COMPANY PROFILE 2008

THE KANSAI ELECTRIC POWER CO., INC.





Message from the Management

Nearly half a century has passed since The Kansai Electric Power Company, Inc. (Kansai EP) took on a major challenge in a hidden, scenic spot called Kurobe Gorge and tunneled through an extremely difficult fracture zone to construct the Kurobegawa No.4 Hydro Power Plant, a project that begun shortly after Kansai EP was established in 1951. Together with the changing times, the main source of electric power generation has shifted from hydro power to thermal power, and then to nuclear power. Recently due to the intense competition to acquire energy resources and global warming being a worldwide concern, the energy industry is undergoing a dramatic change in its surroundings. Even though the times have changed, the mission of Kansai EP remains the same: to be a safe, stable and dependable provider of electricity, to support our customers' comfortable lives and economic activities, and to contribute to the development of society. As an energy provider with the responsibility to support the all-important infrastructure of our society, we will continue in the future as well to combine the total strength of our Group to work actively toward achieving a society with low CO2 emissions, while we join with our customers to continue our powerful forward progress toward the future.

We continue to take deeply to heart the lessons learned from the accident at the Mihama Power Plant Unit 3, and Kansai EP reaffirms its pledge to serve as a corporate model in order to achieve the highest level of safety. By ensuring thorough compliance and taking other necessary steps, we will fulfill our social responsibilities as a corporation, while devoting our utmost efforts to becoming a Kansai Electric Power Company Group that can win even greater trust from our customers and communities.

Shosuke Mori President and Director

Delivering a safe, stable supply of electricity

It's not just a goal, it's our unchanging wish.

Electricity is one of the things we simply can't live without. That's why, at Kansai Electric Power, providing a safe, reliable supply of electricity is more than our goal, it's our unchanging wish. And in a world marked by constant change, you can trust that our wish will stay the same as long as we're in business. At Kansai EP, we're at work 24 hours a day, 365 days a year providing the electricity that keeps the world moving.

CONTENTS

Message from the Management···································	1
Our Mission••••••••••••••••••••••••••••••••••	3

A reliable supply of electricity 05

•Bringing electricity to the customer (From procuring fuel to supplying homes;

•Nuclear power generation (Putting safety first; Core energy source; Zero CO₂ emission



Hydropower generation (Domestic natural resources and refresh construction)

• From load dispatching to power distribution (Central Load Dispatching Center; Power transmission work;

Home and business solutions 17

 Home solutions (Totally-electric conversion; IH stove-tops; EcoCute electric hot-water supply systems).....

•Enhancing lifestyles with electricity (Optical fiber networks; Home security services; Health

 Business solutions (Solutions service, Energy equipment diagnosis, Eco-Ice thermal storage system; Utility services; Soil decontamination) ••••••• 23



Achieving a low-carbon society 25

•Improving the environment (Measures to prevent global warming; Reducing customer

•Lowering CO₂ emissions from utility grids (Nuclear power; Thermal power; Hydroelectric power: Solar power: Kansai Green Electricity Fund) •••••••••••••••••••••••••••••

• Promoting an electricity-based society (Expanding use of EcoCute electric hot-water supply systems; Environmental home budgeting; Electric vehicles) ••••••• 29

•Developing revolutionary technologies; Overseas initiatives to prevent global warming

Working in harmony with local communities 31

•Working together with people in the local community (Mobile classes; Public

• Supporting the community (Supporting the arts, culture, and sports; Corporate leadership)......

Corporate Data 35.36

Policy on Corporate Social Responsibility
38













This mark denotes topics related to Kansai EP's ecological efforts.

Kansai EP has developed an extremely stable, dependable system for providing a continuous supply of electricity day after day, month after month, year after year.

That's what motivates us.

Each and every light brightens somebody's home.

Dependable delivery of high-quality electricity.

From procuring fuel to supplying homes, we make every effort to assure total reliability.

Supplying electricity to customers in a safe, reliable manner is our unchanging wish. Every employee at Kansai EP is part of a fully integrated system that extends from procuring energy resources to operating power plants to delivering electricity to our customers' homes and businesses.

As part of our commitment to society, we follow a long-term approach that makes safety the No. 1 priority in generating and transmitting power. We've set in place rigorous systems for preventing and responding to accidents, so that our energy is as safe as it is dependable. Kansai EP is also continually working to improve energy efficiency, so there's less impact on the environment.



me 14,000 km of transmission lines help make our steady supply of electricity possible



Drawing on different sources to meet the growing demand for electricity.

As energy demand grows, energy security becomes even more vital.

In FY 2007, for the fourth year in a row, Japan set record highs in gross system input. This trend is expected to continue. Since Japan produces only 4% of the energy it needs and relies on imports for the rest, securing stable energy resources is an issue of vital national importance.

• Gross system input in Japan

Annual input (100 GWh)

12,000 r

10,000

8.000

6,000

4.000

2.000

We have devised an "optimal generation mix" that draws on a variety of sources.

Kansai EP aims to secure energy resources that will remain stable regardless of political and economic conditions, whether domestic or international. We have worked to draw on a variety of resources, so we don't depend excessively on any particular one. Our goal is to find a combination that's optimal not only in regard to energy security,

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but from a comprehensive viewpoint that includes environmental impact and economic efficiency.

We call this balance of resources the "optimal generation mix." For Kansai EP, the optimal mix is to use nuclear power as the core energy source and supply it with other sources, such as thermal power, to meet demand during peak periods.





A Kansai EP LNG project aims to secure stable. long-term fuel supply.

Demand for energy in developing countries such as China and India is growing fast and with it, demand for energy resources is booming worldwide. One key resource is LNG, or liquefied natural gas. LNG is used as the main fuel for generating thermal power due to its advantages in supply stability and low environmental impact. To secure a stable, long-term supply of

LNG. Kansai EP is taking part in the Pluto LNG Project, located offshore Karratha in Western Australia. The company has also purchased a tanker, the LNG EBISU, for transport. This project, plus a vertically integrated system that extends from gas development to receiving facilities, is helping Kansai EP stay ahead of Japan's rising energy demands.











Providing reliable power begins with procuring stable resources.





