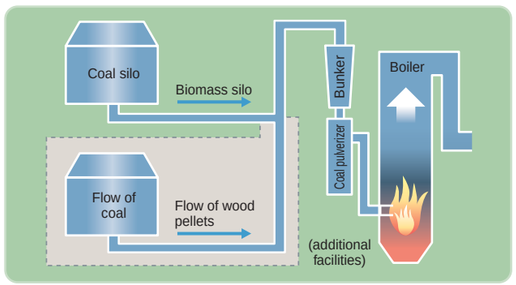
Deguchi adds, "Before introducing wood pellets, we used experimental facilities to carry out repeated experiments to validate the process, and evaluated the effect of mixing them with coal from various perspectives. For example, coal is ground into a powder in a coal pulverizer to be ignited easily, but we were not sure whether or not we could maintain this pulverizing performance when we mixed it with wood pellets, so we tested the pressure of the rollers for crushing capability and operating conditions of the sieving device that separates out the coarse powder."

Actually, the amount of wood pellets used is about 3% of the total fuel. This ratio is to preserve the safety of existing coal-fired thermal power facilities and to use the biomass efficiently.

He says that "a proportion of 3% is about the same as the *furikake* seasoning powder sprinkled on top of rice, but we can't be aggressive in increasing this figure when we consider that the most important mission of power plants is to generate safe, stable electric power."

While observing progress at Unit 1, Kansai Electric Power will also consider starting biomass multi-fuel combustion in Unit 2, which will come into operation in 2010.

■ Schematic overview of multi-fuel combustion of coal and biomass



At the Maizuru Power Station, a biomass silo and other facilities have been added to the existing facilities for burning coal in the boiler, so wood pellets and coal can be burned together to produce steam.

Biomass silo　　Wood pellets

Promoting an electric society

● Advancing heat pump technology and diversifying heat pump devices

Tadashi Masuda
Chief Researcher,
Product R&D Office,
Energy Utilization Technology Laboratory,
Research and Development Center

These days we often hear people talking about heat pumps. The feature of these devices is that they can reuse spent electrical energy many times over in the form of heat energy. Electricity consumption is reduced accordingly, enabling a corresponding reduction in CO_2.

Kansai Electric Power has been involved in developing devices and facilities for heat pump use in situations ranging from homes to institutions.

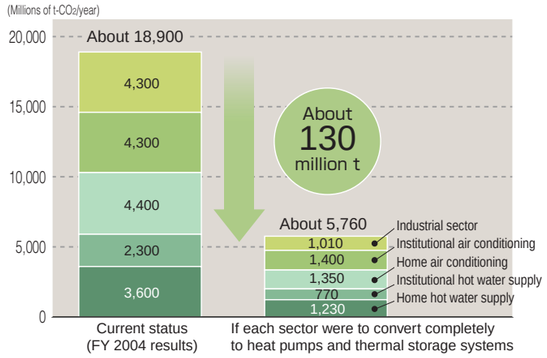
"The old style of heat pump had poor heat efficiency and could only produce hot water of about 70°C. But since we started using CO_2 as a coolant, their efficiency has improved dramatically, meaning that 90°C is now feasible."

So says chief researcher Tadashi Masuda, an authority on electric hot water supply devices. He has long been engaged in the development of electric water heaters in Kansai Electric Power's Product R&D Office of the Energy Utilization Technology Laboratory, part of the Research and Development Center, and in 2001 succeeded in completing the EcoCute water heater, which uses CO_2 as a coolant, in collaborative research with its manufacturer. He has subsequently developed a residential, space-saving version of the EcoCute as well as a multifunctional, compact version that is integrated with the external part of the appliance and which includes underfloor heating, bathroom heating and drying functions.

He adds that "recently I have been concentrating on research on how to reduce the cost, so that more customers will use heat pumps to reduce CO_2 in their everyday lives."

If heat pump systems were to be more generally adopted by homes and offices throughout Japan, as well as for use in air conditioning in shops and for heating processes in factories, it is believed that the resulting CO_2 reductions would total around 130 million t-CO_2/year, greatly exceeding the figure for CO_2 reductions by the private sector (about 60 million t-CO_2/year) set out in the government's plan for achieving the targets of the Kyoto Protocol.

■ Potential for CO_2 reductions by means of heat pumps and thermal storage systems
(Source: Heat Pump & Thermal Storage Technology Center of Japan)



Promoting an electric society

● The trump card for achieving a low-carbon society: pushing for the adoption of electric vehicles

Yuji Hori
Manager,
Technology Survey Group,
Research and Development Center (at time of interview)

Kansai Electric Power is also promoting the adoption of electric vehicles as a measure for reducing CO_2 emissions from private households and other sources.

"It's said that electric vehicles are currently undergoing their third boom. The first boom was during the 1940s, when gasoline was in short supply domestically during wartime; the second came during the 1990s, triggered by the ZEV standards adopted by the US state of California. Now, at the beginning of the 21st century, electric vehicles are attracting attention for their potential as the trump card for raising environmental awareness on the part of society as a whole and in measures to prevent global warming."

So says manager Yuji Hori of Kansai Electric Power's Technology Survey Group of the Research and Development Center. At present he is engaged in collaborative research with Mitsubishi Motors Corporation, carrying out running tests in urban environments and gathering data.

He adds that "in comparison with gasoline vehicles, electric vehicles can reduce CO_2 emissions by about 70%. In the future, if we can make progress in developing high-performance batteries and constructing the infrastructure for recharging them so that their use becomes more widespread, we can anticipate that they will make a major contribution to reducing CO_2."

As one contribution toward achieving a low-carbon society, Kansai Electric Power will proactively press ahead with the use of electric vehicles.

■ Comparison of yearly CO_2 emissions per car (calculated by Kansai Electric Power)

Developing innovative technology

● The world-leading KS-1 absorbs 90% of CO_2!

Yasuyuki Yagi
Senior Researcher,
Electric Power Technology Laboratory,
Research and Development Center

During the 1990s, when global warming had not yet attracted the attention it does today, Kansai Electric Power embarked early on the development of technology for the dissociation and recovery of CO_2. It was a decision that foresaw that CO_2 was to become an increasingly serious problem. A team was assembled together with Mitsubishi Heavy Industries, Ltd., and as the result of full-scale research in an experimental plant constructed at Kansai Electric Power's Nanko Power Station, a new CO_2 absorption solvent was developed three years later. KS-1, which begins with the letter "K" from Kansai Electric Power, absorbs CO_2 at 40°C and recovers it at 120°C, enabling greater than 90% recovery of the gas. This outstanding performance has earned it the reputation of being the world's best CO_2 absorption solvent.

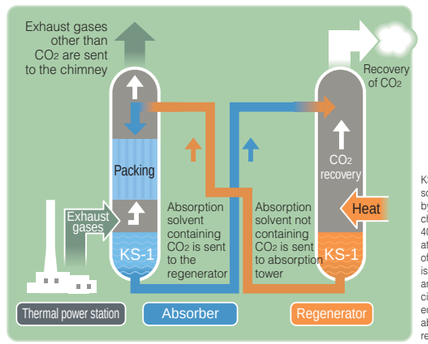
"I was told that they tested hundreds of different aqueous solutions of amines, one by one, until they finally discovered the right one." Yasuyuki Yagi, senior researcher in the Electric Power Technology Laboratory of the Research and Development Center, relates this story about the pioneers' achievements. The research institute that first developed KS-1, reputedly the best in the world, is still continuing with research into absorption solvents.

He says that "in the case of KS-1, thermal energy from steam at 120°C is required to release the CO_2, meaning that the cost is correspondingly high. As a result of continued research, last year we were able to develop an absorption solvent that releases CO_2 for a lower amount of energy."

At present, KS-1 is used mainly in overseas fertilizer plants and other factories for the purpose of using the CO_2. "We believe that it will eventually be used at facilities such as power plants for the direct recovery of the CO_2 contained in exhaust gases, and will be useful in preventing global warming. We hope to develop absorption solvents with even greater practical utility in future, and are engaged in research with this in mind."

Such earnest dedication to technological development will put a stop to global warming. Kansai Electric Power Group employees firmly believe this today as they commute to and from the power stations, laboratories, and sites where they work.

■ CO_2 chemical absorption method



KS-1 CO_2 absorption solvent absorbs CO_2 by means of a chemical reaction at 40°C and recovers it at 120°C. Making use of this property, KS-1 is repeatedly cooled and heated as it is circulated around the equipment, absorbing and recovering CO_2.

Environmental policy

Kansai Electric Power's philosophy consists of the "Five Basic Principles of the Environmental Action Plan," based on our CSR Action Charter. With the "Environmental Action Plan" as our basic course of action, each year we draw up a concrete plan for the year, known as "Eco Action."

The Kansai Electric Power Group CSR Action Charter (extract)

Progressive Approach to Environmental Problems

As an energy supplier with strong ties to the environment, the Kansai Electric Power Group aims for the world's highest level by recognizing the extent of the impact of its business activities on the global environment and by working to reduce the load placed on the environment by its business activities. The Kansai Electric Power Group has also taken advanced initiatives to create a better environment and actively contributes to building a sustainable society.

Philosophy: Five Basic Principles of the Global Environmental Action Plan (Adopted in 1990)

Kansai Electric Power is conscious of our great responsibilities as an energy provider. As we strive to deliver an affluent way of life to people, we are actively taking on the challenge of making the conservation of the global environment a part of our corporate agenda. In all aspects of our operations, we are investigating advanced means of global environmental protection and taking action immediately in areas where we can be effective:

❶ Reduction of environmental impact ❷ Promotion of effective and efficient use of energy and resources
❸ Development of advanced technology ❹ Coordination of efforts throughout the Kansai Electric Power Group
❺ Creation of a new corporate culture to support harmonious coexistence with the global environment

Action Guide: Global Environmental Action Plan (Adopted in 1991, revised in 2005)

Action 1 Consideration for the environment in all areas of our business

❶ Addressing global environmental problems
a. Measures to prevent global warming (New ERA Strategy)
Efficiency : Efforts to increase energy efficiency by society as a whole
Reduction : Reducing greenhouse gas emissions in power supply
Activities abroad : Overseas activities carried out to prevent global warming
b. Protecting the ozone layer

❷ Addressing local environmental problems
a. Measures to prevent air pollution
b. Measures to prevent water pollution
c. Measures against chemical substances, etc.

Action 2 Activities aimed at building a sound material-cycle society

❶ Promoting business activities suitable for a sound material-cycle society

❷ Earnest exchange and cooperation with external groups

❸ Raising employees' awareness of their responsibilities as global citizens and encouraging them to develop good daily practices

Concrete Action Plans: Eco Action (Adopted every year. See pages 17–18.)

Status overview of our business activities and environmental load (fiscal 2007)

The verification mark on the left identifies items that have received an independent review from Tohmatsu Environmental Research Institute Ltd.

INPUT

Fuels for power generation

Fuels for thermal power generation	Coal	1,614 thousand t (dry coal weight)
	Heavy oil	258 thousand kL
	Crude oil	3,098 thousand kL
	LNG (Liquified Natural Gas)	5,109 thousand t
	Other	1 thousand kL (converted to heavy oil)
Fuels for nuclear power generation		84 tU (weight of pre-irradiation uranium)

Water for power generation

Industrial water	5.01 million m^3
Clean water	1.28 million m^3
River water, groundwater, etc	0.66 million m^3
Seawater (desalinated)	2.71 million m^3

Resources

Limestone	41 thousand t
Ammonia	8 thousand t

Office

Office electricity	110 GWh
Office water	0.68 million m^3
Copy paper	1,087 t

Vehicle fuels

Gasoline	4 thousand kL
Diesel oil	1 thousand kL

Business activities

Amount of nuclear electric power generation
64.3 TWh

Power generation

Amount of thermal electric power generation
50.8 TWh

Amount of hydroelectric power generation
12.4 TWh

Purchased from other companies
38.1 TWh
(of which, solar, wind and biomass power generation **1.1 TWh**)

Electric power consumed within power stations **(5.1) TWh**

Pumped-storage hydropower **(2.2) TWh**

Power transmission and power distribution

SF_6 gas recovery rate (at time of inspection)
98.3%

Electric power consumed within transformer substations **(0.2) TWh**

Transmission and distribution losses **(7.8) TWh**

Office

Green purchase rate for office supplies
97.6%

Rate of adoption of low-pollution vehicles
68.2%

Customers

Amount of electric power sold
150.4 TWh

OUTPUT

Released into atmosphere

CO_2 (carbon dioxide)*	54.99 million t-CO_2
SOx (sulfur oxides)	3,412 t
NOx (nitrogen oxides)	5,541 t

* Includes electricity purchased from other electric companies.

Released into water areas

COD emission	35 t
Total effluents	7.33 million m^3

Radioactive waste

Volume of low-level radioactive waste generated*	5,150 drums (200 L drums)

* Net generation (generated amount – reduced amount)

Industrial waste, etc.

Total amount of emissions		342 thousand t
Processing classification	Recycled or reused	333 thousand t
	Reduction in intermediate treatment	3 thousand t
	Landfill disposal	6 thousand t
Recycled rate		98.3%

Emissions from vehicle use

CO_2 emissions	11 thousand t-CO_2

Environmental efficiency (with FY 1990 level as 100)

Amount of electric power sold / Composite index* ····· 128

Amount of electric power sold / Amount of CO_2 emissions ····· 97

*Composite index = Environmental load caused by CO_2, SOx, NOx, and landfill disposal of industrial waste + Resources consumed Oil, coal, LNG

Note: Totals may not tally due to rounding

Eco Action (targets and results)

We set annual targets for our environmental efforts and undertake various activities to realize them in accordance with the environmental policies of the Kansai Electric Power Group. Our 2007 fiscal-year targets and results, and our targets for 2008 and later, are as shown below.

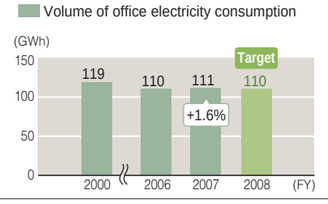
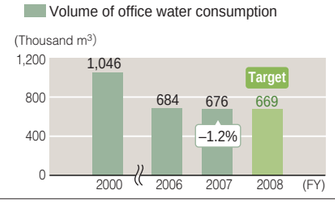
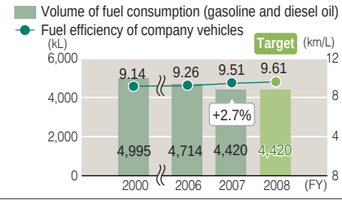
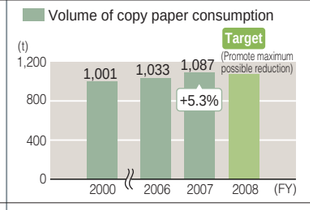
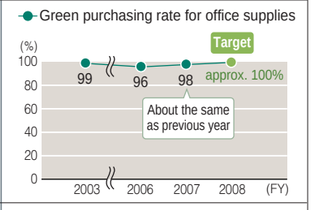
The verification mark on the left identifies items that have received an independent review from Tohmatsu Environmental Research Institute Ltd.

