

Business Operations That Fulfill Social Responsibility

The J-POWER Group undertakes business operations that fulfill our corporate social responsibility (CSR) by continuously reinforcing the foundations of business operations including management and human resources and efforts to achieve mutual benefit with local communities and society as well as environmental management in accordance with our corporate principle of contributing to the sustainable development of Japan and the rest of the world in response to changes in social conditions and the business environment.

Foundations of Business Operations

Corporate Governance

Officers and Management Council System

At J-POWER, directors have supervisory functions and the representative director, who has business administrative authority under the Companies Act, performs executive functions with the managing officers and executive officers. In addition, an independent director participates in management decision-making from an independent perspective based on specialized knowledge and experience. Under the Management Council System, J-POWER established an Executive Committee, which deliberates on matters that are of importance to the company as a whole, and a Management Executing Committee, which handles important matters relating to specific aspects of business execution. The system facilitates appropriate and timely decision-making and efficient corporate operations.

System of Audits and Supervision

J-POWER's Board of Corporate Auditors comprises five auditors, of which three are outside auditors and one is a full-time standing auditor, enhancing the oversight functions of the Board of Corporate Auditors. Separate from the audits conducted by the corporate auditors, the Internal Audit Department, which

is independent from J-POWER's other internal organizations, conducts internal audits, and individual organizations also perform periodic voluntary audits.

Group Internal Controls

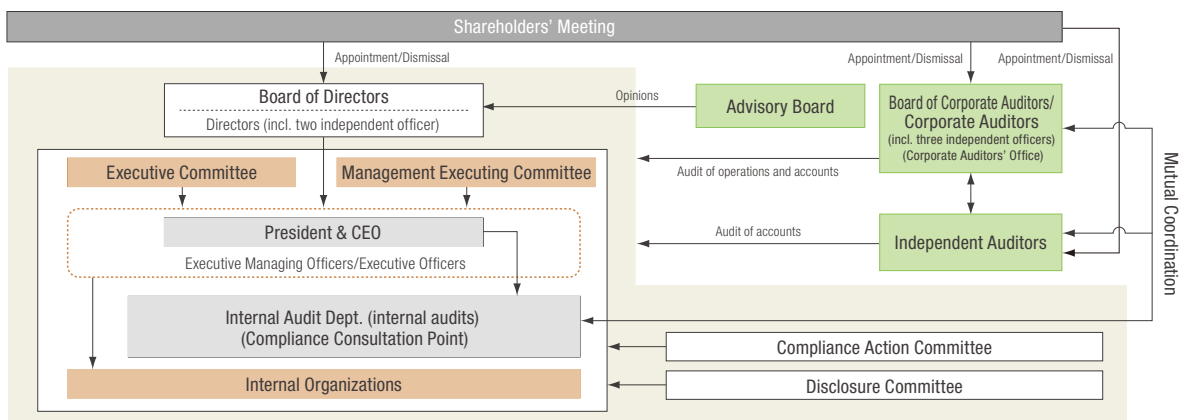
To implement internal controls in accordance with the Financial Instruments and Exchange Act, J-POWER creates internal regulations to ensure the reliability of financial reporting and operates internal control systems. In the 2013 fiscal year, we confirmed the status of development of internal control systems and their operational status, determined that they are effective, and reported the results to the Prime Minister in the form of an internal control report.

Information Disclosures

With regard to the outside disclosure of information, the Disclosure Committee chaired by the president makes active, fair, and transparent disclosures of corporate information.

The J-POWER Advisory Board was established in September 2008 to receive advice and proposals concerning corporate management from outside experts in a wide range of fields.

Figure 1 J-POWER Group's Corporate Governance Framework (as of the end of July 2014)



Compliance Initiatives

Implementation Measures

In accordance with its corporate philosophy, J-POWER adopted Corporate Conduct Rules and a Compliance Code.

To ensure compliance, J-POWER established the Compliance Action Committee and other organizations shown in Figure 2 and takes Group-wide action with the participation of Group companies.

We also established compliance consultation hotlines staffed by internal and external experts to prevent and quickly identify violations of laws and regulations and breaches of corporate ethics.

To raise awareness of compliance, we conduct training and hold lectures on compliance topics, create opportunities for officers and employees to exchange views and for personnel responsible for compliance matters to exchange information, and conduct compliance-related questionnaires, e-learning, and other programs.