Uranium mines are developed to procure fuel for nuclear power generation.

Fuel condensed from natural uranium is used in nuclear power plants to generate electricity. Because Japan does not have its own uranium, it is vital to secure a stable source from overseas. This has led Kansai EP to take part in uranium mine development projects in the Republic of Kazakhstan, which holds the world's second largest uranium reserves.



Press conference about uranium mine development projects

About half of the Kansai's electricity comes from nuclear power plants that emit no CO₂ during power generation.

Putting safety first in nuclear power generation.

Kansai EP continues to take to heart lessons learned from the unfortunate 2004 accident at Unit 3 of the Mihama nuclear power station. We are continuing to implement reforms to strengthen our accident prevention and response systems, and we are redoubling efforts to carry out all appropriate measures to ensure the absolute safety of our nuclear power stations. These efforts include measures to carry out construction work to address aging facilities at nuclear plants that have been in operation for more than 30 years, and taking steps to prevent or minimize potential damage from earthquakes.

Kansai EP power generation



Around half of the Kansai's electricity comes from nuclear power.

When the Mihama nuclear power station went on-line in 1970, Kansai EP became Japan's first electric company to operate a nuclear power plant with a pressurized water reactor. Today nearly half of the Kansai's electricity comes from three nuclear power plants – at Mihama, Takahama and Ohi, in Wakasa, Fukui prefecture. Kansai EP considers nuclear power a stable source of high-quality electricity and the core of our optimal generation mix. We are committed to keeping safety the No. 1 priority at all times in the operation of our nuclear power stations.

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800

600

400 200



When fossils fuels are burned to produce energy, CO₂ is released. That's not the case with nuclear power.

A nuclear power plant uses thermal energy released when uranium undergoes fission - a process that does not emit CO2. Nor does nuclear fission release sulfur oxides or nitrogen oxides, causes of air pollution. In that sense nuclear power generation has little impact on the environment. Generating electricity from natural energy sources such as hydro, solar and wind power - does no harm to the environment, but there are



Pluthermal power effectively reusing a valuable resource.



The Central Control Room in a nuclear power plant

other limitations. For example, there are few areas left that can support largescale hydroelectric power generation. And because solar and wind power generation are greatly affected by weather conditions, and utilization efficiency is still quite low, they are not yet viable means of producing a stable supply of electricity. Accordingly, Kansai EP will continue to use CO₂-emission-free nuclear power to answer the region's needs for a dependable long-term supply of electricity.

Recycling uranium left over from nuclear power generation.

About 95% of spent uranium fuel from nuclear power plants can be reused. Pluthermal refers to the processes of extracting plutonium from spent fuel. mixing it with uranium to produce a recycled fuel (MOX fuel) and reusing it in existing nuclear power plants. For Japan, where energy sources are scarce and the self-sufficiency rate in the energy supply is only 4%, pluthermal is vital for ensuring efficient utilization of uranium resources and a stable supply of energy. Kansai EP is promoting a pluthermal program at the Takahama Power Plant. with the highest priority on safety.



Takahama Power Plant





*Once fuel is inserted into a nuclear reactor, the plant car produce electricity continuously for more than one year without replacing the fuel. Spent fuel can also be recycled. Therefore, nuclear power generation can be regarded as a "quasi-domestic energy source.



Drawing on a variety of technologies to reduce CO₂ emissions with ecological thermal power generation.

Our ace in the hole: Thermal power lets us respond to fluctuating demand.



Combined cycle electric power facility (Sakaiko Power Plant)

Thermal power is a key to our ability to respond flexibly to the continually fluctuating demand for power. During peak demand periods, thermal power accounts for 25% to 33% of our total output. When demand is low, generation is halted. While fossil fuels such as oil and coal account for some of the fuel used in thermal power generation, more than 60% of the fuel used is LNG, with its very low CO₂ and nitrogen oxide emissions.

Combined cycle power generating system



The elegantly curved Kurobe Dam stands against the stunning backdrop of Japan's Northern Alps

From early summer to autumn, the dam discharges a huge volume of water – more than 10 cubic meters per second –and sends up a large plume of spray. Kurobegawa No. 4 Power Plant is located about 10 km downstream, at a level of 200 meters below the dam.

Combined cycle system at Sakaiko Power Plant: Higher efficiency. lower CO₂ emissions.

In spring 2009 Kansai EP will install a state-of-the-art combined cycle power generating system at the Sakaiko Power Plant. Employing both a gas turbine and a steam turbine to drive generators, this advanced new system will significantly boost the plant's power generating efficiency. The combined cycle system burns LNG to produce a high-temperature combustion gas that's used to drive a gas turbine. generating electricity. The high-temperature gas is also used to heat water, producing steam that drives a steam turbine, also generating electricity. Because the combustion gas is used twice, thermal efficiency is extremely high and CO₂ emis-

of electricity produced. Kansai EP plans to upgrade all thermal power generating facilities at the Sakaiko Power Plant to the new type of system by autumn 2010.

sions are reduced by around 30% per unit

Mixed combustion of biomass Fuel and coal: Reducing CO2 emissions even further.

In June 2008 Kansai EP began using a biomass fuel called wood pellets at Maizuru Power Plant Unit 1. a coal-fired thermal plant. Using biomass fuel along with the coal means that coal consumption can be decreased. At Maizuru, we expect this mix to reduce CO₂ emissions by some 90,000 tons every year.



Wood pellets

Putting Japan's own resources to use for natural energy generation.

Japan has abundant water, especially when compared to its other natural resources. Kansai EP puts this vital resource to good use, operating hydroelectric power plants in 148 locations that together account for nearly 10% of all the electricity we generate. Among them is the Kurobegawa No. 4 Power Plant, which can produce up to 335 MW of power. This plant, completed in 1963, was a mas-

sive construction project completed after hollowing out bedrock at the foot of the gracefully curved, 186-m-high dam at the Kurobe Gorge. Kansai EP's successful construction of the Kurobe Dam was celebrated as the engineering feat of the century in Japan. An accumulated total

of 10.000.000 workers toiled for seven vears on the project, and a host of advanced technologies were employed. One of the challenges was that, during construction of the Kanden Tunnel (or Omachi Tunnel), a key part of the project, a fracture zone discharging large volumes of high-pressure ground water was discovered. These struggles, and the project's hard-won success, were later depicted in a movie.