■ Environmental efforts in business operations

(Self-evaluation) ○: Target achieved △: Target mostly achieved ×: Target not yet achieved
—: Unable to evaluate (e.g. because target is for a date several years in the future)

Item	FY 2006 results	FY 2007 targets and results			Targets			Evaluation of FY 2007 results and future actions	Page
		Targets	Results (T)	Self-evaluation	FY 2008	FY 2009	FY 2010		
CO_2 emission reduction per unit of electric power used (sold)	0.338 kg-CO_2/kWh	Approx. 0.282 kg-CO_2/kWh (5-year average for FY 2008–FY 2012)	0.366 kg-CO_2/kWh	—	Approx. 0.282 kg-CO_2/kWh (5-year average for FY 2008–FY 2012)			There was decreased utilization of our nuclear power plants and a lower rate of nuclear power generation, along with higher sales of electric power. Due to this and other factors, there was increased operation of thermal power plants, leading to a greater volume of CO_2 emissions. We will continue to focus on the safety and stability of nuclear power generation facilities, as well as maintaining and improving the thermal efficiency of our thermal power plants and our application of the Kyoto mechanism, in order to reduce CO_2 emissions.	P. 23
Promoting “safety first” operations at nuclear power plants	77.0% facility utilization rate	Operate nuclear power plants with safety assurance measures to prevent a recurrence of an incident like the Mihama Power Station Unit 3 accident	75.0% facility utilization rate	—	Continuous improvement and effective implementation of safety assurance measures to prevent a recurrence of an incident like the Mihama Power Station Unit 3 accident, and to continue safe and secure operations			Based on the principle of “safety first,” involving proactively ensuring safety through regular checks, we are planning to carry out safety- and preventive-measure-related construction.	P. 26
Maintaining and improving the thermal efficiency rate of thermal power plants (lower calorific value base)	42.6%	42.0% or more	41.8%	△	42% or more			While we optimized the operation of thermal power plants, largely through the use of high-efficiency combined plants, factors such as a decline in nuclear power output and increases in the amount of electric power sold meant that operation of fossil fuel-based thermal power plants increased, and we were unable to meet our target. We are taking measures focused on equipment and operations, including the smooth implementation of plans to update equipment at Sakaiko Power Station.	P. 26
Limiting SF_6 emissions (calendar year basis) (gas recovery rate at inspection/removal of equipment)	98.2% (at time of inspection)	97% (at time of inspection) 99% (at time of removal)	98.3% (at time of inspection) 99.6% (at time of removal)	○	97% (at time of inspection) 99% (when scrapping)			We were able to meet our target thanks to appropriate operation of collection equipment for SF_6 gas and other strategies. We will make continued efforts to meet targets in this area in the future.	—
Development and diffusion of renewable energies	Target achieved	Achieve amount required by the RPS Law (1,020 million kWh)	Target achieved	○	Achieve amount required by the RPS Law			In fiscal 2007, we were able to achieve the amount required by the RPS Law. We intend to continue autonomously developing new types of energy such as the introduction of biomass fuel at Maizuru Power Station and purchasing electric power from new energy sources, in addition to other efforts in this area.	—
	Power output from subsidized facilities: 30 MW	Promote the Kansai Green Electricity Fund	Power output from subsidized facilities: 37 MW	—	Promote the Kansai Green Power Fund			In fiscal 2007, we expanded the range of organizations eligible for diffusion and development-related energy aid to include public-benefit groups such as schools and NPOs, resulting in an increase in the number of subsidies provided. We plan to provide further support for diffusion and promotion in the future by collecting subsidies, distributing PR leaflets, etc.	P. 24
Reducing customer CO_2 emissions through the diffusion and expansion of EcoCute	95 thousand t-CO_2	138 thousand t-CO_2	148 thousand t-CO_2	○	192 thousand t-CO_2	246 thousand t-CO_2	300 thousand t-CO_2	Use of the EcoCute water heater continued to expand at a steady rate, and we will continue to work for its widespread adoption.	P. 24
Adoption of low-pollution vehicles (ratio of low-pollution vehicles to all vehicles)	59.0%	61%	68.2%	○	69%	70%	71%	By continuing to purchase low-pollution vehicles, we were able to achieve results exceeding our target. We intend to continue pushing for a higher purchasing rate of low-pollution vehicles.	P. 25
Promotion of household environmental account books	————	————	————	—	Encourage use of Kansai Electric Power environmental household account books both inside and outside the company			As we attempt to meet the targets set by the Kyoto Protocol, reduction of CO_2 emissions in the residential sector is of increasing importance. One of the Company’s contributions is to encourage use of Kansai Electric Power environmental household account books (“Eco e-Life Check”) by both employees and customers.	P. 33
Improving the recycling rate of industrial wastes	97.9%	More than 99% (up to fiscal year 2009)	98.3%	—	99% or more (by FY 2009)		99.5% or more (by FY 2012)	Working toward the goal of a recycling rate of 99% or higher by fiscal 2009, in fiscal 2007 we strengthened our in-house system, and made efforts to collect data from recycling businesses and improve information-sharing channels within the Company. We will continue working toward the goal of zero emissions.	P. 31
Proper processing of PCB wastes	Processed volume: Low-concentration PCB: 28 thousand kL (cumulative total) High-concentration PCB: 214 units (cumulative total)	Process all PCBs by the legal deadline (by 2016)	Processed volume: Low-concentration PCB: 37 thousand kL (cumulative total) High-concentration PCB: 635 units (cumulative total)	—	Process all PCBs by the legal deadline (by 2016)			A cumulative total of 37,000 kL were processed out of the 100,000 kL targeted for treatment at the Recycling Center for Utility Pole Transformers. Starting from October 2006, highly concentrated PCB waste is treated at the Japan Environmental Safety Corporation (JESCO). Aiming to treat all waste as required by the legally stipulated deadline, we continue to treat waste appropriately.	P. 30
Further introduction of systems in compliance with ISO or other certifications (compliant locations at fiscal year-end)	15 locations	Support of and expansion to appropriate numbers of locations	14 locations	×	Support of and expansion to appropriate numbers of locations			The number of locations installed with ISO-compliant systems decreased by one due to operational changes. In the future, we plan to overhaul our company-wide environmental management system, continuously improve the system, and maintain and expand the number of locations meeting requirements.	P. 21
Maintaining sulfur oxide (SOx) and nitrogen oxide (NOx) emission levels per unit of power generated — SOx	Thermal 0.045 g/kWh Overall 0.014 g/kWh	Maintain current status [(Reference) 5-year averages for FY 2002–FY 2006 0.05 g/kWh (thermal) 0.01 g/kWh (overall)]	Thermal 0.067 g/kWh Overall 0.027 g/kWh	△	Maintain current status [(Reference) 5-year averages for FY 2003–FY 2007 0.06 g/kWh (thermal) 0.02 g/kWh (overall)]			While emissions levels for fiscal 2007 exceeded those of the previous year as well as the average value for the past 5 years, by using low-sulfur fuels and installing sulfur scrubbers we made efforts to maintain emission levels, and once again achieved the world’s lowest emission levels. We will continue to use fuels with superior environmental characteristics and sustain the performance of sulfur-scrubbing equipment to maintain the world’s highest levels of cleanliness.	P. 29
NOx	Thermal 0.121 g/kWh Overall 0.039 g/kWh	Maintain current status [(Reference) 5-year averages for FY 2002–FY 2006 0.13 g/kWh (thermal) 0.04 g/kWh (overall)]	Thermal 0.109 g/kWh Overall 0.043 g/kWh	△	Maintain current status [(Reference) 5-year averages for FY 2003–FY 2007 0.12 g/kWh (thermal) 0.04 g/kWh (overall)]			While emissions levels for fiscal 2007 exceeded those of the previous year as well as the average value for the past 5 years, by using low-nitrogen fuels and installing nitrogen scrubbers, we made efforts to maintain emission levels, and once again achieved the world’s lowest emission levels. We will continue to use fuels with superior environmental characteristics and sustain the performance of nitrogen-scrubbing equipment to maintain the world’s highest levels of cleanliness.	
Measured dosages of radioactive gaseous waste in public areas around nuclear power plants	Less than 0.001 millisieverts/year	Less than 0.001 millisieverts/year	Less than 0.001 millisieverts/year	○	Less than 0.001 millisieverts/year			We are properly managing the volume of radioactive gaseous waste, maintaining a level of less than 0.001 millisieverts per year.	—

■ Office energy and resource conservation activities

Item	Reducing office electricity consumption	Reducing office water consumption	Improving fuel efficiency of company vehicles	Reducing copy paper consumption	Improving the green purchasing rate for office supplies
Targets for fiscal 2007 to 2010	1% or more reduction compared to the prior fiscal year	1% or more reduction compared to the prior fiscal year	1% or more improvement compared to the prior fiscal year	Promote maximum possible reduction	Maintain current status (approx. 100%)
Progress since fiscal 2000 (Excerpted)					
Evaluation of estimated results for fiscal 2007 and plans for future efforts	In fiscal 2007, extreme hot and cold weather resulted in a 1.6% increase in electricity consumption compared to the previous year. We will continue steady efforts to curb electricity consumption at each location, through conservation activities such as efficient energy management (appropriate control of heating and cooling, etc.) in company-owned buildings. [Self-evaluation: ×]	In fiscal 2007, we achieved a 1.2% reduction from the previous fiscal year. We will continue patient efforts at each location, such as reuse of sink water and rainwater for toilet flushing, in order to reduce water consumption. [Self-evaluation: ○]	In fiscal 2007, we made a 2.7% improvement in the fuel efficiency of company vehicles; specifically, 10.5 km/L for gasoline-powered passenger vehicles and 5.7 km/L for specialized or large-sized light diesel-powered vehicles. We plan to continue steady efforts to improve fuel efficiency at each location, including the promotion of refraining from engine idling. [Self-evaluation: ○]	In fiscal 2007, the volume of copy paper used increased 5.3% from the previous fiscal year. We will continue patient efforts at each location, including strict enforcement of the use of both sides of copy paper, and minimizing paper use during daily office activities. [Self-evaluation: ×]	Results for fiscal 2007 were almost the same as those of the previous year. We will continue steady efforts at each location in order to promote green purchasing by raising awareness among employees, etc. [Self-evaluation: ○]

Changes from the previous report

New additions

- In order to contribute to reduction of household CO_2 emissions as a part of our efforts to cope with global warming, we have added the item, “Promotion of household environmental accounting.”

Changes in items covered

- Regarding the item, “Improving the green purchasing rate for office supplies,” the number of target items was reduced from 45 to 31, with 14 recycled-paper items eliminated as a result of the incidents of recycled-paper content falsification that occurred in 2007.

Environmental management system

The Kansai Electric Power environmental management system is based on the ideas of the total quality management (TQM) system. With this system, we seek sustainable development that balances the environment, society and economics. Under the environmental policy, we are working to reduce environmental burdens in our enterprise activities through our continuous environment-improvement activities based on the PDCA cycle.

Establishment of a company-wide promotion system

In order to further strengthen and promote across departments our leading efforts to resolve environmental problems, we established the Environmental Board as an organization below the CSR Promotion Council in February 2006. The Environmental Board prepares, checks and reviews Eco Actions, which are concrete action plans for company-wide environmental management.

In addition, in 2006 we adopted the existing Cyclical Business Activities Promotion Working Group as an organization below the Environmental Board, and in 2007 we established the Working Group to Address Global Environmental Problems as part of our efforts to create a fully realized promotion system.

Fifth CSR Promotion Council (Environmental Board) (April 2, 2008)

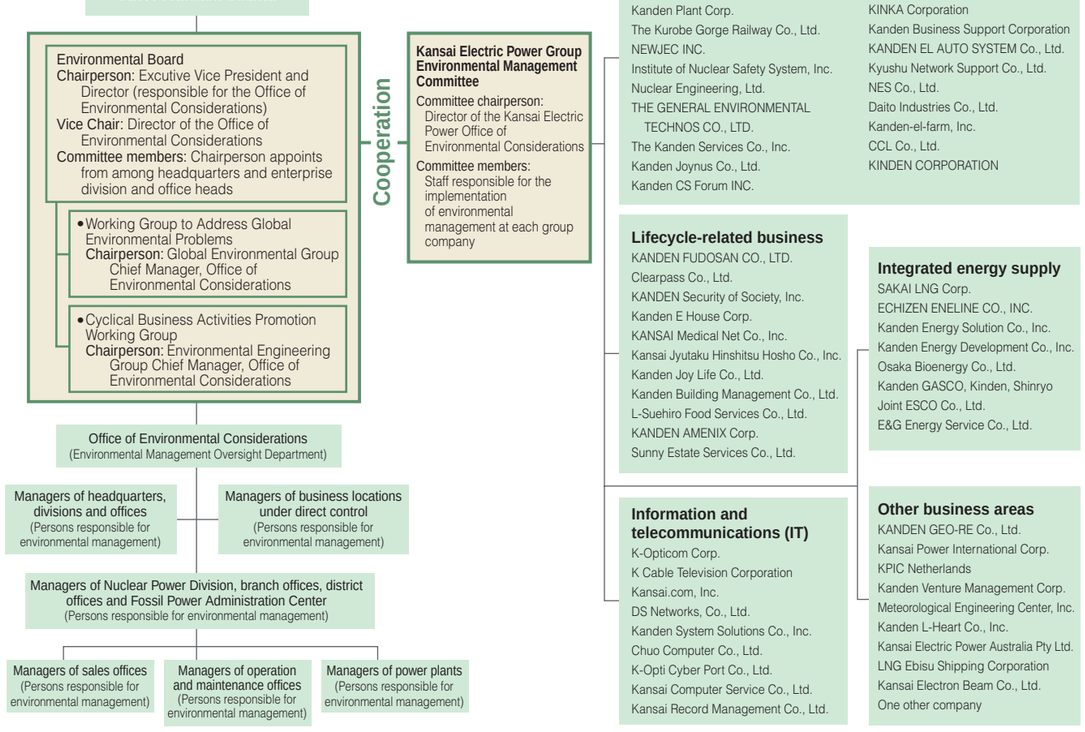
Maintenance of the group-wide promotion system

The Group Environmental Management Committee was established in August 2005, with the goal of expanding environmental management efforts at Group companies. This Committee establishes, checks and reviews the Group's Eco Action, working with the CSR Promotion Council's Environmental Board.

In FY 2007, we worked on maintaining our risk management system, focusing on legal risks related to consolidated subsidiaries and equity method affiliates, and as a result completed all applicable maintenance.

In FY 2008, we will work to boost the rate of inclusion of consolidated subsidiaries and equity method affiliates in the Group's Eco Action.

■ Environmental management promotion system of Kansai Electric Power and the Group companies



(60 companies, as of June 30, 2008)

Group business support
Kanden Engineering Corp.
ENEGATE Co., Ltd.
NIHON NETWORK SUPPORT CO., LTD.
Kanden Plant Corp.
The Kurobe Gorge Railway Co., Ltd.
NEWJEC INC.
Institute of Nuclear Safety System, Inc.
Nuclear Engineering, Ltd.
THE GENERAL ENVIRONMENTAL TECHNOS CO., LTD.
The Kanden Services Co., Inc.
Kanden Joynus Co., Ltd.
Kanden CS Forum INC.
Kanden Office Work Corp.
Kanden Power-Tech Corp.
The Kanden L & A Co., Ltd.
KINKA Corporation
Kanden Business Support Corporation
KANDEN EL AUTO SYSTEM Co., Ltd.
Kyushu Network Support Co., Ltd.
NES Co., Ltd.
Daito Industries Co., Ltd.
Kanden-el-farm, Inc.
CCL Co., Ltd.
KINDEN CORPORATION

Lifecycle-related business
KANDEN FUDOSAN CO., LTD.
Clearpass Co., Ltd.
KANDEN Security of Society, Inc.
Kanden E House Corp.
KANSAI Medical Net Co., Inc.
Kansai Jyutaku Hinshitsu Hosho Co., Inc.
Kanden Joy Life Co., Ltd.
Kanden Building Management Co., Ltd.
L-Suehiro Food Services Co., Ltd.
KANDEN AMENIX Corp.
Sunny Estate Services Co., Ltd.

Integrated energy supply
SAKAI LNG Corp.
ECHIZEN ENELINE CO., INC.
Kanden Energy Solution Co., Inc.
Kanden Energy Development Co., Inc.
Osaka Bioenergy Co., Ltd.
Kanden GASCO, Kinden, Shinryo Joint ESCO Co., Ltd.
E&G Energy Service Co., Ltd.

Information and telecommunications (IT)
K-Opticom Corp.
K Cable Television Corporation
Kansai.com, Inc.
DS Networks, Co., Ltd.
Kanden System Solutions Co., Inc.
Chuo Computer Co., Ltd.
K-Opti Cyber Port Co., Ltd.
Kansai Computer Service Co., Ltd.
Kansai Record Management Co., Ltd.