Information Security

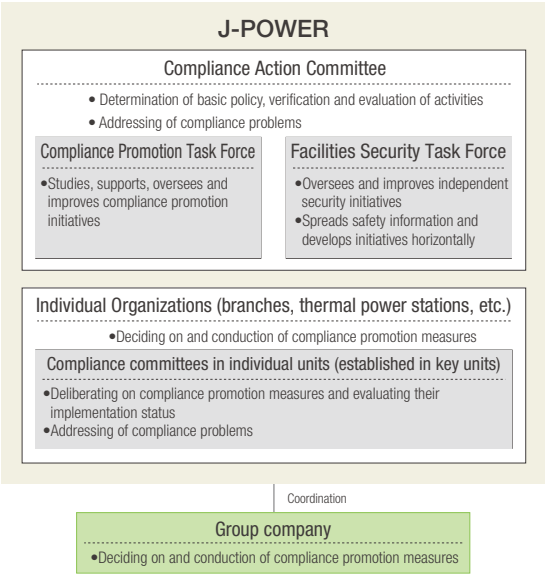
Basic Policy

As advanced computerization and the use of information technology by businesses advances, instances of cyber terrorism and attacks targeting specific companies have increased, making information security more important than ever. The J-POWER Group, a key infrastructure business responsible for stable electric supplies and construction of nuclear power plants in Japan and other countries, must ensure higher levels of information security.

J-POWER adopted a Basic Policy on Information Security and publicizes Group-wide information security measures on its website.

 **Basic Policy on Information Security**
http://www.jpowers.co.jp/english/privacy/privacy_003_e.html

Figure 2 J-POWER Group Compliance Promotion Structures



Specific Measures

Each year, we formulate and implement an annual plan setting forth specific information security measures based on the status of activities in the preceding year. The main measures are described on the J-POWER website.

To rapidly and appropriately respond to IT harm to important systems relating to electric power operations, we are reinforcing collaborative systems with relevant government ministries and agencies and the electric power industry as a whole and contributing to the IT aspects of stable electric power supplies. With regard to construction of the Ohma Nuclear Power Station, IT divisions are working with nuclear power divisions to implement robust security measures.

 **Information Security Countermeasures**
http://www.jpowers.co.jp/english/privacy/privacy_004_e.html

Emergency Management

Crisis Management Measures

The J-POWER Group recognizes a variety of events as emergencies, and as an electricity wholesaler, the greatest emergency would be an impairment to the production and distribution of electricity, our product, that prevented the supply of electric power.

We take the following measures to prevent such an occurrence.

- (1) Installation of appropriate facilities and development of disaster recovery systems in preparation for natural disasters including earthquakes, typhoons, lightning strikes, and tsunamis.
- (2) Enhanced security to prevent malicious and violent conduct (excluding situations that cannot be addressed by a single company, such as war and terrorism).
- (3) Ongoing enhancement of facility inspections to prevent major impediments to electric power supply and appropriate repairs and upgrades in response to deterioration, decline of function, and breakdowns.
- (4) Preparation of action plans for responding to pandemics and other events that could have a major impact on business operations.

The J-POWER Group has established the following systems to accurately forecast and prevent accidents, facility incidents, and other crisis events and to respond promptly and appropriately if such events occur and manage them.

Emergency Management Systems

(1) Emergency Response Team

A permanent organization at the J-POWER Headquarters. The Team oversees immediate responses and emergency management operations in the event that an emergency occurs.

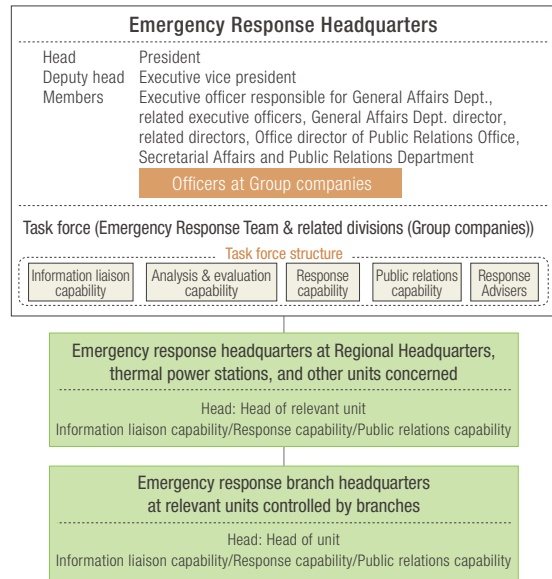
(2) Emergency managers and emergency duty personnel

Emergency managers and personnel are appointed at each head office division and local unit to take first-response action and report information.



A group discussion during disaster preparedness training

Figure 1. Emergency Countermeasures (after establishing Emergency Response Headquarters)



(3) Emergency Response Headquarters and branches

When an emergency is predicted to occur or occurs and the seriousness warrants emergency countermeasures, the Emergency Response Headquarters (and branches) are established. (See Figure 1.)

Disaster Response and Business Continuity Measures

As an electric power supplier with responsibility for vital lifelines, J-POWER has been designated a designated public institution under the Disaster Countermeasures Basic Act.

To carry this out, we actively implement physical measures in anticipation of a large-scale natural disaster as well as non-physical measures including the formulation of various rules relating to the occurrence of accidents and establishing systematic disaster response systems that cover the entire organization from the head office to local bodies. We are also reinforcing disaster response systems to ensure business continuity even in the event of damage that exceeds expectations.