Tackling this immense project was essential for solving the serious power shortage that gripped post-war Japan.

Almost half a century later, hydroelectric power from the Kurobegawa plant is still helping Kansai EP meet the nation's energy needs.



Hydroelectric power generation has harnessed nature's power for more than a half century.



•Kanden Tunnel, which runs through a fracture zone

Eighteen years of rehabilitation: Q Upgrading hydroelectric power plants across Japan.

Upgrading equipment makes it possible to generate more hydroelectric power from the same plant discharge and the same head. In 1988 Kansai EP launched an 18-year rehabilitation project that involved upgrading every hydroelectric power plant we operate in Japan. The project finally came to completion in 2006, with the rehabilitation of the Komaki Power Plant in Tovama Prefecture. Upgrading the facilities not only in-

creased total output by more than 40 MW, it also reduced CO₂ emissions by around 100,000 tons per year. This led to the project's receiving the Minister of Environment's Award for Global Warming Mitigation in FY 2006.

A 24/7 monitoring system and advanced IT technology secure the power distribution system that covers the Kansai area.

Central Load Dispatching Center works to meet fluctuating demand.

Demand for electricity fluctuates by the second. Our Central Load Dispatching Center monitors demand 24 hours a day, 365 days a year, and issues instructions to our nuclear, thermal and hydroelectric power plants. The Center works with local dispatch centers and control centers across the Kansai to adjust voltage and frequency as necessary.

Kansai EP also operates an intricate network of power transmission lines throughout the region, monitoring such things as repair activities, equipment failures and lightning, and selecting the most appropriate transmission routes accordingly. These efforts are all part of ensuring that our customers enjoy a stable supply of high-quality electricity.



Central Load Dispatching Center



Power transmission lines

and issues power-gen

High-voltage power transmission network carries bulk power.

Our plants generate electricity at the voltage from several thousand to 20,000 volts . To minimize power loss during transmission, however, the voltage is actually boosted to higher voltage such as 275,000 and 500,000 volts before it's sent out. The electricity is transmitted from our plants to our customers through power lines supported by large steel towers built between mountains. Those transmission lines extend beyond the Kansai, connecting to countrywide networks that span the country from Hokkaido to Kyushu. This vast network of power lines helps ensure reliable delivery of electricity to homes and business .

Before distribution. substations lower the voltage to meet customer needs.



Primary substation

Power generated at our plants is transmitted over lines to primary substations, which lower the voltage to 154,000 volts or 77,000 volts. For customers who need large amounts of electricity, such as railway companies and large factories, electricity is delivered at this voltage level. Electricity for other customers is sent to secondary substations, which further lower the voltage to 77,000 volts or 22,000 volts. This process of reducing the voltage in stages allows the electricity to be transported more efficiently, minimizing power loss due to transmission over long distances.

Electricity to your home... After a long journey, electricity undergoes final distribution.

Electricity of which the voltage is reduced at secondary substations to 77,000 volts or 22,000 volts is sent to distribution substations. There the voltage is reduced further to 6,600 volts and fed to local distribution lines. Electricity is delivered in this condition to high-rise buildings and medium-size factories. Electricity for home users is sent to electrical poles, where transformers further reduce the voltage to 100 or 200 volts before it reaches our homes.



Distribution line maintenance





Electricity follows a long, complicated journey from a power plant to your home. But the journey is over in a blink. Because electricity travels at around 300,000 km per second, customers use the electricity a mere instant after it's generated at one of our plants.



Electrical pole and transformer



Home and business solutions

The Kansai EP Group also offers a variety of services aimed at bringing greater comfort and convenience to homes and work places. For example, we promote totally-electric homes.

We want to serve as many customers as possible, because there are so many things we can help with

At our Happy-E Life Square showroom in Kobe, visitors can see and experience the comfort and convenience of a totally-electric home.



Safe, comfortable, economical and environment-friendly: Welcome to the totally-electric lifestyle.

In a totally-electric home, ecoconscious living and high customer satisfaction come together.

While providing the electricity people depend on everyday, Kansai EP is always looking for new ways to satisfy customers and improve the global environment. To that end we recommend totally-electric homes. Marketed in Japan as "Happy-E Life" homes, these residences offer superior performance in four key areas: They are environment-friendly, safe, comfortable and economical. More than 600,000 homes in our service area have already become totally-electric homes, and staff at our sales offices and showrooms continue to promote this forward-looking concept.



* Survey by Kansai EP. Includes smaller residential units, such as studio apartments. All figures indicate cumulative data.

CO2 emissions per family (Based on a Kansai EP estimate of annual CO2 emissions from a 4-member family in a home with four rooms, a living room and a combined kitchen and dining room)

0 (kg-CO2)

EcoCute552	44% reduction (approx.)
Natural gas hot-water system987	

* The amounts of electricity and gas consumed by a 4-member family living in a house with four rooms, a living room and a combined kitchen and dining room were estimated by Kansai EP. The annual load of the hot-water supply system is 16.36.1, b The 370-L, 1.5-KW EcoCute model was used for the calculation. The annual consumption of electricity was estimated to be (1.507 KW) fdaytime: 161 KWh, nightime: 1,364 KWh). "Happy-E Plan" is applied. The amount of gas consumed by the natural gas hot-water system was estimated to be 431 m3. The equipment efficiency is APF = 3 for the EcoCute model (data source: Osaka Gas catalog). The CO2 emission factor is 0.366 kg-CO2/KWh for electricity (based on actual measurements (provisional values).

nises a safe, comfortable, economical and environment-friendly lifestyle.

Four advantages of the totally-electric home

Environment-friendly: Uses advanced airsource heat pump (heat exchange) technology EcoCute products supply hot water with three times the heating energy of conventional electricity, slashing CO₂ emissions.

Safe: No flames means a safer lifestyle Totally-electric homes are safer for everyone in the family, from small children to the elderly.

Comfortable: Easy cleaning and maintenance

Totally-electric homes minimize air contamination, so the kitchen, living room and other areas stay cleaner and healthier.