Other business areas
KANDEN GEO-RE Co., Ltd.
Kansai Power International Corp.
KPIC Netherlands
Kanden Venture Management Corp.
Meteorological Engineering Center, Inc.
Kanden L-Heart Co., Inc.
Kansai Electric Power Australia Pty Ltd.
LNG Ebisu Shipping Corporation
Kansai Electron Beam Co., Ltd.
One other company

Eco Action: Group company concrete action plans

Starting in the 2005 fiscal year, we at Kansai Electric Power Group began working to implement concrete plans for the environment, called Eco Actions.

In fiscal 2007 results, we achieved our targets in one area: reducing utility water consumption. In other areas, however, we were unable to reach our targets.

Henceforth, we will seek to expand the number of Group companies implementing Eco Action, and continue to promote activities to reach our targets for each area.

Please note that due to the recycled-paper content falsification incidents that occurred in 2007, we have eliminated "purchasing recycled copy paper" as a category for evaluation in fiscal 2007.

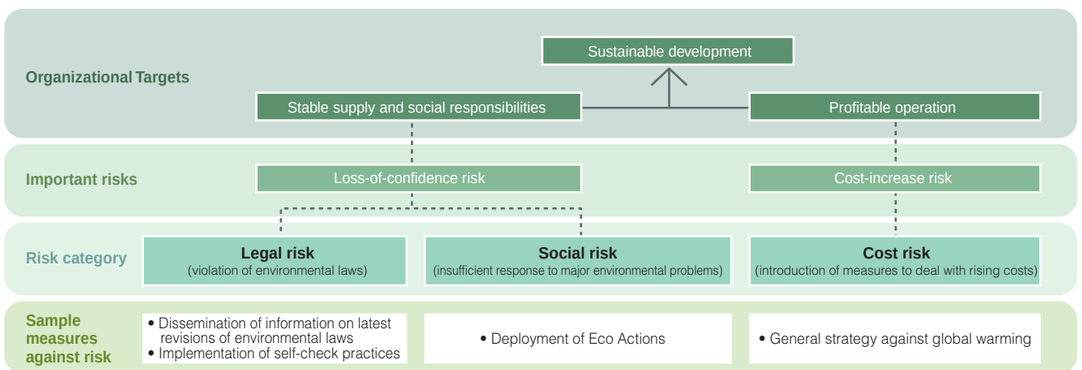
Item	FY 2006 results ∗ 34 target companies in FY 2006 ( ) cumulative total for 38 companies	Targets and results in FY 2007		Targets			Evaluation (Reasons for increase/reduction)
		Targets	Results (∗ 34 target companies)	FY 2008	FY 2009	FY 2010	
Reducing office electricity consumption	46.5 million kWh (46.8 million kWh)	1% or more reduction compared to the previous fiscal year	1.7% increase compared to the previous fiscal year 47.3 million kWh	1% or more reduction compared to the previous fiscal year			The number of companies under review decreased, but due to increases in the number of business locations and other factors, we were unable to reach our target. We will continue to carry out energy-saving activities.
Reducing utility water consumption	251,000 m^3 (253,000 m^3)	1% or more reduction compared to the previous fiscal year	1.2% reduction compared to the previous fiscal year 248,000 m^3	1% or more reduction compared to the previous fiscal year			As we worked aggressively in areas such as raising awareness of water conservation, water consumption volume fell, enabling us to reach our target. We will continue to carry out water-saving activities.
Improving fuel efficiency of company vehicles	9.0 km/L (9.0 km/L)	1% or more improvement compared to the previous fiscal year	1.3% decrease compared to the previous fiscal year 8.9 km/L	1% or more improvement compared to the previous fiscal year			While we promoted Eco-Drive principles such as enforcement of the "idling-stop" policy, we were unable to reach our target due to increases in the number of short-distance trips and other factors. We will continue to promote Eco-Drive.
Reducing copy paper consumption	698.5 t (706.5 t)	Reduce as much as possible	18.7% increase compared to the previous fiscal year 829.1 t	Reduce as much as possible			The number of companies under review decreased, but due to increases in the number of business locations maintained under the system and other factors, we were unable to reach our target. We will continue making efforts to use less paper.

∗ In FY 2007, the number of companies under review was reduced from 38 to 34. This report evaluates the results of those 34 companies.

Maintaining an environmental risk management system

At Kansai Electric Power, we divide environmental risk into three categories—legal risk, social risk and cost risk—and carry out necessary risk management by keeping employees informed of revisions to environmental laws, Eco Action, etc. We intend to extend this risk-management approach to all applicable Group companies and deploy environmental risk management Group-wide.

■ Environmental risk management system



Observance of laws, regulations and other rules

Kansai Electric Power strictly abides by all laws and regulations related to the environment. We also ensure compliance with environmental protection agreements concluded with local governments in the areas of our power plants, and none of our facilities have violated the terms of these agreements. We did not receive any guidance, notices or orders from any national or local government entities in fiscal 2007 regarding these environmental laws, regulations and agreements.

Management systems compliant with ISO standards

Since the 1997 fiscal year, we have been implementing environmental management systems (EMS) that conform to the ISO 14001 standard, an international body of environmental management, especially at our thermal power stations. In model operations for each business type, the Company has received ISO 14001 external certification, and in February 2005, our Hokusetsu Sales Office acquired Eco Action 21 certification from the Ministry of the Environment.

In addition, starting in 2008 at the Ohi Power Station, we have been working to merge EMS with quality management systems (QMS) with the goal of jointly achieving targets for quality management and environmental management.

Henceforth, in consideration of the activities of these model business locations, we will focus on deploying EMS throughout the Group, as well as working to combine EMS with QMS.

■ Business locations that have acquired ISO 14001 external certification (as of the end of FY 2007)

Kansai Electric Power

Business type	Name of business location	Date of Registration	Certification Agency
Power Generation	Himeji No. 1 Power Station (thermal)	March 24, 2000	Organization of International Standards Certification Co., Ltd.
	Himeji No. 2 Power Station (thermal)	March 23, 2001	
	Kainan Power Station (thermal)	October 27, 2000	Japan Audit and Certification Organization
	Nanko Power Station (thermal)	March 29, 2002	
	Ohi Power Station (nuclear)	October 25, 2002	
Distribution	Himeji Operation and Maintenance Office	March 29, 2002	Organization of International Standards Certification Co., Ltd.
	Power Distribution and Sales Division, Technical Test Center	January 26, 2004	

Group

Business type	Name of Group company
Power support	KINDEN CORPORATION
	Kanden Engineering Corp.
	Kanden Plant Corp.
	ENEGATE Co., Ltd.
	NEWJEC INC.
	THE GENERAL ENVIRONMENTAL TECHNOS CO., LTD.
Information technology	K-Opticom Corp.

■ Business locations that have acquired Eco Action 21 certification (as of the end of FY 2007)

Business type	Name of location	Date of registration	Certification agency
Sales	Hokusetsu Sales Office	February 16, 2005	Institute for Global Environmental Strategies Sustainability Center

Challenges undertaken by Group companies

Thorough purification of contaminated soil at low cost

KANDEN GEO-RE Co., Ltd.

Up until now, soil contaminated by factory runoff and other pollutants has generally been purified using either the “washing” or “heat treatment” method. There are advantages and disadvantages to both, as washing can be done at low cost, but there are limits to the pollutants it can eliminate, and it has a low recycling rate, whereas heat treatment is highly effective, but the cost is high due to the consumption of fuel and other factors.

By combining these two purification methods into one progressive treatment system, KANDEN GEO-RE Co., Ltd. has been able to exploit the advantages of both methods, establishing a treatment technology capable of thoroughly cleaning up almost any pollutant at minimum cost.

As a result, the purified soil can be reused for gardening or for shoring up foundations, achieving a recycling rate of 97% or more.

As an organization of professionals in contaminated soil cleanup, KANDEN GEO-RE offers clients a complete range of solutions from soil testing to sale of purified soil.

This business has been able to play a part in the movement toward efficient use of land, and thus to contribute to the realization of a sound material-cycle society.

Washing facility

Heat treatment facility (rotary kiln)

■ Purification capabilities, etc. of KANDEN GEO-RE Co., Ltd.

Purification capabilities	Washing	330 t/day (top class for the industry)
	Heat treatment	Rotary kiln: 100 t/day
Pollutants that can be dealt with	Oil, hazardous substances covered under the Soil Contamination Countermeasures Law, etc.	
Property area	Approx. 3 ha	
Volume of soil able to be stored	Contaminated soil	Approx. 15,000 t (indoors)
	Purified soil	Approx. 8,000 t

Environmental accounting

At Kansai Electric Power, in order to clarify the costs of environmental protection efforts in our business activities and the benefits attained by these efforts, we have conducted environmental accounting of the annual results since the 1999 fiscal year for Kansai Electric Power as an individual company, and since fiscal 2003 for the entire Kansai Electric Power Group, and have made these results public.

Evaluation of the 2007 fiscal year

Environmental protection costs

Investments increased by ¥7.9 billion over the past fiscal year to ¥32.7 billion. Primary factors were CO_2 reduction measures such as the construction of biomass mixed combustion facilities at Maizuru Power Station Unit 1 (a ¥3.0 billion increase), anti-oil leakage work at transmission and substation facilities (a ¥2.6 billion increase), and work on air pollution prevention measures at Maizuru Power Station Unit 2 (a ¥1.9 billion increase).

In expenses, there was a dramatic rise in the use of thermal power plants due to the increased amount of electric power sold, resulting in expenses such as the cost of low-sulfur fuel as an anti-pollution measure (a ¥7.0 billion increase), and the operating costs of air/water pollution prevention equipment (a ¥2.6 billion increase). As a result, expenses rose by ¥10.4 billion over the previous fiscal year to ¥55.9 billion.

■ Environmental protection costs (Millions of yen)

Category	Investment		Expense	
	FY 2007	FY 2006	FY 2007	FY 2006
Ⅰ. Cost of measures against global environmental problems (CO_2 reduction measures, etc.)	33.5	6.9	32.2	22.3
Ⅱ. Cost of conservation of regional environments	288.3	240.6	372.2	275.6
1. Measuring and monitoring of environmental impact	0.3	0.0	25.5	25.7
2. Pollution prevention (anti-air pollution measures, anti-water contamination measures, oil leakage prevention measures, etc.)	204.8	160.1	309.3	209.9
3. Natural environment protection and harmonization	83.2	80.5	37.4	40.0
Ⅲ. Cost of building a sound material-cycle society	0.3	0.2	91.8	97.0
1. Treatment and recycling of industrial waste	0.3	0.2	50.8	48.9
2. Treatment and recycling of general waste	–	–	0.2	0.2
3. Treatment of radioactive waste	–	–	40.7	47.9
4. Green purchasing	0.0	0.0	0.1	0.0
Ⅳ. Cost of environmental management	4.3	0.3	33.3	32.2
Ⅴ. Cost of research and development	0.6	0.4	19.6	16.8
Ⅵ. Other costs	0.2	0.1	10.1	11.0
1. Coexistence with local communities and support for environmental education	–	–	2.0	2.5
2. International activities	0.2	0.1	0.1	0.1
3. Environmental compensation and contributions	–	–	8.0	8.4
Total	327.3	248.5	559.1	454.9
Total investment for the period concerned	2,688	2,237	–	–
Total running costs for electric utilities business during the period concerned	–	–	23,330	21,687

Economic effect of environmental protection efforts

In terms of economic effects, cost reduction due to reuse and recycling dropped by ¥1.0 billion from the previous year, but savings on fuel costs* due to increased thermal efficiency of thermal power plants amounted to ¥4.8 billion yen. This means that the economic effect on Kansai Electric Power grew by ¥3.9 billion from the previous year to ¥28.4 billion.

* Savings on fuel costs during the period concerned were calculated from an improvement in thermal efficiency compared with that of the 1990 reference year.

■ Economic effect of environmental protection efforts (Millions of yen)

Category		FY 2007	FY 2006
Revenue	Business income from recycling, etc.	27.1	26.3
Expenditure	Cost reduction by energy saving (improved thermal efficiency of thermal power plants, etc.)	222.2	173.8
	Cost reduction by material reuse and recycling	34.2	44.6
	Other	0.6	0.6
Total		284.1	245.3

Eco-efficiency

Kansai Electric Power conducts trial calculations of the relationship between the environmental loads of our business activities and the economic value that those activities produce to measure the eco-efficiency index (in which the 1990 fiscal year is given a value of 100). Eco-efficiency for the 2007 fiscal year declined from the previous year, with the volume of power sold divided by the composite index equaling 128 (a 17-point decrease from the previous year) and the volume of power sold divided by the volume of CO_2 emission equaling 97 (a 7-point decrease from the previous year). A primary cause was the increased environmental burden (CO_2, SOx, NOx emissions volume) due to the increased operation of thermal power plants.

* In calculations starting in fiscal 2007, we are using the LIME2 integrated coefficient developed by the Lifecycle Assessment Research Center.

Group environmental accounting efforts

Group environmental accounting efforts focused on all or some of the companies participating in the Kansai Electric Power Group Environmental Management Committee.

In fiscal 2006, we focused on all 38 participating companies, but in fiscal 2007 we focused on 35 out of the 58 participating companies. 25 new companies participated in the Committee, while 5 withdrew, whereas 2 new companies became the focus of environmental accounting, while 5 were removed from being the subject of accounting.

We will continue to work to expand the scope of our environmental accounting.

■ Environmental protection costs (Millions of yen)

Category	Main items	Investment		Expense	
		2007	2006	2007	2006
Management activity costs	ISO implementation and operation	5	3	697	685
Pollution prevention costs	Maintenance of air/water pollution prevention equipment	60	13	34	29
Recycling costs	Ordinary/industrial waste processing/ recycling	0	0	509	572
Social activity costs	Planting activities, participation in non-company projects	–	–	5	5
Other costs	Levies on pollution levels	20	22	73	17
Total		85	38	1,319	1,307

■ Economic effect of environmental protection efforts (Millions of yen)

Category		FY 2007	FY 2006
Revenue	Business income from recycling, etc.	355	765
	Sales proceeds from eco-products, etc.	119	13
Expenditure	Cost reduction by energy saving, etc.	57	20
Total		532	798

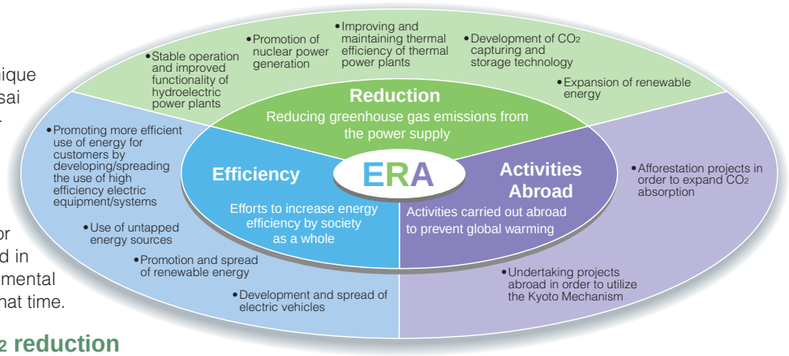
Global warming prevention efforts

Promoting our New ERA Strategy of comprehensive measures to prevent global warming and developing the initiatives for the reduction of greenhouse gases and appropriate energy use worldwide.

The verification mark on the left identifies items that have received an independent review from Tohmatsu Environmental Research Institute Ltd.

New ERA Strategy

New ERA (pronounced "era") is a unique overall strategy developed by Kansai Electric Power, consisting of the well-balanced promotion of three strategies–efficiency (E), reduction (R) and activities abroad (A)–with the goal of contributing to the battle against the global warming problem for many years to come. It was formulated in 1995 by systematizing the environmental policies that had been in place up to that time.



Kansai Electric Power's CO_2 reduction target and performance through implementation of the New ERA strategy

Setting targets aimed at reducing the CO_2 emissions factor

Kansai Electric Power has been promoting our New ERA Strategy with the goal of reducing the volume of CO_2 emissions proportional to the volume of electric power consumed (sold), known as the CO_2 emissions factor. As a result, CO_2 emissions factor reduction has reached the highest standards for the industry, but with the goal of establishing a low-carbon power grid, we have set the challenging goal of reducing emissions by an average of 0.282 kg-CO_2/kWh per year over the first five-year commitment period of the Kyoto Protocol (FY 2008–FY 2012), and are pushing for further results.

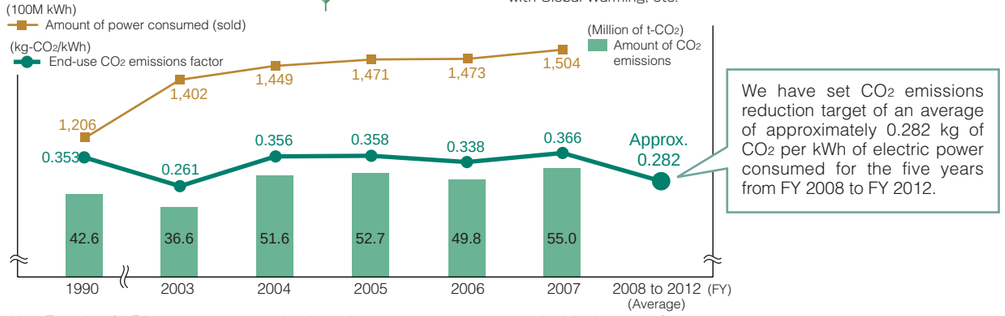
CO_2 emissions factor reduction results

Due to the decreased utilization of our nuclear power plants and a lower rate of nuclear power generation, along with higher electric power sales and other factors, the volume of CO_2 emissions increased compared to fiscal 2006, and the CO_2 emissions factor for our fiscal 2007 was 0.366 kg-CO_2/kWh.*

Henceforth, with the goal of establishing a low-carbon power grid, we will focus on increasing the utilization of nuclear power generation facilities, where our top priority is safety, as well as improving the thermal efficiency of our thermal power plants and our application of the Kyoto mechanism related to the reduction of CO_2 emissions on a global scale.

* This is a provisional value. The government will officially announce actual values, based on the Law concerning the Promotion of Measures to Cope with Global Warming, etc.

■ Change in CO_2 emissions factor, etc.



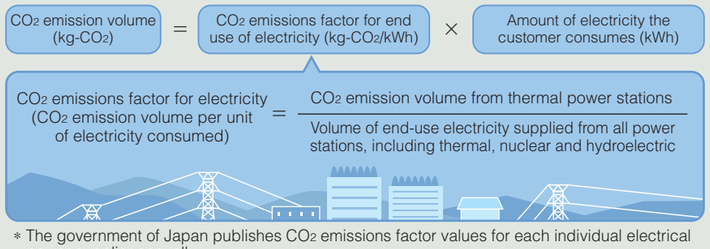
We have set CO_2 emissions reduction target of an average of approximately 0.282 kg of CO_2 per kWh of electric power consumed for the five years from FY 2008 to FY 2012.

Note: The values for FY 2005 onward are calculated based on the calculation, reporting and publication system for greenhouse-gas emission volumes, as mandated in the Law Concerning the Promotion of the Measures to Cope with Global Warming. Note that under this system, CO_2 reduction values such as green power certifications are not taken into consideration.

CO_2 emissions factor and our customers' lifestyles

The volume of CO_2 emitted as a result of customers' use of electricity is obtained by multiplying the CO_2 emissions factor for electricity use with the amount of electricity the customer uses. Kansai Electric Power contributes to reduction of customers' CO_2 emission volumes by making efforts to further lower the CO_2 emissions factor, as well as offering energy-saving suggestions.

■ How to calculate CO_2 emission volumes in electricity use



* The government of Japan publishes CO_2 emissions factor values for each individual electrical power supplier annually.

Efficiency — achieving more efficient energy use throughout society

We are working to promote customer energy conservation methods, the development and popularization of new energy and other ways to increase more efficient use of energy throughout society.

Promotion of more efficient energy use

At Kansai Electric Power, in order to assist our customers in practicing more efficient energy use, we are making efforts in areas such as the "development and deployment of highly efficient equipment and systems" and "proposals for improving procedures for using customers' equipment." For example, to our corporate customers, we suggest solutions such as highly efficient air conditioning and heat pumps for hot water supply, whereas for individual customers, we are working to popularize the use of EcoCute, a high-efficiency water heater employing heat-pump technology that can realize three times the heat energy per unit of electric power consumed. The use of such energy-saving devices can help us to cut CO_2 emissions drastically.

Energy-efficient EcoCute can contribute to the battle against global warming

Informing the public about energy-saving practices

Kansai Electric Power is dedicated to assisting its customers in practicing efficient energy use. For our corporate customers, we provide a full suite of services for this purpose throughout the entire equipment cycle from equipment planning and design to installation, operation and maintenance. To serve individual customers, we provide a wealth of information about energy-saving techniques, including the household environmental account book.

Providing information about saving energy through websites and pamphlets

Kansai Electric Power distributes pamphlets that explain how customers can use energy wisely, without undue effort or waste. The Group's website includes a page that introduces tips on and fun ways of saving energy.

The Ekoda family's energy-saving lifestyle

Web Enjoy Sho-ene Life: The Ekoda family's energy-saving lifestyle
http://www.kepco.co.jp/sho-ene/index.html

Service to find out how much energy you use

The energy use notice we deliver every time a customer's electricity meter is read contains a comparison with the amount of electricity used in the same month of the previous year. On our website, customers can view their accounts to see how much electricity they have used in the past 15 months. Information services such as these provide a handy index for reducing lighting and heating expenses and saving energy.

Web Referring to the electric bills of the past 15 months
http://www.kepco.co.jp/service/syoukai/index.html

Promoting the use of renewable energy

Mini-hydropower generation

In February 2007, Kanden Energy Development Co., Inc., a member of Kansai Electric Power Group, began a mini-hydropower generation project in collaboration with the Toyonaka City Water and Sewer Commission. Installed inside Toyonaka City's Terauchi water distribution site, this mini-hydropower plant employs the pressure of tap water en route from the clean water reservoir to the distribution reservoir to drive a 129 kW generator. Efficient use of this water pressure, which had previously gone unused, made it possible to cover the electric power needs of the water distribution site. Kansai Electric Power purchased the leftover power.

Mini-hydropower generation at the Toyonaka City Terauchi water distribution plant

Use of biofuels

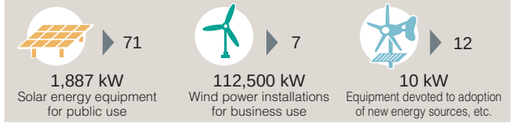
In Osaka Prefecture, we have been involved since 2007 in the Ecological Fuel Practical Application Region System Verification Project, a verification project commissioned by the Ministry of the Environment and aimed at advancing the distribution and use of "E," a type of gasoline containing 3% bioethanol. We are participating in the project by registering several of our company vehicles and running them on E3.

The Kansai Green Electricity Fund

The Kansai Green Electricity Fund (operated by the Kansai Institute of Information Systems and Industrial Renovation (KIIS) is a citizen participation project that solicits contributions from customers in the Kansai region to assist in the construction of renewable energy generating equipment that does not emit CO_2. Kansai Electric Power is proud to match its customers' contributions, taking an active part in the quest to promote the increased use of new energy sources.

Assistance in fiscal 2007 was given to 6 solar energy installations, 2 wind power installations, and 7 facilities devoted to the adoption and development of renewable energy sources, meaning that the total number of installations assisted since the launch of the fund in fiscal 2000 now amounts to 90.

■ Results as of fiscal 2007 (Number of installations assisted / Total amount of power output by equipment)



Energy conservation in the area of freight shipping

As a result of the revision of the Act Concerning the Rational Use of Energy (energy saving law) in 2007, the Company was designated by the Japanese government as a specified freight shipper, and has been cooperating appropriately by reporting the volume of energy consumed by freight shipping. More than 90% of our domestic freight transport, mostly consisting of fossil fuels, is carried out by ship, and there is a continuing modal shift. However, we will not be complacent with these results, and will continue to strive for reduced energy use in the area of freight shipping.

Adoption of electric vehicles

Electric vehicles do not emit CO_2 (carbon dioxide), NOx (nitrogen oxides) and SOx (sulfur oxides) while running, and even when the electrical energy consumed when recharging the battery is taken into account, they still emit only about 30% of the carbon dioxide of gasoline-powered cars. This makes them ideal next-generation automobiles, capable of drastically reducing the burden on the environment.

While employing test vehicles under development for everyday company operations, Kansai Electric Power collects data on them and evaluates their acceptability and practicality, continuing efforts toward the mass-market acceptance of electric vehicles.

Electric test vehicles are used for everyday purposes to assess their practicality and other factors.

Office activities aimed at conserving energy and resources

Efforts toward environmental friendliness at the Kansai Electric Power Building

The Kansai Electric Power Building, housing our new corporate headquarters, which started operations in 2005, implements a wide variety of features to be a "model for environmentally friendly buildings." Following the Minister of the Environment Award for Initiatives to Prevent Global Warming in November 2005, the building was awarded the 2nd Sustainable Architecture Award (Institute for Building Environment and Energy Conservation Chairperson Prize) in February 2008, showing society's continued appreciation of our efforts.

Kansai Electric Power Building

● Efforts to use natural energy

The building is constructed to make effective use of natural ventilation and lighting, and it makes active use of natural energy with features such as solar panels installed on every floor. Also, while maintaining excellent energy conservation by utilizing the heat from river water for air conditioning, the building avoids releasing heat directly into the atmosphere, helping to curb the heat island phenomenon.

Inside the Kansai Electric Power Building, the Nakanoshima 3-chome District Heat Supply Facility is gaining attention as a pioneering example of a technique to mitigate global warming and the heat island phenomenon

● Promotion of energy conservation

With automatic lighting in work areas and efficient air conditioning methods, we combine energy conservation with comfort.

● Promotion of electric load leveling

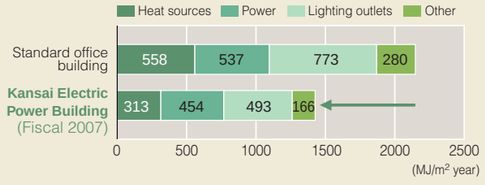
While hot water supply equipment is run on nighttime power supply, the building's heat storage or large-scale ice thermal storage is used to reduce daytime peak energy consumption.

● Effective use of resources

Rainwater, water draining from sinks, etc., are treated and reused as water to flush toilets, resulting in a 40% reduction in water use.

■ Expected effects

Through these efforts, the energy consumption on an office floor will be about 30% less than on a standard office floor.



Energy management at business locations

In order to push for further reductions in energy consumption at Kansai Electric Power business locations, some locations have adopted "energy management." At target locations, the daily energy consumption is measured precisely and continually, data is confirmed and analyzed, and effective strategies are put into place.

In operations during fiscal 2007, in addition to the energy conservation activities already in place, efforts such as data-based adjustment of air conditioning controls have succeeded in reducing the energy consumption by 3% or more in comparison with the preceding year. While continuing these activities, we will attempt to make maximum possible use of the knowledge gained through them to provide opportunities for more efficient energy use to our customers.

■ Progress of electric power consumption during operations in fiscal 2007

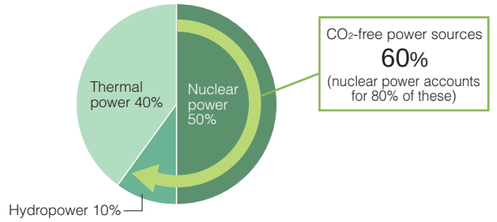
Reduction — decreasing greenhouse gas emissions through the supply of electric power

We are working actively to reduce greenhouse gas emissions through promotion of nuclear power generation that puts assurance of safe and stable operation first, as well as maintenance and improvement of thermal power plant efficiency and other aspects of the electric power supply.

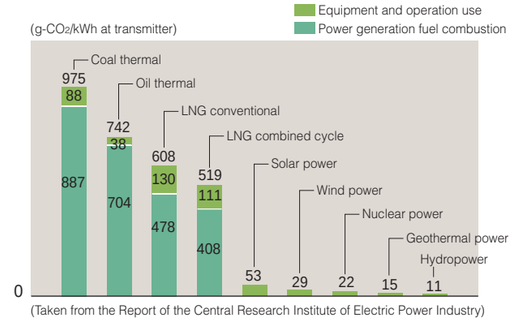
Promoting nuclear power generation

Nuclear power generation does not produce CO_2 emissions that cause global warming, and so is a valuable means to prevent global warming. Moreover, the uranium used in nuclear power plants as fuel is available in a number of politically stable countries, assuring stability of supply and economic efficiency. For these reasons, Kansai Electric Power considers the continuation of nuclear power generation to be a high priority, and is actively pressing ahead with its development.

■ Percentage of CO_2-free power sources (amount of electric power generated at Kansai Electric Power facilities in fiscal 2007)



■ Lifecycle CO_2 emissions factor by source



(Taken from the Report of the Central Research Institute of Electric Power Industry)

* Calculations take into account all energy consumed, not just the fuel burnt in producing the electricity but also the energy consumed in obtaining the basic fuel for the construction of facilities, transportation of fuel, refining, use and maintenance.

Stable operation and improved capability of hydropower generation

With a long history of providing power derived from water, one of nature's gifts, hydropower generation is a purely domestic Japanese energy source, excellent in terms of both stability of supply and economic efficiency. In addition, like nuclear power, it is an environmentally friendly method of power generation that emits no CO_2 during the process. Kansai Electric Power will continue to carry out all appropriate maintenance to ensure the continued stable operation of hydropower generation facilities, and promote the switch over to variable-speed operation at pumped-storage hydropower plants, with the goals of flexible response to changes in demand and lightening of the burden on the environment.

Maintaining and improving the thermal efficiency of thermal power plants

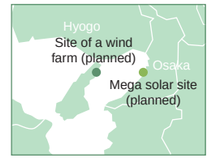
Improving the thermal efficiency of thermal power plants contributes directly to the saving of fossil fuels, and as a result, CO_2 emissions can be reduced. At the Sakaiko Power Station, we are presently pursuing a facility renewal plan that will incorporate a state-of-the-art, combined-cycle power generation method (improving thermal efficiency from 41% to 58%) with a temperature in the entrance of the gas turbine of around 1,500°C. Phased launch of operations at the new facility will begin in April 2009. In other power plants, the Company is continuously pursuing improvements in both equipment and operation in order to maintain and raise thermal efficiency.

■ Comparison of CO_2 emission volumes before and after facility renewal at Sakaiko Power Station

	Now	After facility renewal	Evaluation
Output (unit: 10,000 kw)	200	200	Equivalent
CO_2 emissions factor (kg-CO_2/kWh)	0.51	0.36	Approx. 30% reduction

Actively developing wind and solar power generation

Renewable energy sources such as wind and solar power do not emit CO_2 during the power generation process. The Kansai Electric Power Group has been steadily developing these technologies.



Wind farm planned on Awaji Island

With limited locations suitable for wind power generation, the Kansai region has relatively few installation of wind power generators compared to the other regions of Japan. However, a site with relatively strong and steady wind has been found on Awaji Island, and Kanden Energy Development Co., Inc., a subsidiary of the Kansai Electric Power Group, is planning a wind farm with 12 turbines generating a total of 24,000 kW of power.

Mega solar power generation plan on the Sakai City waterfront

The Company, Sakai City and Sharp Corporation have agreed to cooperate on the Sakai City Waterfront Mega Solar Power Generation Plan at the following two locations.

❶ Sakai No. 7-3 District Solar Power Generation Plant (tentative name)

[Output: approx. 10 MW (10,000 kW); Scheduled start of construction: Fiscal 2009; Scheduled start of operation: Fiscal 2011]

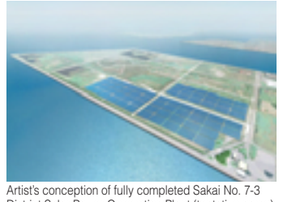
The Company will build a solar power generation plant in Sakai No. 7-3 District, on an industrial waste landfill in Nishi Ward, Sakai City.

❷ Sakai Manufacturing Complex Solar Power Generation Facilities (tentative name)

[Output: Approx. 9 MW (9,000 kW) initially, with maximum of 18 MW (18,000 kW); Scheduled start of construction: by March 2010; Scheduled start of operation: by March 2011]

The Kansai Electric Power Group and Sharp will install solar power generation facilities on Sharp's and other companies' buildings in the complex, which is currently under construction.