Economical: Saves money

The discount plan available in totally-electric homes and the use of energy-efficient EcoCute products save money.

IH stove-tops are safer for everyone in the family to use.

An IH (induction heating) stove-top generates heat inside the pot or pan, not by a flame or burner heating the outside of the pot or pan. There's no flame or hot burner at all – so there's no danger caused by a flame going out (while the gas is still on), or the burner being left on accidentally. Cleaning is easy too. Spilled oil can be simply wiped away.

To help publicize the advantages of the IH stove-top, Kansai EP conducts cooking classes in our showrooms. This gives consumers an opportunity to see for themselves how safe and easy-to-use the IH stove-top is.







A totally

ectric home pro





EcoCute saves electricity, slashes CO₂ emissions.

In a typical home, about one-third* of the energy consumed is for heating water. EcoCute is ready to change all that. Using advanced air-source heat pump technology, EcoCute electric hot-water supply systems heat water by using heat energy that is three times more than that of the electricity consumed. Their high energy efficiency also slashes CO₂ emissions.

*Source: Handbook of Energy & Economic Statistics in Japan (2008 Edition), The Institute of Energy Economics, Japan



20

Optical fiber network ensure secure and dependable performance. We provide services that help people in a host of ways.



Health and nursing care services that provide comfort and security.

The Kansai EP Group draws on a wide range of accumulated know-how and experience to provide high-value-added services in the health and nursing field. Offering such services as membership health management, private nursing homes with personalized care, and home nursing care, Group companies are working to keep customers healthy, secure and comfortable.



PET inspection system for early-stage cancer diagnosis

Providing the best energy solutions to promptly and accurately meet business needs as a trusted business partner.

Helping business customers find the right energy solutions.

Both corporate and industrial customers use energy in a variety of ways. The Kansai EP Group can help a company find the ideal energy solutions, no matter what the company's scale, field or type of operation. For example, the energy experts at Kansai EP can help a company reduce energy consumption, cutting both costs and CO₂ emissions. Diagnostic services to improve energy efficiency at large facilities.



Kansai EP's energy-equipment diagnostic service

The corporate sector consumes an enormous amount of energy, so its ability to use energy efficiently is critical. Pulling together technologies and know-how from across our Group, Kansai EP provides diagnostic services for equipment and facilities to help companies understand how to utilize energy in the most efficient manner possible. We have also developed our own original measuring and analysis tools that can obtain a variety of data simultaneously, allowing us to respond more quickly to customer needs. Eco Ice thermal-storage air conditioning systems take advantage of lower nighttime rates.

Kansai EP is promoting energy-efficient Eco Ice and Eco Ice Mini thermal-storage air conditioning systems. Ideal for businesses, these systems use electricity at night – when rates are low – to produce ice and cold water (in the summer) or hot water (winter) and store it for daytime cooling and heating use. Achieving exceptionally high energy efficiency, these large-scale air conditioning systems can significantly lower a company's energy costs. Meeting corporate energy management and environmental needs.

To provide customers with optimum solutions to meet their diverse needs such as "energy conservation, CO₂ reduction and cost saving", one of our Group companies, Kanden Energy Solution, offers energy management, ESCO services, and other onsite services. Kanden Energy Solution

Solutions business

can evaluate factors such as a company's energy usage and equipment conditions, then devise a custom-tailored solution. Kansai EP also actively proposes "Utility Service" that offers comprehensive services for utility facilities – transformers, boilers and air conditioning systems, covering their design, construction, operation, maintenance and operational management. In all of these endeavors, total customer satisfaction is our aim.

Facility business

Energy business

One-stop

services &

solutions



Decontaminating soil for better environment.

Soil at old factory sites contaminated by organic substances, heavy metals and oil has become a significant issue. Kansai EP has established a new soil decontamination company, Kanden Geo-Re, that uses one of our expertise derived from various power plant constructions and other land reuse programs. By these experiences, Kanden Geo-Re can thoroughly analyze and decontaminate soil.

Kanden Geo-Re has now developed a newer land-decontamination system that offers higher efficiency and lower costs than previous system. The system can process around 100,000 tons of soil per year, with a soil reuse rate of more than 97%. Kanden Geo-Re offers total solutions in the soil decontamination field through consulting service, soil cleaning service and sales of recycled soil.

th our diagnostic services, we can help customers use energy more efficiently actories and other large-scale facilities.

Achieving a low-carbon society

Vitally concerned about preventing global warming and protecting the environment, Kansai EP is committed to helping achieve a low-carbon society.

> Working in harmony with nature and local communities... Our power plants are homes to forests and ponds.

> > and the American Million of the

einte

At our power plant sites, Kansai EP has created biotopes that provide habitats for dragonflies, fireflies and other in (Dragonfly pond at Sakaiko Power Plant)

We're deeply involved with the environment - so we're committed to making it better.



New ERA strategy aims to prevent global warming.

Kansai EP's New ERA strategy outlines a comprehensive set of measures aimed at improving energy efficiency, reducing CO₂ emissions and helping prevent global warming. In the long run, the company's goal is to help bring about a low-carbon society that does not rely on fossil fuels. Efforts toward that end include working to reduce CO₂ emissions from utility grid power and promoting an electric society.

We help customers reduce CO₂ emissions.

Kansai EP's New ERA strategy is aimed at lowering the CO₂ emission factor – the amount of CO_2 emissions per net system energy demand. By identifying and recommending ways to save energy, we're helping customers reduce the amount of CO₂ discharged as a result of their everyday activities.



Providing low-carbon, environment-friendly power generation.

Actively promoting a nuclear power generation system that emits no CO₂ during generation.

Nuclear power is the core component for reducing carbon-based power in utility grids. A nuclear power plant generates electricity using the energy produced as uranium fuel undergoes nuclear fission. No CO2 is discharged in the process, making nuclear power an effective way to combat global warming. Kansai EP strongly advocates the use of nuclear power generation, while focusing on assuring the safe, stable operation of nuclear

power plants.





Developing clean new energy sources, such as solar and wind power.

Japan's first solar power plant will deliver clean electricity to homes.

Kansai EP is promoting a plan to construct two large solar power plants along the coast near Sakai City. One plant, which Kansai EP will construct on our own, will be the first solar power plant in Japan to provide electricity for consumers. The other plant will be constructed jointly with Sharp Corporation.

In constructing and operating the new facilities, we expect to acquire a lot of expertise that will help us improve solar power generation, making it a more viable option for the future. We will disseminate the knowledge we gain to the public, so others can make use of it too.

With total output planned to be around 28,000 kW, the new solar plants will rank among the largest in the world. Solar-

power generation, like nuclear and hydroelectric power generation, discharges no CO₂, so the new plants are expected to reduce total CO₂ emissions by about 10,000 tons per year. Plans call for operation to begin in 2011.



Planned Sakai City solar power plant (artist's rendition)



Taikoyama wind power plant (Kyoto Prefecture), built with subsidies from the Kansai Green Electricity Fund



Boosting thermal power generating efficiency to reduce CO₂ emissions and fossil fuel consumption.

At our Sakaiko Power Plant, Kansai EP is installing the industry's most advanced combined cycle generator. The new equipment will improve efficiency and reduce CO₂ emissions by around 30%. At all of our other thermal power plants too, we're continually seeking ways to improve efficiency so we can reduce both CO₂ emissions and fossil fuel consumption.

General transmission-end efficiency of thermal power generation (low calorific value standard)



Upgrading our hydro power facilities.

In 1988 Kansai EP launched a full-scale hydroelectric power plant improvement project. Some 18 years later, in 2006, we completed the job, upgrading every one of our hydroelectric power plants. The upgraded facilities greatly improve power generating efficiency, reducing CO₂ emissions by 100,000 tons every year.



Working with the Kansai Green Electricity Fund to promote new energy sources.

The Kansai EP Group is promoting the use of clean renewable energy sources, such as solar and wind power. We're planning to build 12 windmills with combined output of 24,000 kW on Awaji Island, which offers some of the best wind conditions in the Kansai.

We also work closely with the Kansai Green Electricity Fund, which helps subsidize construction of power plants that use clean, renewable energy sources. Kansai EP makes financial contributions to the Kansai Green Electricity Fund, matching the amount of donations received from local residents. The funds support construction of environmentfriendly power-generating facilities.

Promoting an electricity-based society

Promoting the use of electric appliances and proposing energy-saving ideas with the aim of creating an energy-efficient society.

The EcoCute solution helps to reduce CO₂ emissions.



If everyone used energy more efficiently, we could make an enormous

reduction in CO_2 emissions. One way to improve efficiency is to use energy-saving EcoCute electric hotwater supply systems. Using advanced air-source heat-pump technology, these extremely efficient systems can significantly reduce CO₂ emissions. Promoting EcoCute systems is one part of our strategy to move toward a low-carbon society.

Environmental home budgeting - helpful information for consumers.

Kansai EP posts environmental home budgeting information on our website. Designed to make it easy for consumers to estimate the amount of CO₂ discharged from running their homes, the information can help consumers do their parts to save energy and improve the environment.



Electric vehicles minimize impact to the environment.



Electric vehicle (test model) under developmen Electric vehicles produce no CO2 and no nitrogen oxide, and they are extremely quiet. Those are three good reasons why the electric vehicles being developed today are likely to become tomorrow's mainstay automobiles. There's another big reason too - electric vehicles are extremely energy-efficient, consuming only around one-tenth to one-guarter as much energy as a gasoline-powered vehicle. Kansai EP continues to promote the widespread use of these environmentally friendly vehicles. One way we're helping is by collecting and evaluating operation data as part of efforts to commercialize electric vehicles.

Developing breakthrough CO₂-reduction technologies and launching global warming-prevention initiatives.

New CO₂ separation and recovery technologies.

Anticipating the growing CO₂ crisis, in 1990 Kansai EP launched a project to develop technologies for separating and collecting CO₂ from the exhaust discharged at thermal power plants.



Nanko Thermal Power Plant flue gas desulfurization plant

We teamed up with Mitsubishi Heavy Industries and built an experimental plant on the grounds of our Nanko Thermal Power Plant. Within three years after full-scale research had begun, we developed KS-1 – a CO₂ absorbing solution capable of collecting more than 90% of the CO₂ in exhaust gas. KS-1's superior performance has earned it acclaim as the world's best CO₂-absorbing solution a reputation it still enjoys today. The product is now used at a number of different factories, including overseas fertilizer plants, for collecting CO_2 . Our research lab continues with efforts to develop CO₂-absorbing solutions with even higher efficiency, and we are working on applying KS-1 to the direct recovery of CO_2 from exhaust gas at thermal power plants.

valu's solar power plant receives abundant bright sunlight.

Construction of a solar power plant in Tuvalu, an island under threat from global warning.

The average elevation point of Tuvalu is 2 meters above sea level. A consequence of global warming has been an increase in the sea level causing a threat to the South Pacific islands in the near future. Tuvalu is willing to do its own part for the mitigation of global warming and has requested collaboration with developed countries for the reduction of CO₂ emissions. Kansai EP has helped the aspiration setting up a 40-kW solar power generation system on the roof of the soccer stand in Funafuti, the capital of Tuvalu. Kansai EP has also transferred its know-how to construct and operate the system to Tuvalu Electric Company.



uvalu Island in the South Pacifi



Working in harmony with local communities

As a responsible corporate citizen, Kansai EP is committed to contributing to the development of our local communities.

We work hard as members of the community, and feel a sense of attachment and pride.

Kansai EP employees worked hand in hand with local residents in efforts to beautify the neighborhood as part of our Environment Month activities.

19

To move forward, and experience life together with the community... We listen to the people we serve and work as one with them.

At our mobile classes. we teach children about energy and the environment.

Today's children will be tomorrow's leaders - and they will inherit a world in which energy and the environment are vital concerns. To get children thinking about these issues from an early age, Kansai EP employees visit elementary and junior high schools and conduct educational activities in what we call mobile classes. Arranged by staff at individual Kansai EP sites, the lessons are designed to make learning fun, with clever experiments and hands-on activities. In fiscal 2007, some 47,000 children learned about energy and the environment at 1,140 classes conducted by Kansai EP employees.

Keeping the lines of communication open with local residents.