The two power generation facilities will have a combined output of approximately 28 MW (28,000 kW), making this one of the largest solar power facilities in the world. When completed and operational, this project will result in CO_2 emission reductions of approximately 10,000 tons a year.



Artist's conception of fully completed Sakai No. 7-3 District Solar Power Generation Plant (tentative name)

Activities Abroad — efforts overseas to prevent global warming

Making use of the technological capabilities, knowledge and expertise that we have gained through years of operation as an electricity supplier, Kansai Electric Power is developing activities such as using the Kyoto mechanisms to contribute to the mitigation of global warming.

Installation of solar power generation equipment in Tuvalu

At an elevation of only 2 meters above sea level, the island nation of Tuvalu is under threat of sinking beneath the ocean due to rising sea levels caused by global warming and other factors.

As part of its environmental preservation activities with e8 (a conference of the world's major electric power companies), the Company has installed a 40 kW solar power generator in Tuvalu's capital Funafuti, and is working to pass along our construction, engineering and operation know-how. The solar power generator commenced operation in February 2008, and the Company is participating over the next 2 years by monitoring operations and providing support at the power station.

Project name	Tuvalu Solar Power Generation Project
Participants other than Kansai Electric Power	Tokyo Electric Power, Tuvalu Electricity Corporation
Volume of CO_2 reduction	About 50 t-CO_2/year
Participation period	2007–2010

Tuvalu is a small island nation in the South Pacific, only 2 meters above sea level

Solar power generation equipment

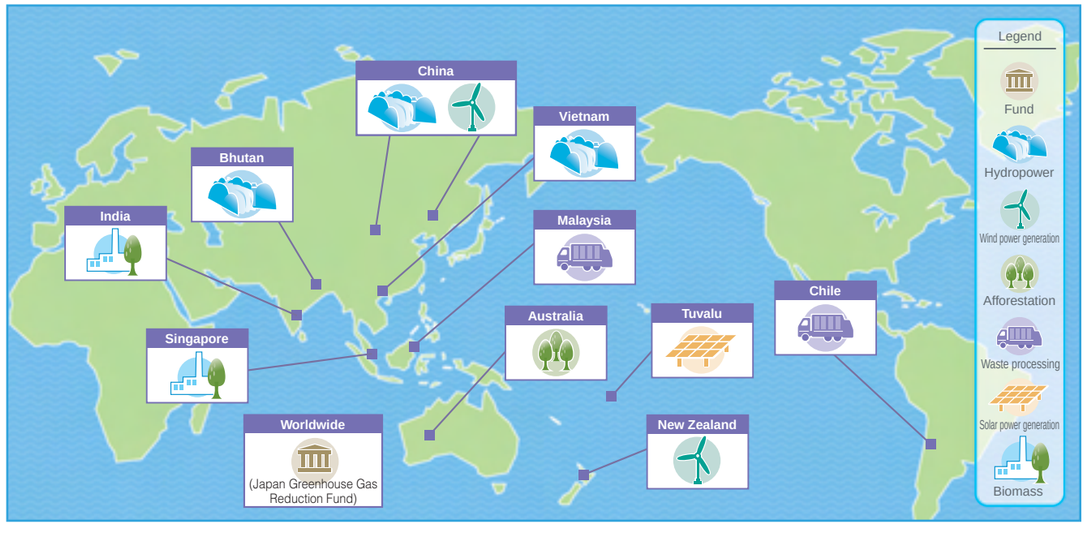
Environmental afforestation enterprise in Australia

Past logging practices in Australia have led to serious environmental problems, as soil salination has made previously arable land unfit for farming. In response to this crisis, since fiscal 2002, the Kansai Electric Power Group has been carrying out a co-benefit environmental afforestation enterprise to counter global warming and soil salinization at the same time. In an agricultural area leased outside Perth in Western Australia, we have planted malee eucalyptus trees in belts about 10 m wide, extending a total of approximately 900 km (about 2.5 million trees covering about 1,000 ha).

Project name	Western Australia Environmental Afforestation Project
Participants other than Kansai Electric Power	Oil Mallee Company, General Environmental Technos Co., Ltd.
Volume of CO_2 reduction	About 860,000 t-CO_2/20 years
Participation period	2002–2022

Part of the malee eucalyptus forest, planted in belts (photo shows a local excursion to the site)

Main overseas projects by Kansai Electric Power



About the "Clean Development Mechanism" and "Joint Implementation"
These are methods of greenhouse gas emissions reduction laid out by the Kyoto Protocol. When developed countries take part in projects in other countries aimed at reducing emissions of greenhouse gases such as CO_2 and methane, the volume of emissions reduced can be put toward meeting the developed country's reductions target. The "Clean Development Mechanism" (CDM) is a system in which developed countries conduct projects in developing countries aimed at reducing emissions of greenhouse gases, and "Joint Implementation" (JI) is a system in which two or more developed countries collaborate on such a project.

Participation in wind power generation project in New Zealand

There are a total of 134 wind turbine generators in operation at Tararua Wind Power Station in Palmerston North on the north island of New Zealand, making it the largest wind power station in the Southern Hemisphere. The Company participated in the Phase 3 project by installing 31 wind turbine generators, (respectively 3,000 kW) and selling the power generated by them.

For this project, Kansai Electric Power received Joint Implementation (JI) certification from the New Zealand government, becoming the first Japanese corporation to participate in a JI project in New Zealand.

Project name	Phase 3 Tararua Wind Power Station Project
Participants other than Kansai Electric Power	TrustPower Limited
Volume of CO_2 reduction	About 230,000 t-CO_2/year
Participation period	2008–2012

Tararua Wind Power Station on New Zealand's north island

Efficient use of waste heat in Singapore

In this project, the waste heat from an incineration facility for thinned wood and other waste materials in Singapore's Sungei Kadut district is put to use for drying spent grain from a beverage factory and for maintaining the storage temperature of chemicals. Efficient use of waste heat from the incinerator allows for suppression of greenhouse gas emissions, in contrast to previous use of fossil fuels.

This project was the first to be authorized by the government of Singapore as a CDM project, and we will make efforts to apply for CDM registration.

Project name	Thermal Energy Recovery for New Applications Project
Participants other than Kansai Electric Power	Bee Joo Industries Pte Ltd
Volume of CO_2 reduction	About 15,000 t-CO_2/year
Participation period	2008–2012

Waste heat from an incineration facility for thinned wood, etc., is used for new purposes

Methane gas emission prevention at palm oil mill in Malaysia

At a palm oil mill on the island of Sabah in Malaysia, vast amounts of empty fruit bunches left over after palm oil extraction, as well as organic effluents, are left to decay anaerobically, releasing methane gas into the atmosphere. Kansai Electric Power contributes by composting the empty fruit bunches and effluents before they decay, turning them into useful fertilizer and preventing the emission of methane gas.

In November 2007, this project was registered by the United Nations as a CDM project in recognition of the prevention of methane gas emissions, thereby fighting against global warming.

Project name	Co-composting Project at palm oil mill
Participants other than Kansai Electric Power	MG BioGreen Sdn. Bhd.
Volume of CO_2 reduction	About 29,000 t-CO_2/year
Participation period	2007–2012

Fruit bunches

Composting facility

Kansai Electric Power can be expected to continue making contributions to the prevention of global warming

Kyotoenergy Pte Ltd is specialized in services to the CDM, integrating the business from carbon advisory services, Carbon Asset Management, emission reductions aggregator and project financing. Over the past year, Kyotoenergy Pte Ltd and Kansai Electric Power have jointly participated in CDM projects.

Efforts to prevent global warming are urgently needed and CDM proves to be a realistic and efficient measure to reduce CO_2 emissions. Kansai Electric Power has clearly understood that climate change is redefining business objectives and opens perspectives for future growth from a brand new angle. We believe its efforts should be recognised and evaluated as a huge step forward against global warming, and look forward to Kansai Electric Power's continuous and thorough investment in the future.

Kyotoenergy CEO
Michel Buron

Progressive approach to regional environmental issues

At Kansai Electric Power, we conduct comprehensive efforts to protect the community environment, including preventing atmospheric pollution and water quality contamination. We also take appropriate measures to prevent chemical substances from harming people and the environment.

The verification mark on the left identifies items that have received an independent review from Tohmatsu Environmental Research Institute Ltd.

Community environmental protection measures

At our power stations, we undertake measures based on laws, regulations, environmental protection agreements and other rules to reduce atmospheric pollution, water quality contamination, noise, vibrations and other problems.

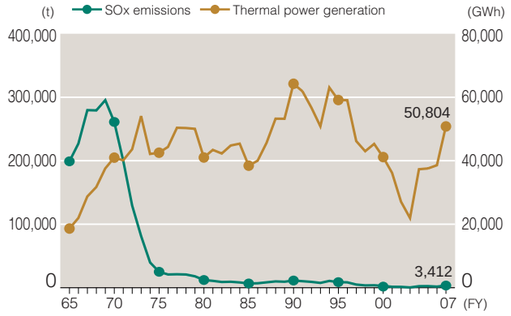
In addition, we monitor and measure the air and seas around our power stations and carefully evaluate the environmental effects of our operations on the regional environment to ensure that no problems occur.

Air pollution prevention measures (NOx, SOx, soot)

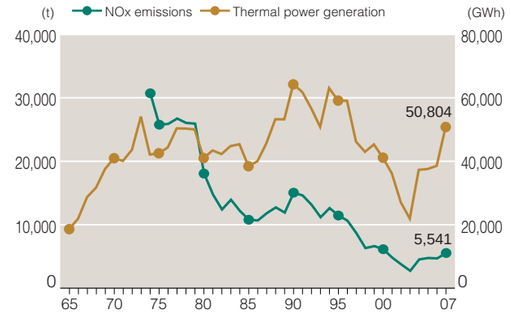
Our thermal power plants use low-sulfur and low-nitrogen fuels, and we have dramatically reduced sulfur oxide (SOx) and nitrogen oxide (NOx) emissions through measures such as the installation of flue gas desulfurization and denitrification equipment. As a result, SOx and NOx emissions from our thermal power facilities are ranked among the lowest in the world.

In addition, high-performance electric filters are installed, drastically cutting soot emissions.

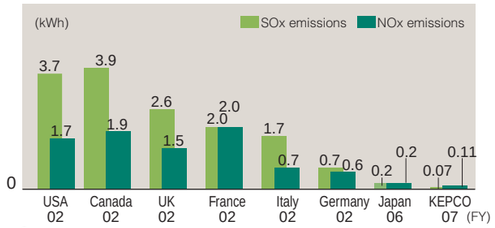
■ SOx emissions and thermal power generation



■ NOx emissions and thermal power generation



■ SOx and NOx emissions per unit of thermal power generated



Sources:
Emission amounts: OECD Environmental Data Compendium 2004
Amounts of electric power generation: Energy Balances of OECD Countries 2002-2003
Japan figure: Federation of Electrical Power Companies of Japan

Water quality degradation and hot water discharge measures

Water used in thermal power plants is thoroughly purified by a variety of processing equipment before discharge. Furthermore, to supplement oil barricades and loading arms, we have installed oil fences and other oil spill countermeasures to be completely prepared for the unlikely occurrence of an oil spill. We also release seawater used for power plant cooling (hot water discharge) at a temperature no more than 7°C higher than the nearby ocean. In addition, to prevent affecting the sea creatures that live nearby, we choose appropriate methods and locations for water intake and output.

Noise pollution and vibration prevention measures

Whenever possible, we place devices that may cause noise pollution or vibrations inside and far from the boundaries of our power plants and substations. We also reinforce machinery foundations and install noise absorbers and barriers to minimize noise pollution and vibration.

Odor prevention measures

Input levels of the ammonia used in our sulfur scrubbers and soot collectors are constantly maintained at an appropriate level by automatic control systems, and emissions are controlled to low ammonia concentrations. This concentration is measured regularly to prevent odor.

Research on the use of bamboo charcoal for CO_2 fixation and effective applications in the Maizuru region

Kansai Electric Power is conducting empirical research on making charcoal from bamboo grown in the Maizuru region of Kyoto to fix CO_2 from the atmosphere and on effective applications for bamboo charcoal, including water purification and soil improvement.

Maizuru Bamboo Charcoal Testing Center for CO_2 Fixing and Utilization (Maizuru, Kyoto)

Strict management of chemical substances

We strictly manage chemical substances to prevent harm to human health and impact on ecosystems in accordance with applicable laws.

PCB waste processing

Since April 2004, Kansai Electric Power has been smoothly processing pole transformers at our Recycling Center for Utility Pole Transformers to handle low-concentration PCB wastes in insulation oil and transformer cases. In addition, for high-concentration PCB wastes, such as high-voltage transformers and condensers, we contracted the Japan Environmental Safety Corporation to process these items starting in October 2006. Moreover, we are managing heavy electrical machinery and other equipment appropriately in response to the identification of PCB traces in some items.

Efforts to handle asbestos problems

Kansai Electric Power has been periodically monitoring and appropriately managing the condition of facilities identified as containing asbestos and taking appropriate action. We continue to undertake appropriate management and execute carefully planned measures to handle asbestos.

■ Locations where asbestos is used

Application		Location
Sprayed materials containing asbestos		Thermal insulations, acoustic materials, fire-resistant materials and soundproof materials of transformers
Products containing asbestos	Building materials	Flame-retardant boards, roofing and flooring in buildings, etc.
	Asbestos cement tubes	Tubing for buried cables (power transmission and distribution, communication)
	Thermal insulation	Power generation equipment (thermal, nuclear)
	Sealants and joint seating	Power generation equipment (thermal, nuclear)
	Shock-absorbent materials	Suspension insulators for power transmission equipment, etc.
	Adhesives	Aerial power transmission cables, hydroelectric dams

Volumes of chemical emissions and amounts transported

In anticipation of the enactment of the PRTR law, the Company prepared the Handbook on PRTR Chemical Management as part of ongoing efforts to ensure the prudent and appropriate handling of chemicals. In accordance with the PRTR law, we disclose to the national government our volumes of chemical emissions and the amounts transported, and regularly make the same information public.

Measures to prevent soil and groundwater contamination

Kansai Electric Power has produced a *Handbook on Measures Against Soil Pollution* and applies it appropriately. Moreover, our power stations have water and oil retaining walls installed, preventing contamination from chemicals and fuels such as heavy oil in the unlikely event of leakage.

Implementing environmental assessments

An environmental assessment is a consultative process with respect to the environmental impact of a company's business activities. The company's operations are measured and evaluated to determine the degree of their environmental impact. The results are disclosed to the regional community and opinions are canvassed. These findings inform the company's environmental efforts and are reflected in its operating plans.

In environmental assessments of power generating stations, not only the procedures stipulated in the Environmental Impact Assessment Law, but also the specific steps outlined in the Electricity Enterprises Law, must be followed.

Kansai Electric Power is upgrading its generating equipment at Sakaiko Power Station to a combined-cycle power generation system. This upgrade was the subject of an environmental assessment lasting from January 2004 to July 2006.

Similarly, we are evaluating the commercial viability of upgrading the Himeji No. 2 Power Station to combined-cycle power generation. The environmental assessment process for this move, including a one-year status inspection and subsequent measurements and evaluations, began in May 2007.

Artist's conception of Sakaiko Power Station when completed

The color scheme reflects the pine trees on the station's grounds as well as nearby Hamadera Park.