• Elgaia Ohi virtual-reality theater nity to learn more about our business operations and issues related to electricity, energy and the environment. Held at facilities in a variety of locations, these presentations promote communication with residents of local communities.One facility we use for our presentations is called Elgaia Ohi Located in Fukui Prefecture, Elgaia Ohi is one of the world's largest virtual-reality theaters. Visitors here can see powerful simulations about energy and the environment and take incredible virtual tours of nuclear power plants.

Joining in environment **c** beautification campaigns as part of the community.

Working hand in hand with our neighbors, Kansai EP takes active part in cleaning campaigns, tree-planting programs and other efforts to beautify the community. Kansai EP employees also participate in neighborhood festivals and other traditional local events. We support the community by providing volunteer work, such as inspecting all the wiring for the Gion Matsuri.



Helping to clean up the Kasuga Taisha shrine in Nara

Sponsoring a 4-month, Kansaiwide exhibition of works by disabled artists.



Kanden Collabo Art 21 - An exhibition of the works of disabled artists

Since 2001 Kansai EP has supported disabled artists by sponsoring exhibitions of their works. The company received submissions from several hundred artists and exhibited 30 carefully selected works at eight locations. Many people visiting the exhibitions said they came away deeply inspired by the beauty of the art.

Sponsoring classical music concerts

around the Kansai to provide emotional enjoyment through music.

For 20 years Kansai EP has sponsored classical music concerts at our head office and branch offices. Events such as our Kanden Classical Special give people an opportunity to enjoy the beauty and emotional enjoyment of classical music.



Performance of Puccini's Tosca Opera (FY 2007)

Supporting sports events, including the KANDEN FLASH-**BOWL SERIES.**

Kansai EP has supported the Kansai Collegiate American Football Association for 20 years, serving as sponsor of the KANDEN FLASHBOWL SERIES. We also sponsor and participate in marathon races around the Kansai and provide support for other sports events.

Holding lessons for children in our mobile classes more than 1,000 times a year, Kansai EP helps tomorrow's young leaders learn about energy and the environment.

Supporting art, culture and sports to help vitalize each community.



Working with local governments and companies to attract new business to the Kansai.

In recent years the Kansai area has attracted a number of new industries, and large production plants have been constructed in the region. For example, the Osaka Bay area has become a major flat-panel display manufacturing base a development that's helping revitalize the region's economy. Kansai EP supports this effort by disseminating information about the advantages of the Kansai and taking part in campaigns designed to attract new industry and investment from around Japan and overseas to the Kansai. Our PR efforts are helping to build a stronger economic base for the region.



Website about business opportunities in the Kansai

Corporate Data

Overview

(As of March 31, 2008) *Note: Figures are rounded, so the sum of individual figures might differ slightly from the indicated total.

Date of establishment	May 1, 1951
Paid-in capital	¥489,300 million
Outstanding shares	962,690,000
Total assets	¥6,135,000 million (consolidated: ¥6,789,600 million)
Employees	22,113 *based on employee registry
Energy sales volume	Lighting: 50,182 million kWh
	Power: 100,241 million kWh
	Total: 150,422 million kWh
Contracted customers	Lighting: 12,180 thousand
	Power: 1,150 thousand
	Total: 13,340 thousand
Gross system input	163,400 million kWh
System peak demand	33,060 MW (August 2, 2001)*Highest daily value at generating end
Supply area	Entire Osaka, Kyoto, Nara, Shiga and Wakayama prefectures;
	greater part of Hyogo and portions of Mie, Gifu and Fukui prefectures
Operating revenues	¥2,478,500 million (consolidated: ¥2,689,300 million)
Operating income	¥111,000 million (consolidated: ¥152,400 million)
Current net income	¥55,400 million (consolidated: ¥85,300 million)

Electricity Sales and Peak Demand

*Note: Figures are rounded, so the sum of individual figures might differ slightly from the indicated total.





Electric Power Supply Facilities

Power plants	Hydroelectric	148 locations
	Thermal	12 locations
	Nuclear	3 locations
	Total	163 locations
Transmission lines (length)	Overhead	14,088 km
	Underground	4,235 km
Distribution lines (length)	Overhead	122,201 km
	Underground	5,927 km
Substations	917 locations	147,870 thousan

(As of March 31, 2008) *Note: Figures are rounded, so the sum of individual figures might differ slightly from the indicated total.