■ Discharge and transferred substances subject to PRTR Law

Substances	Discharge (t/year)				Transferred (t/year)			
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2004	FY 2005	FY 2006	FY 2007
2-aminoethanol	<0.1	<0.1	0	0	3.3	5.1	4.7	11
Asbestos	0	0	0	0	120	50	80	25
Bisphenol A epoxy	<0.1	<0.1	0.11	0.11	0	0	0	0
Ethylbenzene	4.0	7.1	14	17	0	0	0	0
Xylene	33	32	36	46	<0.1	<0.1	0.11	<0.1
HCFC-225	4.3	2.1	4.6	3.2	0	0	0	0
Styrene	2.4	2.2	1.2	1.2	0	0	0	0
Thiourea	0	0	—	—	0	0	—	—
Toluene	7.0	4.5	6.9	14	0	0	<0.1	<0.1
Hydrazine	<0.1	<0.1	<0.1	<0.1	1.4	2.1	0.89	1.1
Bis (2-ethylhexyl) phthalate	—	—	—	1.1	—	—	—	0
Benzene	<0.1	—	—	—	0	—	—	—
Tris (dimethylphenyl) phosphate	0	0	0	0	15	7.7	7.3	3.7
Dioxins	70 (mg-TEQ/year)	340 (mg-TEQ/year)	0.44 (mg-TEQ/year)	0.45 (mg-TEQ/year)	3.9 (mg-TEQ/year)	4.4 (mg-TEQ/year)	14 (mg-TEQ/year)	1.5 (mg-TEQ/year)

∗ Quantities indicated are for facilities that handle quantities greater than those designated under the PRTR law. ∗ A "0" indicates no discharge, etc.
∗ "<0.1" indicates discharge, etc. was less than 0.1 t/year. ∗ A "—" indicates that the item is not applicable to any Company facility. ∗ Displayed to two significant digits

Promotion of business activities suitable for a sound material-cycle society

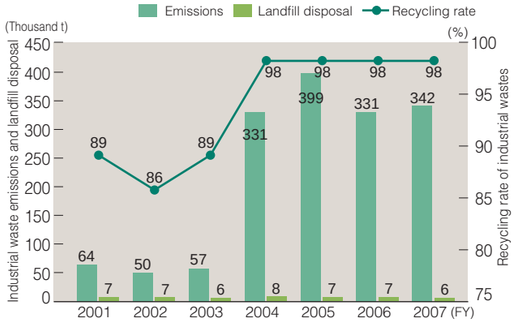
Kansai Electric Power is working hard to promote a sound material-cycle society. Efforts include energy- and material-saving activities such as green purchasing and activities related to the three Rs: reduction, reuse and recycling.

The verification mark on the left identifies items that have received an independent review from Tohmatsu Environmental Research Institute Ltd.

Industrial waste recycling rate and landfill disposal volume performance

Kansai Electric Power promotes efforts related to the three Rs for waste and other materials throughout all its operations to encourage business activities appropriate to a sound material-cycle society. For example, waste concrete utility poles are recycled as roadbed materials, and all of the coal ash and gypsum produced by the Maizuru Power Station is recycled as raw materials for cement and the like.

Changes in emissions and recycling rates for industrial wastes



* Industrial waste recycling rate (%) = (industrial waste emissions − landfill disposal volume) / industrial waste emissions × 100

Applications for resources recovered from industrial and other waste

Industrial and other waste	Recycling rate	Main recycling applications
Sludge (Desulfogypsum, wastewater processing sludge, etc.)	97%	Construction materials
Soot (Coal ash, heavy oil ash, etc.)	100%	Cement raw materials
Cinders (Coal ash, heavy oil ash, etc.)	100%	Rare metal recovery
Waste oil	100%	Fuel, etc.
Metal scraps	99%	Metal recovery
Demolition debris (Waste concrete utility poles, etc.)	99%	Roadbed materials
Glass and ceramics scraps (Thermal insulation scraps, insulator scraps, etc.)	38%	Metal recovery
Waste plastic scraps (Ion-exchange resin etc.)	71%	Plastic raw materials
Special management industrial waste (Waste oil, waste asbestos, etc.)	73%	Fuel, etc.

Efforts to achieve zero emissions

At Kansai Electric Power, from fiscal 2007 we have adopted a new industrial waste recycling rate target of 99.5% or more in line with our commitment to achieving zero emissions in our business operations in the medium and long term.

To achieve this target over the next five years or so, we are strengthening our in-house system for promoting recycling, and are moving forward with efforts to collect information on recycling contractors and establish mechanisms for information sharing within the company.

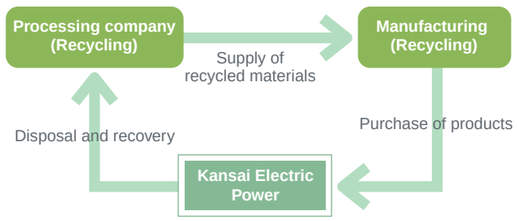
Concrete efforts to meet targets

Issue	Effort
In-house systems for promoting recycling are insufficient.	Enhance efforts for promoting recycling-oriented activities (setting up policies to increase the recycling rate and monitor progress by division).
Recycling methods are unclear.	Collect information and establish mechanisms (for sharing information on recycling contractors and recycling examples).
Disposal of difficult-to-recycle waste	Cultivate new avenues for recycling based on work to develop new technologies, etc.

Recycling of unneeded protective tubes, etc.

Kansai Electric Power purchases plastic waste, such as the polyethylene insulation (polyethylene tubes) from discarded power distribution equipment and electrical connection covers, for reuse as materials.

Recycling of waste plastic



Main materials for recycling

Electrical connection covers | Branch-line guards | Polyethylene insulating tubes

Sorting and collecting of general waste

At Kansai Electric Power's head office, we do not keep trash cans in work areas. Instead, each work area is furnished with a "sorting collector," "collection box for non-burnables and other waste" and other depots for the sorting and collection of garbage.

Thanks to this system, the Company has achieved a 100% recycling rate for paper.

Sorting collector (right) and collection box for other non-burnables and other waste (left)

Categories for sorting of office trash at the head office

Item	Placed in:
Copy paper	Paper collector
Newspapers	Newspaper collector
Magazines, brochures (color printed items)	Magazine collector
Cans	Can collector
PET bottles	PET bottle collector
Lunch packaging, drink packs, instant-noodle containers	Other burnables collector
Other burnables	Other burnables collector
Cardboard boxes	Stack in the work corner
Shredded paper	Stack in the work corner
Glass (bottles, etc.)	Collection box for other non-burnables (bottles and glass)
Ceramics	
PET bottle labels, caps, lids for paper cups	Collection box for non-burnables (plastic)
Plastics (except PET bottles)	
Metals (metal office materials only)	Collection box for other non-burnables (metals)
Paper cups from vending machines	Paper cup collection box beside vending machines in the "refresh corner"
Food waste	Tea dregs collector in the "refresh corner"
Cigarette ash	Ash trays in the "refresh corner" and smoking room

Increasing the number of green purchasing items

At Kansai Electric Power, in accordance with Japan's green purchasing promotion policy, which was established in 1999, we are pursuing green purchasing efforts by giving priority to products and services with low environmental impact when buying supplies. Specifically, we have established a green purchasing manual and are promoting efforts to realize the company-wide purchasing targets that we have set.

In office supplies, we have achieved a green purchasing rate of almost 100%. From fiscal 2007 forward, we are increasing the range of office supply items from 43 to 45, promoting further improvements in our green purchasing rate.

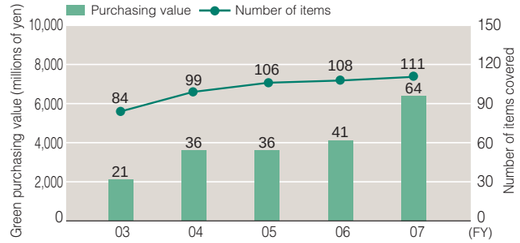
Owing to problems regarding the percentage of recycled paper in certain paper products, in fiscal 2007 the Company reduced the number of items it lists in its green purchasing activities from 45 to 31, removing 14 partial-recycled-paper products.

At the same time, we actively advanced the procurement of environmentally friendly materials for electric lines, transformers, and other materials and parts for electric power facilities, raising the number of green purchasing items to 111 in fiscal 2007. The number of covered items will rise to 114 in fiscal 2008 as we continue to expand the scope of our green purchasing program.

Results for green purchasing of office supplies

Item	Green purchasing rate		
	Target	Result (fiscal 2007)	
Office supplies	Almost 100%	Total (31 items)	98%
		• Stationery (15 items)	75%
		• Appliances and furniture (11 items)	97%
		• OA devices (5 items)	99%

Green purchasing results for electrical power facility materials and parts



VOICE

Toward zero emissions

To promote still further improvements in the recycling of industrial waste emitted from our business locations, we have adopted the ambitious target of zero emissions (recycling rate target of 99.5% or more), and the Company is united in working toward this goal. To reach this target, we are focusing closely on the basics, ensuring that all employees are strongly aware of their individual responsibilities for the waste they generate in the course of operations. This is the surest path toward fulfilling our goal.

Takamitsu Yabe
Environmental Engineering Group
Office of Environmental Considerations

Raising environmental awareness

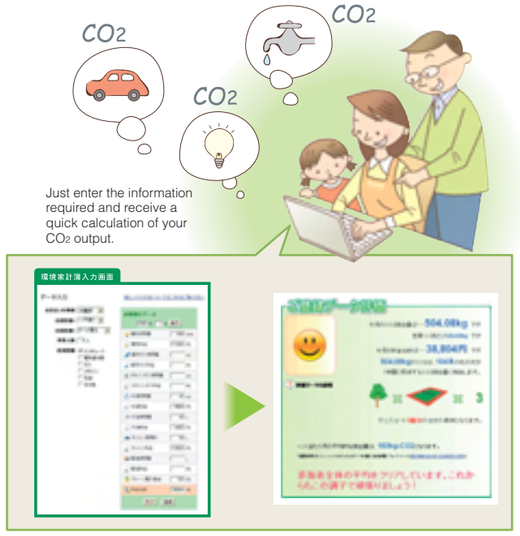
Committed to reducing the environmental impact of its business activities and the realization of a sustainable society, Kansai Electric Power is working actively with its customers and the regional community to raise environmental awareness.

Eco eLife Check: an environmental household account book

CO_2 emissions from households are climbing every year. Reducing the volume of these emissions is an important front in the fight to prevent global warming. That's why Kansai Electric Power created Eco eLife Check, an environmental household account book. This tool, available on the Company Web site, offers a new way of thinking about the energy people use at home, by encouraging families to include environmental impact in everyday household calculations.

By registering with Eco eLife Check online, families can view their own private statistics on the Web, comparing their results with the average and checking their position in a national ranking. Families can have fun together as they continuously evaluate their environmental performance.

For every 10 people who register as members, Kansai Electric Power plants one tree. By helping people to make Japan a greener place, Kansai Electric Power is responding to the public's desire to protect the environment, while widening the circle of positive environmental action.



Just enter the information required and receive a quick calculation of your CO_2 output.

Kanden e-Kids Club

Kansai Electric Power commits time and resources toward developing the environmental consciousness of the next generation, on whom all our hopes for the future depend. Children in the fifth and sixth years of primary school in our region of operation are invited to participate in a series of ecological programs, called Kanden e-Kids Club, to encourage them to recognize, think about and take action on global warming and a wide variety of environmental problems.

In fiscal 2007 a total of 198 children took part in this program, which was launched in fiscal 2006. Kanden e-Kids Club canvasses for new members every June, and activities continue from the opening ceremony in July to the program's end in March of the following year. The children take part in fun activities that encourage them to experience the natural world with their own eyes, ears and hands, including tree climbing and forest thinning. Tours of power stations and trash incinerator stations provide an added perspective on environmental issues, and the Kids' ISO 14000 Program encourages parents and children to work together to explore ways of reducing energy consumption in the family home.

By organizing Kanden e-Kids Club in the Kansai community, Kansai Electric Power hopes to provide children with opportunities to try their hand at eco-friendly activities and grow as environmentally responsible individuals.

Tree climbing

Closing ceremony

Raising environmental awareness with the Green Curtain

From April to June 2008, Kansai Electric Power conducted an environmental awareness-raising campaign at 35 primary schools throughout the business areas of Company outlets and showrooms.

The "Green Curtain" is a net, cast across an entire window, on which climbing plants are grown. The curtain is an effective device for reducing energy consumption: it shades the interior from the sunlight, regulating indoor temperatures, while the plants' evaporating effect cools the surroundings. During this period, Company staff visited primary schools, distributing leaflets explaining the purpose and effects of the Green Curtain and how it is created, and even assisting the children in planting seedlings of their own.

Through these activities, children experience how their own Green Curtains work.

Kansai Electric Power expects this program to bolster children's environmental awareness and encourage families to think about things they can do to use energy wisely.

Green Curtain

Planting seedlings

Independent review

Kansai Electric Power has received independent review of environmental performance information in our CSR Report 2008 from Tohmatsu Environmental Research Institute Ltd. to assure confidence in our accuracy.
(Items that have received independent review are indicated by the mark to the right.)

(TRANSLATION)

Independent Review Report

July 4, 2008

Mr. Shosuke Mori
President and Director
The Kansai Electric Power Co., Inc.

Tohmatsu Environment Research Institute Ltd.
Hiroshi Enoki, Representative Director

1. Scope of the Review
We have reviewed the "Kansai Electric Power Group CSR Report 2008" (the "Report") prepared by The Kansai Electric Power Co., Inc (the "Company"). The purpose of our review was to provide limited assurance from an independent practitioner about whether material environmental information indicated with the verification logo for the period from April 1, 2007 to March 31, 2008 included in the Report was accurately measured and calculated, referring to the Environmental Reporting Guidelines – 2007 version (issued by the Japanese Ministry of the Environment) and GRI Sustainability Reporting Guidelines (Version 3.0), in accordance with calculation methods adopted by the Company, and that no such material items were omitted.

2. Responsibility of the Management
The Report is the responsibility of the Company's management. Our responsibility is to provide our limited assurance with respect to the review performed on the Report from an independent practitioner.

3. Summary of Review
To obtain an adequate and valid standard of basis for providing limited assurance with respect to our 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), the Proposed Environmental Report Review Standard (issued by the Japanese Ministry of the Environment in 2004) and the Practical Guideline for Assurance Engagement of Sustainability Information (issued by the Japanese Association of Assurance Organizations of Sustainability Information in February 2008).
The review procedures performed for the material environmental information indicated with the verification logo for the period from April 1, 2007 to March 31, 2008 included in the Report consisted of; 1) agreeing information to summary tables and supporting documents on a sample basis; 2) interviewing the responsible personnel and the persons in charge; 3) reviewing and agreeing information to the relevant minutes, the Company's regulations, and ISO related documents and so on; 4) site visits; and 5) comparing information with other available supporting internal and external materials.

4. Conclusions
On the basis of the review procedures described in the preceding paragraph, nothing has come to our attention that caused us to believe: the material environmental information indicated with the verification logo for the period from April 1, 2007 to March 31, 2008 included in the Report was not accurately measured or calculated, referring to the Environmental Reporting Guidelines – 2007 version (issued by the Japanese Ministry of the Environment) and GRI Sustainability Reporting Guidelines (Version 3.0), in accordance with calculation methods adopted by the Company, in all material respects; or that any material items listed in the Appendix: Requirements for Logotype Registration of Environmental Reporting were omitted.

5. Special Interests
There are no interests between the Company and Tohmatsu Environmental Research Institute Ltd. or its engagement personnel, requiring disclosure referred to the provisions of the Certified Public Accountants Law of Japan.

In this year's overall independent review, we received the following comments from Tohmatsu Environmental Research Institute Ltd.

Independent expert comments

1) To promote the consistent application of accounting methods for the environmental performance data, the Group produced its Eco-Action Accounting Guidelines as part of the development of its Eco-Action Accounting Manual. The Group's circulation of these documents to all related sections and departments represented a concerted effort to improve the accuracy of environmental information. However, we found some areas where further clarification of the accounting methods is needed. Improvement of these points in the next fiscal year would be desirable.
2) Thanks to use of the environmental information management system becoming entrenched and cooperation among departments and sections, the tabulation of environmental performance data was faster this year than the previous fiscal year. We expect that continuing efforts will be made to tabulate the environmental performance data more efficiently.
3) The prevention of global warming, an issue of strong current interest, was well covered in a Special Feature. For the period from fiscal 2008 through fiscal 2012, the Group has set a challenging target of reducing CO_2 emissions per unit of electrical power to 0.282 kg/kWh. We expect that future reports will carry more specific information about the means by which the Group intends to fulfill this target.

Future Kansai Electric Power efforts

Kansai Electric Power will make solid efforts to improve the accuracy of its environmental information by clarifying further the accounting methods stated in the Group's Eco-Action Accounting Guidelines. Beginning in the next fiscal year, the Company will also strive to establish its data more quickly. Finally, the Company will provide more detailed information regarding the efforts by which it is endeavoring to reduce its CO_2 emission factor.

Acquisition of EcoLeaf environmental label certification

Kansai Electric Power's main product, electric power (system electric power), has received EcoLeaf environmental label certification.

The EcoLeaf environmental label is an environmental labeling system that is operated by the Japan Environmental Management Association for Industry (JEMAI). This system uses third-party verification of quantitative environmental data for the product lifecycle from the gathering of raw resources to disposal and recycling. In July 2003, Kansai Electric Power became the first business in the energy services field to receive this registered and publicly certified label.

We update our certification every year, using the latest results, and will continue to use this label to build customer confidence through the display of valuable environmental information.

■ Registered and published data for FY 2006 results

Product name: System electric power
Specification: 60 Hz
Fiscal year: 2006
No.AT-03-001
Global-warming load during life cycle (CO_2 equivalent):
0.392 kg-CO_2/kWh (FY 2006)
CO_2 emissions in power generation (all-day average):
0.338 kg-CO_2/kWh (FY 2006)
0.315 kg-CO_2/kWh
(5-year average for FY 2002–FY 2006)

* Updates to the FY 2007 results are based on the Law to Promote Measures Against Global Warming, in consideration of the Company's CO_2 emission factor as published by the government of Japan.
** For details on the certification data, please visit our website at (http://www.kepco.co.jp/kankyou/) or the website for the Japan Environmental Management Association for Industry (http://www.jemai.or.jp/ecoleaf).

Contributions to society as a corporate citizen

At Kansai Electric Power, we recognize that our operations vitally affect the daily lives of the people in the region we serve. Each employee is dedicated to serving the regional community, partnering with local people at every Company location to make our region a better place.

Contributing to regional communities

Meeting the expectations of each region

In a spirit of gratitude to the communities that support us every day, each of our locations participates actively in local events, and even hosts its own wide range of events. These activities serve to deepen the spirit of open dialogue between Kansai Electric Power and its customers.

Kansai Electric Power employees add fun to Christmas parties at social services facilities. (Hanshin Sales Office)

Company employees inspect the wiring used in Kyoto's Gion Festival. (Kyoto Sales Office)

At the Gokoyama Kanjiki Country Festival, the Company bonds with the local community through shared experience of traditional culture. (Hokuriku District Office)

The station's grounds open to the public for an evening of appreciation for the firefly. (Himeji No. 1 Power Station)

At the Mihama/Hiroshi Itsuki Marathon, Kansai Electric Power employees participate not only as organizers but also as runners. (Mihama Power Station)

Beautification activities in partnership with regional communities

Each Company facility works with the community in which it operates to maintain the beauty of the local environment through regular cleanup campaigns. In addition to participating in area cleanup activities, the Company cooperates with local governments, councils and other organizations to conduct cleanups at sightseeing spots, coastal areas, riversides and social services facilities.

Cleaning and inspecting utility poles as part of efforts to maintain well-lit city streets (Shiga Sales Office)

Maintaining pathways on Mount Koya (Hashimoto Sales Office)

Inspection of electrical equipment for elderly people who live alone

Liaising with local social services organizations and fire stations, Kansai Electric Power provides inspections of electrical equipment in the homes of elderly people living alone. Company representatives check for electrical leaks and wiring faults and advise customers on the safe use of electricity, not only to ensure a safe and reliable power supply but also to enable customers to use their electricity with peace of mind.

Checking for electrical leaks (Mikuni Sales Office)

Supporting and helping to promote student sports

Co-sponsoring student American football in Kansai

Kansai Electric Power has been supporting student American football in Kansai since 1988. The KANDEN FLASHBOWL SERIES is a league tournament held each spring and autumn. It aims to generate interest in student American football in Kansai and raise the level of skill.

KANDEN FLASHBOWL SERIES

Assisting people with disabilities through art

Kanden Collabo Art 21 exhibitions for disabled artists

Kanden Collabo Art 21, a series of exhibitions featuring submissions of art created by disabled people, is a collaborative project that connects businesses and society through art. It is organized in collaboration with the Tanpopo-no-ye Foundation, a group that has extensive experience with disabled artists. We accept works of art from throughout Kansai, and every year we receive submissions from all over the region. In fiscal 2007, the seventh year we held this event, we received over 700 submissions. The best of these were selected for exhibition at seven locations throughout Kansai and Fukui Prefecture. They were first displayed in Osaka as part of the Disabled Persons Week promoted by the national government. Large numbers of people turned out to see the works of these talented artists.

Providing superb opportunities for the appreciation of music

Classical concerts

To promote the blossoming of culture in the Kansai region, we have been holding a series of classical concerts, called the Kanden Classic Special, since 1998. In fiscal 2007 we sponsored a production of Puccini's opera Tosca. Over two nights, some 4,200 opera lovers turned out to enjoy this outstanding performance. The Company also hosts a series of classical concerts at its sales offices and other locations.

Kanden Classic Special

Support for employee volunteer activities

Enhancing the support system

We support the desires of our individual employees to contribute to society through volunteer activities. In addition to offering volunteer time off, a matching gift program and other support policies, we provide information to our employees through in-house publications to raise their desire to participate in volunteer activities.

■ Support system for volunteer activities

Matching gift program

Results (FY 2007): 7 instances totaling ¥460,000

Under this system, the company makes contributions up to a set limit to match support provided, either by individual employees or collected through workplace fund-raising activities, to public organizations that meet fixed requirements.

Volunteer time-off program

Results (FY 2007): 114 instances totaling 254 days

This system allows employees that participate in activities that contribute to society and meet fixed conditions to take 50% to 100% of the time devoted to such activities as specially recognized time off, up to an annual limit.

Volunteer sabbatical program

Utilized by 15 employees from FY 1992 to FY 2007

This program enables employees who have worked for the company for five years or more to take up to a year off in order to participate in long-term volunteer work for a public social welfare organization. In the case of the Japan Overseas Cooperation Volunteers, however, the maximum sabbatical period is two years and six months.

VOICE

Using the volunteer sabbatical program to serve in the Japan Overseas Cooperation Volunteers

Tatsuo Fujii
Akashi Customer Center
Kobe Sales Office

Posted to the Provincial Sports Bureau, Ministry of Culture, Department of Caldas, Republic of Colombia (March 2008 to March 2010)

I am currently seconded to Colombia as a basketball instructor, providing instruction to youth teams and training for local instructors. Though I have experience as an instructor in Japan, I've had to play a lot of things by ear in putting my instruction program together here, given the differences in culture. Nonetheless, my goals are the same as those I have in Japan: to help kids discover the fun of sports, and to cultivate in them a spirit of consideration for others.

I'm determined to work hard every day to use my experience for the benefit of the Colombian people.

Efforts for regional vitalization

Attracting businesses to Kansai from across Japan and overseas for regional vitalization

Since fiscal 2000, Kansai Electric Power has been cooperating with local governments and business communities in an effort to promote economic growth in the areas where we operate by attracting new businesses. For example, we provide information on the incentive system by local governments and industrial parks in Kansai to enterprises that are investigating Kansai as a new location. We also conduct public relations efforts and other activities to promote the convenient transport access and numerous merits of the Kansai region in order to attract the attention of businesses that are considering investment in domestic facilities.

Informing the world about the attractions of Kansai

We produce "The KANSAI Guide to Investment" a concise pamphlet with information on industrial parks in Kansai and the incentive systems offered by local governments. Japanese and English versions of "The KANSAI Guide to Investment" may be accessed on the Kansai Electric Power Web site.

We also publish the magazine *Community Information* on a bimonthly basis. It contains information on industry-university collaboration projects, industrial promotion policies and the latest incentive systems offered by local governments, and available industrial sites.

The Company also has a library of local-government pamphlets on the third floor of its head office building. Kansai Electric Power invites everyone interested in investing in Kansai to make full and free use of this trove of information about investing in this dynamic region.

Web "The KANSAI Guide to Investment"
http://www.kepco.co.jp/english/i-park/index.html

The Osaka Bay area becomes a world-leading production hub for flat-panel displays

In 2005, Matsushita Plasma Display Co., Ltd. (MPD) established a plasma display plant in the city of Amagasaki, on the former grounds of Kansai Electric Power's Amagasaki No. 3 Power Plant. In 2007, MPD expanded its operations, opening Amagasaki No. 2 Plant. In addition, Amagasaki No. 3 Plant is already under construction.

Meanwhile, Sharp Corporation decided in July 2007 to open the world's largest LCD panel plant in Sakai. Plans call for the new plant to start production within fiscal 2009.

Another major production facility will soon be constructed in Himeji, as IPS Alpha Technology, Ltd. decided in February 2008 to build an LCD panel plant there.

These exciting developments highlight the Osaka Bay region's emerging presence as a flat-panel production hub. Further concentration of industry is expected in the near future.

Artist's conception of Sharp's "21st-century industrial complex" when completed

Creating a vibrant industrial hub

The Kansai Electric Power Group is committed to promoting vibrant growth in the Kansai region. We are devoting the expertise of the entire Group to a "solutions-based incentive program," to serve the needs of the digital electronics and other manufacturers who will bring fresh capital investment to the region over the coming years.

Promotion of diversity and creation of comfortable workplaces

The entire Kansai Electric Power Group is pursuing efforts for the realization of fair and impartial employment, and for the creation of comfortable workplaces that suit individual abilities and aptitudes, while complying with applicable laws and regulations.

Supporting the upbringing of the next generation

Kansai Electric Power provides a range of options that enable employees to balance work and home duties, such as leave and flexible work systems.

Leave systems and shortened work hours to support childcare and nursing

To support employees involved in childcare and nursing, we offer a leave system and system of shorter work hours.

For example, we introduced a temporary leave system for child-raising in 1991, before such provisions were mandated by law. At present, employees can utilize this system until the end of the fiscal year in which their child turns three. Though it is primarily utilized by women, the system is easy to use and well-established, with several male employees presently making use of it.

■ Status of use of childcare support system

- Childcare leave
  Women: 100% of female employees who gave birth in fiscal 2007 used this system.
  Men: Since its introduction in 1991, 8 men have used this system.
- Shortened work hours for childcare
  Women: 146 women used this system in fiscal 2007.
  Men: Since fiscal 2002, 1 man has used this system.

f-Staff system

Approximately 20 employees are presently participating in our f-Staff system, which reemploys women who resigned their jobs with Kansai Electric Power to give birth or to raise their children. Based on work performance, f-Staff members may eventually be hired as full-time employees, if they so desire. In April 2008 two f-Staff members were rehired as full-time employees. The system was expanded in fiscal 2008, to provide for the reemployment of employees who resigned to provide nursing care to family members.

VOICE

I returned to my old job using f-Staff

When I had my first child, I quit my job to become a full-time mom. Later, after the birth of my second child, I heard about the f-Staff system, but I wasn't sure it was right for me, as my kids were still small. I thought about it and decided to work while I still can, and two years ago I went back to work. Usually, going back to the working world is stressful, because you have to build relations with co-workers all over again. That's why I was so happy that I could return to my old workplace. Also, being able to choose my working hours was really wonderful, because I could continue to work without placing a burden on my children, and asking my parents to look after them wasn't an option for me.

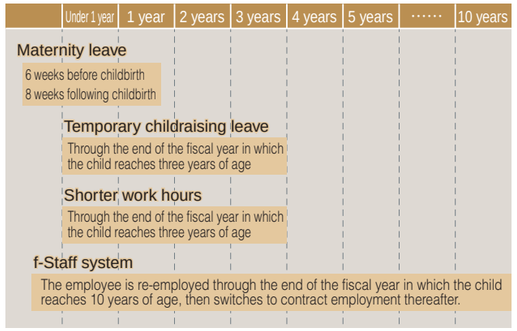
Atsumi Hato
Toyooka Customer Center
Toyooka Sales Office

Leave systems

Kansai Electric Power offers leave systems to support employees who are raising the next generation. In addition to providing maternity leave and childcare leave as mandated by law, the Company offers its own support measures: spouse maternity leave and family support cumulative leave.

Spouse maternity leave offers five days' leave to employees whose spouses are giving birth, while family support cumulative leave permits employees to save time from their annual paid leave and divert it to spouse or family nursing care, or for visits to the hospital for infertility treatment.

■ Main child-raising support systems



Promotion of hiring in compliance with the Equal Employment Opportunity Law

In accordance with the letter and spirit of the 1986 enactment of the Equal Employment Opportunity Law and the revisions of the same law in later years, we actively recruit women and conduct personnel deployment with no distinction of gender. We are placing more women in engineering positions as part of a broader effort to widen the range of positions in which women are employed. In positions of responsibility, the Company evaluates personnel fairly and impartially, basing decisions on individual ability and appropriateness for each position, while avoiding gender-based discrimination. As a result, the number of women employed at Kansai Electric Power is steadily rising.

	Number of female employees	Number of female employees in positions of responsibility
Fiscal 2002	66	61
Fiscal 2007	115	72

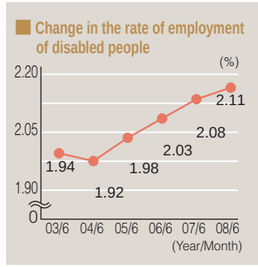
Promotion of employment of older people

Efforts to employ the elderly at Kansai Electric Power predate the implementation of the Law for the Stabilization of Employment of Older Persons in 2006, which mandates such measures. Our reemployment system for employees retiring at the age of 60 was introduced in 1996. In 2001 we established the e-Staff system, which greatly expanded the types of work covered. In 2006, we revised our system to raise the mandatory retirement age to 65 in stages and expand further the range of positions in which older employees are placed. Today, more than half of our retirees choose to return to work after the age of 60 under the e-Staff system. It enables older employees to continue to use their knowledge and experience in their familiar workplaces.

Promotion of the employment of people with disabilities

Our efforts to employ the disabled are ongoing. For example, in 1993 we established Kanden L-Heart, a special affiliate company where we have actively employed disabled people for many years. Our employment rate for disabled people was 2.11% in June 2008, continuing to exceed the legally required employment rate of 1.8%. In the future, with the goal of increasing their independence and participation in society, we will do everything we can to promote the employment of people with disabilities.

■ Change in the rate of employment of disabled people



VOICE

Kanden L-Heart now employs 98 disabled people

When I was a baby I was diagnosed with cataracts. When I was one year old, cancer was discovered in one of my kidneys. A third of my other kidney was removed. When I graduated from the school for the visually impaired, I was warned that few workplaces would accept me. But I didn't want to live in nursing care—to the best of my ability, I wanted to work. I obtained national certification as a massage therapist. Fortunately, soon after that I discovered Kanden L-Heart.

I'll never forget how, when I finished my first massage and my customer said "thank you," I felt fulfilled as never before. For the first time I understood the joy, the excitement of working. This is only my second year here at Kanden L-Heart, but I still treasure every encounter with a customer. I'm determined to become the best massage therapist I can possibly be.

Madoka Sato
Kanden L-Heart Co., Inc.

Diverse working time systems

In order to support flexible lifestyles, we are operating existing working hour and time-off systems adaptably through the Refresh Time-off and Flexible Time-off long-term time-off systems, and promoting work efficiency through the Selective Working Hours and Flextime Working Hours systems.

Appropriate management of work hours

Through the entire work cycle from hiring to retirement, we endeavor to monitor the work hours of employees and to comply with the applicable laws by, for example, encouraging employees working long hours to meet with and receive guidance from industrial physicians. At Kansai Electric Power, we also require employees who work overtime to receive instructions from management beforehand and to self-report the hours worked. In addition to having management personnel check the reported overtime hours, we aim to instill an awareness in all employees of the need for appropriate management of work hours.