8,190 thousand kW 16,410 thousand kW 9,770 thousand kW 34,360 thousand kW

Main Branches

Head Office:	6-16, Nakanoshima 3-chome, Kita-ku, Osaka 530-8270, Japan TEL:06-6441-8821	Kyoto Branch
Nuclear Business Unit	Yokota 8, Goichi 13, Mihama-cho, Mikata-gun, Fukui 919-1141, Japan TEL:0770-32-3500	Kobe Branch
Mihama Power Plant	5-3, Kawasakayama, Nyu 66, Mihama-cho, Mikata-gun, Fukui 919-1201, Japan TEL:0770-39-1111	Nara Branch
Takahama Power Plant	1 Tanoura, Takahama-cho, Ohi-gun, Fukui 919-2392, Japan TEL:0770-76-1221	Shiga Branch
Ohi Power Plant	1-1 Aza Yoshimi, 1 Oshima, Ohi-cho, Ohi-gun, Fukui 919-2101, Japan TEL:0770-77-1131	Wakayama Branch
Nuclear Power Construction Center	2-1 Yokota, 13 Goichi, Mihama-cho, Mikata-gun, Fukui 919-1141, Japan	Himeji Branch
Thermal Power Engineering Center	6-32, Nakanoshima 3-chome, Kita-ku, Osaka 530-6591, Japan TEL:06-6441-8821	Tokyo Branch
Information -Communication Center	6-16, Nakanoshima 3-chome, Kita-ku, Osaka 530-8270, Japan TEL:06-6441-8821	Tokai Branch
Purchasing Center	Sumitomo Fudosan Nishi Umeda Building 5F, 1-7, Fukushima 5-chome, Fukushima-ku, Osaka 553-0003, Japan TEL:06-4796-8860	Hokuriku Branch
Research Institution of Electric Power Technology	11-20, Nakoji 3-chome, Amagasaki-shi, Hyogo 661-0974, Japan TEL:06-6491-0221	Thermal Power Center
Institute for Energy Technology	11-20, Nakoji 3-chome, Amagasaki-shi, Hyogo 661-0974, Japan TEL:06-6491-0221	Sakaiko Power Plant
Civil Engineering and Construction Center	Sumitomo Fudosan Nishi Umeda Building 4F, 1-7, Fukushima 5-chome, Fukushima-ku, Osaka 553-0003, Japan TEL:06-4796-8853	Tanagawa No. 2 Power Plant
Kansai Electric Power Capacity Development Center	5-5, Shimizu 2-chome, Ibaraki-shi, Osaka 567-0059, Japan TEL:072-641-1691	Nanko Power Plant
Power Systems Technology Center	Nakanoshima Center Building, 2-27, Nakanoshima 6-chome, Kita-ku, Osaka 530-0005, Japan TEL:06-6441-8831	Kainan Power Plant
Kansai Electric Power Hospital	1-7, Fukushima 2-chome, Fukushima-ku, Osaka 553-0003, Japan TEL:06-6458-5821	Gobo Power Plant
Kuroyon Administrative Office	2010-17, Taira, Omachi-shi, Nagano 398-0001, Japan TEL:0261-22-0800	Himeji No. 1 Power Plant
Maizuru Thermal Power Plant Construction Office	500, Aza Chitose, Maizuru-shi, Kyoto 625-0135, Japan TEL:0773-68-2001	Himeji No. 2 Power Plant
Sakaiko Power Plant Construction Office	2, Chikko Shinmachi 1-cho, Nishi-ku, Sakai-shi, Osaka 592-8331, Japan TEL:072-241-0025	Aioi Power Plant
Wakayama Thermal Power Plant Construction Office	6-16, Nakanoshima 3-chome, Kita-ku, Osaka 530-8270, Japan TEL:06-6441-8821	Ako Power Plant
North Osaka Branch	9-3, Honjyo Higashi 3-chome, Kita-ku, Osaka 531-8588, Japan TEL:06-6373-1541	Maizuru Power Plant
South Osaka Branch	9-5, Hamaguchi Nishi 3-chome, Suminoe-ku, Osaka 559-0006, Japan TEL:06-6672-1301	Kansai International Airport Energy Center

Kyoto Branch	579, Higashi Shiokoji-machi, Karasuma Nishi Iru, Shiokoji Dori, Shimogyo-ku, Kyoto 600-8216, Japan TEL:075-361-7171
Kobe Branch	2-1, Kanocho 6-chome, Chuo-ku, Kobe 650-0001, Japan TEL:078-391-7211
Nara Branch	48, Omori-cho, Nara-shi 630-8548, Japan TEL:0742-27-1237
Shiga Branch	1-51, Nionohama 4-chome, Otsu-shi, Shiga 520-8570, Japan TEL:077-522-2626
Wakayama Branch	40, Okayamacho, Wakayama-shi, 640-8145, Japan TEL:073-422-4150
Himeji Branch	117, Jyunishomae-cho, Himeji-shi, Hyogo 670-8577, Japan TEL:079-225-3221
Tokyo Branch	Fukokuseimei Building, 2-2, Uchisaiwai-cho, 2-chome, Chiyoda-ku, Tokyo 100-0011, Japan TEL:03-3591-9261
Tokai Branch	27-14 Izumi 2-chome, Higashi-ku, Nagoya 461-8540, Japan TEL:052-931-1521
Hokuriku Branch	2-13, Higashi Denji Gatamachi 1-chome, Toyama-shi, Toyama 930-8513, Japan TEL:076-432-6111
Thermal Power Center	6-32, Nakanoshima 3-chome, Kita-ku, Osaka 530-6591, Japan TEL:06-6459-0433
Sakaiko Power Plant	2, Chikko Shinmachi 1-cho, Nishi-ku, Sakai-shi, Osaka 592-8331, Japan TEL:072-241-9781
Tanagawa No. 2 Power Plant	1905-12, Tanagawa Tanigawa, Misaki-cho, Sennan-gun, Osaka 599-0311, Japan TEL:0724-95-0661
Nanko Power Plant	3-8, Nanko Minami 7-chome, Suminoe-ku, Osaka 559-0032, Japan TEL:06-6613-0101
Kainan Power Plant	260-96, Funao Aza Nakahama, Kainan-shi, Wakayama 642-0001, Japan TEL:073-482-6153
Gobo Power Plant	1-3, Aza Tomishima, Minami Shioya, Shioya-cho, Gobo-shi, Wakayama 644-0024, Japan TEL:0738-23-2811
Himeji No. 1 Power Plant	3058-1, Nakashima, Shikama-ku, Himeji-shi, Hyogo 672-8530, Japan TEL:079-235-0551
Himeji No. 2 Power Plant	Megatokiwa-cho, Shikama-ku, Himeji-shi, Hyogo 672-8034, Japan TEL: 079-245-1651
Aioi Power Plant	5315-46, Aza Yanagiyama, Aioi, Aioi-shi, Hyogo 678-8543, Japan TEL:0791-23-5063
Ako Power Plant	1062, Kariya Aza Higashi Okite, Ako-shi, Hyogo 678-0239, Japan TEL:0791-42-4111
Maizuru Power Plant	560-5, Aza Chitose, Maizuru-shi, Kyoto 625-0135, Japan TEL:0773-68-2004
Kansai International Airport Energy Center	Senshu Kuko Naka 1, Tajiri-cho, Sennan-gun, Osaka 549-0011, Japan TEL:0724-56-6140

Major Business Sites

TEL:06-6582-2881 Kuio Business Site Ogimachi Business Site TEL:06-6373-3131 Hokusetsu Business Site TEL:06-6384-1131 Mikuni Business Site TEL:06-6391-1061 Takatsuki Business Site TEL:072-676-3131 Ikeda Business Site TEL:072-752-5070 Moriguchi Business Site TEL:06-6908-4731 Hirakata Business Site TEL:072-841-1131 TEL:06-6631-4101 Namba Business Site Higashisumiyoshi Business Site TEL:06-6700-3131 Higashiosaka Business Site TEL:06-6787-5011 Habikino Business Site TEL:072-956-3381 Minami Osaka Business Site TEL:072-238-8681 Kishiwada Business Site TEL:072-422-4701 Kyoto Business Site TEL:075-491-1141 Fushimi Business Site TEL:075-612-2131 Fukuchiyama Business Site TEL:0773-22-3101 Maizuru Business Site TEL:0773-62-2540 Mivazu Business Site TEL:0772-22-2112 Ohama Business Site TEL:0770-52-0890

Information technology

Lifecycle-related business

KANSAI MULTIMEDIA SERVICE COMPANY

Kanden System Solutions Company.

K Cable Television Cornoration

URBAN SERVICE COLLTD

Kansai Medicalnet Co., Ltd.

KANDEN AMENIX CO., LTD

Kanden Joy Life Co., Ltd.

Clearpass Co., Ltd.

KANDEN FUDOSAN CO., LTD.

EL SUEHIRO FOOD SERVICE CO

Kansai Jyutaku Hinshitsu Hosho

KANDEN E HOUSE CORPORATION

KANDEN Security of Society, Incorporated

KAN-DEN BUILDING MANAGEMENT Co., Ltd.

Incorporated

K-Opticom Corporation

TERUYA Corporation

Management Co.,Inc

TEL:078-392-6200 Kobe Business Site TEL:0799-22-0605 Awaii Business Site TEL:078-912-2651 Akashi Business Site Hanshin Business Site TEL:06-6481-3961 Sanda Business Site TEL:079-563-2484 Nara Business Site TEL:0742-36-1201 Takada Business Site TEL:0745-53-1131 Shiga Business Site TEL:077-522-2611 Hikone Business Site TEL:0749-22-0080 Yokaichi Business Site TEL:0748-22-2111

Wakavama Business Site TEL:073-422-8111 Hashimoto Business Site TEL:0736-32-1245 TEL:0739-22-1212 Tanabe Business Site Shingu Business Site TEL:0735-22-521 Himeji Business Site TEL:079-292-3131 Kakogawa Business Site TEL:079-421-3201 Aioi Business Site TEL:0791-22-0730 Yashiro Business Site TEL:0795-42-0260 Tovooka Business Site TEL:0796-22-3131

Energy-related business

Eco Power Co., Ltd. FCHIZEN ENELINE CO., INC eL ENERGY Company Incorporated Osaka BioEnergy Co., Ltd. Osaka Rinkai Energy Service Corporation KIA Heating & Cooling Supply Co., Ltd. Kanden Energy Development Co, Inc. Kanden Energy Solution Company Incorporated KOUKA ENERGY Company incorporated KOBE HEATING AND COOLING SUPPLY Co., 1 td. SAKALL NG Corporation The Japan Atomic Power Company HYDRO EDGE Co., Ltd. Wakayama Kyodo Power Company, Inc.

Main Affiliated Companies

Group business support

ENEGATE Co., Ltd. THE GENERAL ENVIRONMENTAL TECHNOS CO., LTD The Kanden L&A Company, Limited Kanden EL Auto System Corporation Kanden Engineering Corporation Kanden Office Work Corporation The Kanden Services Company, Incorporated Kanden CS Forum, Incorporated KANDEN JOINUS CO., LTD. Kanden Power-Tech CORPORATION Kanden Business Support Corporation Kanden Plant Corporation KINDEN CORPORATION The Kurobe Gorge Railway Co., Ltd. Institute of Nuclear Safety System, Incorporated Nuclear Engineering, Ltd. NIHON NETWORK SUPPORT CO., LTD. NEWJEC INC.

Other business areas

LNG EBISU Shipping Corporation Osaka School Amenity Service Co., Inc OG-Kanden Joint Planning Company Kansai Sojitz Enrichment Investing Kansai Electron Beam Co., Ltd. Kansai Power International Corporation Kanden L-Heart Co., Inc. Kanden-el-farm, Inc. Kansai Electric Power Australia Ptv I td KANDEN GEO-RE Co., Ltd. Kansai Power Venture Management Corporation METEOROLOGICAL ENGINEERING CENTER INC. CCL Co., Ltd. Japan Australia Uranium Resources Development Co., Ltd. Japan Indonesia LNG Co., Ltd. Japan Electron Beam Irradiation Service Co., Ltd.

(As of August 31, 2008)

At Kansai EP, our Corporate Social Responsibility (CSR) Action Principles charge every employee with making total customer satisfaction their foremost priority.

CSR Action Principles

1. The safe, steady delivery of quality products and services Recognizing that the products and services we provide are critically essential to society and support the very foundation of our customers' everyday lives, the Kansai EP Group is committed to ensuring the safe, dependable delivery of those products and services at all times.

2. A progressive approach to the environment

As an energy company, the Kansai EP Group understands that our business activities are profoundly interconnected with environmental issues and have an enormous effect on the global environment. Accordingly, we strive to develop operations that meet the world's highest standards in terms of reducing environmental impact. We will also take a progressive approach to improving the environment and establishing a sustainable society.

3. A conscientious, supportive member of local communities

Conducting business operations that are rooted in local communities and deeply affect the lives of residents, the Kansai EP Group is committed to living, working and growing hand in hand with local communities. Accordingly, we contribute actively to the development of local communities and revitalization of the entire region.

4. Respecting human rights and creating an ideal workplace environment

The Kansai EP Group considers respect for human rights to be an important internationally recognized obligation. Accordingly, in all of our Group companies we strive to maintain safe, comfortable workplaces that are free of all types of discrimination.

5. Open, transparent business practices

To reflect the concerns of society in our operations, to ensure fairness in all of our activities, and to promote full accountability, the Kansai EP Group is committed to communicating closely with the public and following open, transparent business practices.

6. Ensuring strict compliance with all rules and regulations

Following a code of corporate ethics and complying with all relevant laws, regulations and company rules are strict requirements that all corporations must meet to properly serve society. The Kansai EP Group affirms that following our code of ethics and complying with all laws, regulations and rules will be the basis underlying all of our business activities. Further, we will continue to maintain and improve our system for ensuring strict implementation and compliance procedures.







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