Maintenance of stable labor and management relations

Kansai Electric Power has concluded union shop agreements with the Kansai Electric Power Labor Union, and we have built over 50 years of history of working toward the shared goal of improving company productivity accompanied by improving labor conditions. We have built good labor and management relations based on a strong relationship of trust. In order to maintain this good relationship, we will hold operation confabulations about company management plans and other topics among other efforts to promote mutual understanding and agreement between labor and management.

■ Main opportunities for communication between labor and management

- Operation confabulations
  The Company fosters an exchange of views between labor and management regarding the Company's management plans and other issues (annual basis).
- Operation discussions
  The Company conducts discussions between labor and management regarding reorganization and other important matters (occasional basis).

Enhancement of personnel vitalization systems

Our employees are the driving force behind the future growth of the Kansai Electric Power Group; with this in mind, we are actively introducing a variety of systems. In fiscal 2007 we continued our effort toward improving training for different specialized fields and stages of capability, following the key policy of "implementation of training to support reliable execution of work tasks, with safety as the top priority." In addition, we have increased the coverage of our Challenge Training courses, which employees can attend on their days off. The response has been enthusiastic, with 5,101 participating in the 158 courses offered.

To promote communication among employees and vitalize the workplace, we also enhanced our welfare programs.

Supporting a dynamic and enthusiastic workplace

From October 2007, Kansai Electric Power has provided support for special events at the workplace as well as sports and other team activities.

Workplace recreation (softball tournament)

Communicating with stakeholders

The Kansai Electric Power Group actively works to create opportunities for canvassing the views of customers and for conveying our ideas and concerns to customers. We make extensive use of a variety of publicity media, including print publications and the Internet.

A multifaceted dialogue with customers

Promoting better understanding of nuclear power

Approximately half of the electrical power Kansai Electric Power delivers to its customers comes from nuclear power plants in Fukui Prefecture. Nuclear power is a clean, environmentally friendly energy source that generates no CO_2. Nuclear power is not just indispensable for generating the electrical power on which customers' modern lives depends, but also a key element in the promotion of measures to prevent global warming. Recognizing the need to gain the public's trust on this vital issue, Kansai Electric Power is conducting activities on several fronts to deepen people's understanding of nuclear power.

● Observation tours of nuclear power facilities

To foster a deeper understanding of nuclear power among its customers, the Company invites the general public to visit the areas where power is generated to tour nuclear power stations and other facilities related to nuclear power. In fiscal 2007 some 31,000 people participated in these tours. For further details on tours of nuclear power facilities, please inquire at any Kansai Electric Power sales office.

● Dialogue between energy-producing and energy-consuming regions

The Company offers an array of interactive events in which children and young people from energy-producing regions and energy-consuming regions can tour a nuclear power station together. These events provide opportunities to learn not only about power generation but also about each others' communities.

We also offer interactive discussions between primary schools in energy-producing regions and those in energy-consuming regions. Linked by live video stream over the Internet, the students exchange opinions and ideas about environmental issues, energy and other matters.

Observation tour at the Nuclear Energy Training Center

Interactive exchange event for the younger generation

Mobile classrooms for the younger generation

Our future is in the hands of the children who form the next generation. One of our most vital missions at Kansai Electric Power is to impart to the younger generation a sense of what energy is and why it is so important.

The "mobile classroom" explains the basics of how energy is produced and transmitted over distances, as well as how it is used and what we can do to conserve energy and protect the environment. The "classroom" consists of a series of fun, interactive demonstrations: for example, children operate a hand-turned generator to light a light bulb, or conduct experiments to explore ways of reducing global warming. These demonstrations provide children with entertaining explanations of how CO_2 contributes to global warming and the role energy plays in our world.

Mobile classroom using experimental equipment to simulate global warming

Communication efforts at Company facilities

The Company actively communicates with local communities at each Company facility, to enable them to understand Kansai Electric Power's business activities and also to enable customers' opinions to be reflected in ongoing efforts to improve its operations.

Communication with people in each community

Communication via the Internet

In the interest of rapid and accurate disclosure, we present on our Web site the contents of press conferences, messages from Kansai Electric Power, and various other information. In addition, Kanden e-Patio, an Internet club (with approximately 35,000 members) we launched in 2002, provides information through an e-mail magazine and its own Web site. We have also established an e-mail inquiry desk and are actively advancing two-way communication with all our stakeholders.

Kansai Electric Power Web site

Kanden e-Patio

Web Kansai Electric Power
http://www.kepco.co.jp/english/index.html

Kanden e-Patio
http://www.fururu.net/e-patio/

Communication through round-table discussions

To create opportunities to listen directly to the opinions of people in the region, in March 2008 Kansai Electric Power invited members of its online members' club, e-Patio, to take part in round-table discussions concerning environmental issues.

The Company is proud of its continuing series of communication activities, as it strives to gather a wide range of opinions from the communities it serves and align its perspective with that of its customers.

Discussion with Kanden e-Patio members

Providing information through print publications

We are making use of media, including print publications, to broadly provide information to deepen understanding of the business activities of the Kansai Electric Power Group.

Yaku

Watt

Examples include *Yaku*, a report aimed at opinion leaders that probes deeply into timely social issues, and the regularly issued public relations magazine *Watt*, which features reports on our business activities in addition to lifestyle information and regional topics.

Sharing insights from customers throughout the Group

We receive a variety of views and requests regarding our business activities in the course of our day-to-day work and when we encounter members of the community. Our "Dambo-no-Koe" feedback system is designed to ensure that every one of these valuable opinions can be used to help improve the operations of Kansai Electric Power. Customer views collected through Dambo-no-Koe are conveyed to the management at our business locations and also shared throughout the entire company, including top management. We sort these opinions according to content and utilize them to the fullest.

Providing information to media agencies

Information about Kansai Electric Power on television and in newspapers greatly influences customer understanding of our business and our corporate image.

Kansai Electric Power actively provides information to media agencies, including regular press conferences with the company President. In addition, we respond swiftly and appropriately to reporting requests from media agencies, and disclose and communicate accurate information.

Promoting communication within the company

We promote active communication within the Company to encourage sharing and understanding of business information, and to enable employees and management to work together as a team.

We provide time-sensitive information via our in-house portal site and publish a monthly in-house newspaper, *Kansai Electric Power News*. In keeping with the goal of reliably conveying business information to each of our employees, especially important information, we sometimes publish special issues and include explanatory matter as summaries in the monthly issues. We also administer questionnaires after issues appear and use this feedback to implement changes as needed in order to make the newspaper more useful to our employees. In cases where the management wishes to convey its thoughts to employees in a direct, visual manner, we broadcast messages using our in-house television system.

Kansai Electric Power News

In-house portal site

In fiscal 2007 Kansai Electric Power published the first issue of *Wakasa*, a magazine for communication with employees working in the nuclear operations area of the Company and its affiliates. By sharing information on nuclear-related topics, the publication aims to build a dynamic and motivated nuclear-power-generation workplace with a strong sense of teamwork and a well-entrenched, safety-first mentality.

Wakasa

Providing information to shareholders and investors

Kansai Electric Power discloses information to its investors impartially and swiftly. We provide information to our institutional investors, individual investors, public groups and a wide range of other investors in Japan and overseas through the Kansai Electric Power Web site and various other means.

Company explanatory meeting about FY 2007 (convened October 31, 2007)

Company explanatory meetings and visits to investors

We periodically have company explanatory meetings headed by the President, as well as visits to investors in Japan and abroad by the President and corporate officers. Through these meetings, corporate managers promote active, two-way communication with investors.

Disclosure through investor relations tools

We create pamphlets that we also make available as downloads from our web site to provide our shareholders and investors with an overview of Kansai Electric Power business activities, our management targets, financial data and other information.

Annual Report

Fact Book

Kanden-dayori (shareholder newsletter)

Web IR information for shareholders and other investors:
http://www.kepco.co.jp/english/ir/index.html

Consciousness raising and autonomous efforts in individual workplaces

In fiscal 2007 we continued to promote autonomous efforts in every workplace, mostly led by compliance promotion staff appointed at each location. In addition, our Compliance Committee Secretariat strengthened support for frontline workers through dialogue, training and other activities.

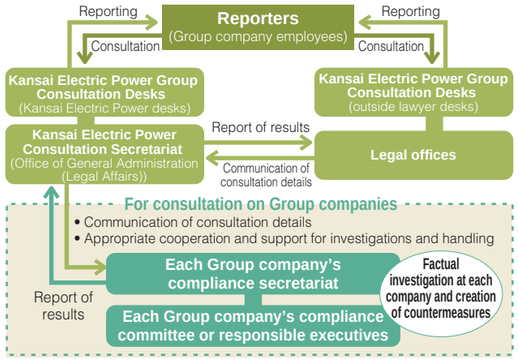
System for Promoting Compliance

In November 2002, the Company established the Kansai Electric Power Compliance Committee to reinforce the strong public confidence the Company already enjoys and promote a corporate culture of frank and open dialogue. In February 2003, this Committee prepared a Compliance Manual, which is distributed to all employees. This Manual explains in straightforward language the minimum standard of conduct expected of all employees in the execution of their duties, from the perspectives of the law, business ethics and internal Company rules.

At the same time as the Compliance Manual was being produced, Kansai Electric Power established Compliance Consultation Desks to serve as resources for employees who have concerns about compliance. These desks are located both in-house (Office of General Administration (Legal Affairs)) and outside the Company (legal offices), and have started to accept a wide range of consultations. From 2005, the Company expanded access to these desks for consultations to include the Kansai Electric Power Group as a whole, and they now also handle issues faced by our Group companies.

From April 1, 2006, in tandem with the enforcement of the Whistleblower Protection Act, the Company has informed employees of business partners of the role of the Compliance Consultation Desks, and has been collecting risk information extensively from such personnel as well.

Kansai Electric Power Group Consultation Desks



To promote independently motivated compliance activities at each workplace, the head of each workplace, department or section is designated as its compliance promotion officer. Compliance promotion staff are then appointed for each workplace (equivalent to a section head) to carry out grassroots compliance activities.

Compliance promotion activities at each workplace

Training based on workplace examples

Awareness-raising training (example-based training) is carried out at each workplace using specific examples of compliance risk in that workplace. In fiscal 2007, our Compliance Committee Secretariat (Legal Department) compiled 33 examples and published them as the Collection of New Compliance Case Studies. These examples are helpful in consciousness-raising efforts at Company workplaces.

Shared awareness of compliance risk at all workplaces

With the objective of fostering a shared recognition of workplace compliance risks, in fiscal 2007 compliance promotion staff led brainstorming sessions at each workplace regarding latent risks in their operations. These exercises were followed by extensive discussions.

In fiscal 2008, the Company will raise awareness to new levels regarding compliance risk in numerous fields of real operations, drawing on results from the previous fiscal year as feedback.

Dialogue and training activities with frontline workers

In fiscal 2007, compliance promotion staff dedicated themselves to raising consciousness of compliance in the workplace. At the same time, the Compliance Committee Secretariat (Legal Department) focused on direct dialogue and training activities with frontline workers. Both of these efforts served to support independent and practical compliance activities at each workplace.

Discussion and training activities

VOICE

Creating a workplace where we can all talk openly and work together as a team

When the "activities to develop a shared awareness of compliance risk at each workplace" were carried out where I work, everyone joined in the discussion, and we set to work on activities focused on preventing risk from occurring. As a result, we all gained a firmly rooted idea that risk could not be hidden or ignored, and that none of us could understand its full extent on our own. We resolved to discuss compliance issues openly and address them as a team, with the participation of all members.

For me, compliance activities are not just a psychological exercise. They are the execution of a duty with real practical implications in step with the changing times and common social awareness. I'm determined to do my part to ensure that where I work, everyone feels they can speak their mind at any time, and that we're all in this together.

Tetsuta Nishikawa
Manager, Planning Section,
Kainan Power Station

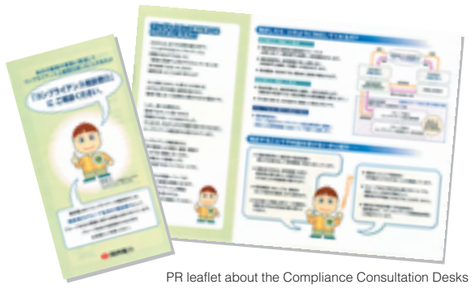
Promotion of dialogue with frontline workplaces

Staff from our Compliance Committee Secretariat (Legal Department) visit our frontline workplaces for dialogue and training. In fiscal 2007 such visits covered all 90 of our frontline workplaces, including our sales offices, operation and maintenance offices, and power stations. Participation was widened to include not only compliance promotion staff, but also unit leaders and senior persons in charge (number of participants: 1,256).

Raising consciousness at frontline workplaces

In dialogue and training activities with frontline workplaces in fiscal 2007, the Company explained a number of issues, drawing on examples from the Company's own operations and from incidents at other companies that are currently in the public eye. We explained and underscored the importance of compliance as a form of risk management, socially accepted standards as criteria for action, the dangers of concealment and falsification, and the role of managers in promotional activities.

The Company also used these activities to canvass employees on their opinions and hopes regarding compliance activities. In addition, to ensure that employees are fully aware of the activities and role of the Compliance Consultation Desks, we circulated information about the Desks, their operations and why they matter to employees. In October 2007 a PR leaflet on the Compliance Consultation Desks was distributed to every employee in the Kansai Electric Power Group.



PR leaflet about the Compliance Consultation Desks

Follow-up on earlier discussion and training activities with frontline employees

To reduce the sense of distance between senior management and frontline workplaces, and to improve and build on employees' awareness of compliance issues, Kansai Electric Power will expand its program of direct visits to frontline workplaces for dialogue and training activities in fiscal 2008.

In addition to promoting general understanding of compliance matters, compliance officers probed deeply into potential sources of legal and other risk in individual sections and departments, in a bid to enhance employees' recognition of compliance issues still further.

Compliance with the Anti-Monopoly Law

The Company produces and distributes a number of explanatory texts to raise awareness of the Anti-Monopoly Law and its implications. In 1996 we issued the first version of our *Anti-Monopoly Law Observance Manual*. Later, we produced and released the explanatory text of the *Guidelines for Proper Electric Power Trade*, a collaboration between the Fair Trading Committee and METI. In June 2006 we revised this manual to reflect revisions to the Electricity Enterprises Law and guidelines issued by METI.

From September to November 2007, we held Anti-Monopoly Law training sessions, as we do every year, at our head office and branches, in order to deepen understanding of this topic among our employees.

As part of our efforts to ensure thorough compliance, in the years ahead we will continue these training sessions with the aim of instilling in our employees a correct understanding of the intent and content of the Anti-Monopoly Law that will be reflected in their work.

A sure grasp of legal procedures

Inadequacies in our performance of legal procedures, including failure to submit the required reports and applications, came to light at some of our power stations in fiscal 2006. In response, in fiscal 2007 we took measures to prevent the recurrence of these omissions. We reviewed the Legal Procedure Checklists, a list of legal procedures produced at each department and section, to ensure that the Company's operations follow the letter and spirit of the law.

We will vigorously promote these efforts at each workplace. We will also work to collect and manage the latest information on revisions to applicable laws and to accurately track the execution of required filings, submissions and other legal procedures in our business activities.

Tools for raising awareness of compliance issues

In March 2008, the Company launched an e-Learning course entitled "Compliance: What You Need to Know in 2008." Using specific examples, this course outlines the approach to compliance needed to ensure prudent risk management. The course is available to all employees of all Kansai Electric Power Group companies, providing the entire Group with a thorough grounding in understanding compliance.

From January 2007, Kansai Electric Power have made available on the Company Intranet a "Column on Current Affairs in Compliance," discussing specific incidents and other related matters in the news today. The Company uses these timely updates in morning assemblies, meetings and other occasions as tools to promote understanding of and raise consciousness of compliance. In fiscal 2008, topics will be introduced relating compliance issues to current trends in society, further supporting this consciousness-raising process.

Compliance: What You Need to Know in 2008

Kansai Electric Power Group

CSR Report 2008

This report is also available on the Internet (http://www.kepco.co.jp/english).
Please direct your opinions and questions about this report to the CSR Promotion Group.

The Kansai Electric Power Co., Inc.
3-6-16 Nakanoshima, Kita-ku, Osaka 530-8270, Japan

K08J0006