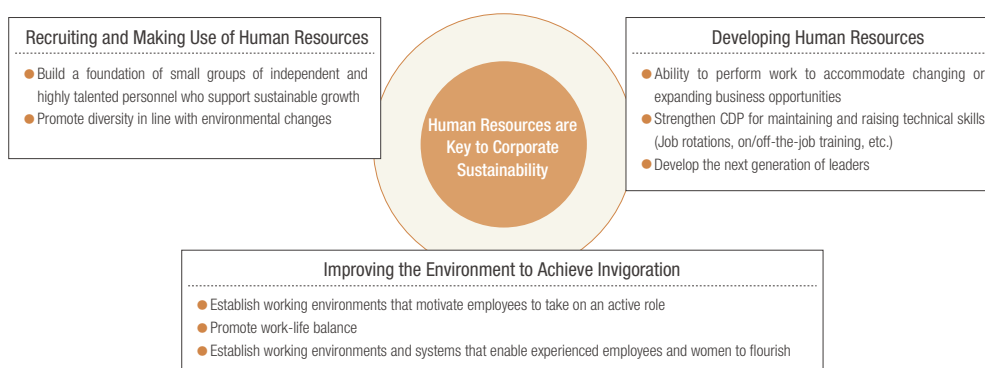
With regards to business continuity, considering the importance of immediately shifting to an emergency structure following the occurrence of an emergency and undertaking recovery operations, we have determined the minimum necessary actions to maintain business during an emergency and periodically conduct disaster response training to confirm the effectiveness of manuals and the status of emergency stores. In accordance with Tokyo Metropolitan ordinances, the J-POWER head office is preparing for Tokyo Inland Earthquakes by increasing its stores of emergency foodstuffs and investigating ways to accommodate personnel who would not be able to return to their homes.

Recruiting and Developing Human Resources and Creating Dynamic Workplaces

The J-POWER Group strives to provide safe, comfortable working environments for every one of our employees. We consider human resources to be valuable assets upholding our fundamental sustainability as a corporation. At the same time, we endeavor to create a corporate culture that respects the character and individuality of our employees and makes them feel it worthwhile to constantly take on new challenges.

The J-POWER Group positions human resource recruitment and development as crucial policy measures for the company's sustainable growth. We are reinforcing the foundation for career development, with a focus on CDP programs, establishing workplace environments and systems that make advantageous use of diversity, and promoting work-life balance in order to improve individual skills and workforce productivity.

Developing Group Human Resources and Creating Dynamic Workplaces



Recruiting and Making Use of Human Resources

The J-POWER Group's Conceptual Approach to Human Resource Recruitment

The J-POWER Group approach is to conduct stable hiring in the interest of sustainable growth, and also to seek human resources from people in a wide range of fields and age groups to whom we provide opportunities to take an active part.

With regard to personnel hiring and utilization, the J-POWER Compliance Code stipulates respect for individuality and human rights and prohibits discrimination. We are also conducting awareness-raising on these matters in human rights training. We are currently creating systems and working environments that enable our diverse personnel to fully demonstrate their capabilities, without regard for gender, age or other such distinctions.

Table 1. Employment of New Graduates (J-POWER)

	FY 2012	FY 2013	FY 2014
Men	72	67	59
Women	6	9	5
Total	78	76	64

Measures to Promote Diversity

As a measure to further increase the hiring of elderly people, we have reviewed the continuing employment system, which is a system for employment of people who have reached retirement age, to bring it in line with the amendment of the Law for the Stabilization of Employment of the Aged in April 2013. In combination with the personnel registration system, which introduces job opportunities in the Group, we will harness the experience, technology, and motivation to work possessed by older people in the Group and make use of it for

the sustained growth of our business. As of the end of March 2014, 69 employees (J-POWER) had taken advantage of the continuing employment system and related programs.

Our employment ratio for people with disabilities was 2.17% as of June 1, 2014. A "consultation desk to provide employment assistance and information on working environments to employees with disabilities" having been established, we will continue to take measures to enhance working environments and promote understanding through such initiatives as making office buildings barrier-free. In the future, we will continue striving to raise the employment ratio.

VOICE

Aiming to Build a Workplace Where Diverse Human Resources Can Take Continuously Active Parts

The J-POWER Group operates in a changing business environment, and the arrival of a society of declining birthrates and an increasing elderly population has brought increasing demand from society for corporations to achieve longer sustained employment for people. We face a need to allocate a wide range of different job assignments to a diversity of human resources, regardless of their sex or age, while responding to changes in the business environment and social environment. The J-POWER Group will endeavor to build a workplace in which a diversity of human resources can continue playing active parts by taking such measures as revising the continuing employment system and promoting the development and use of childcare and family elder care support systems.

Human Resource Development Office,
Personnel and Employee Relations
Department

Shiho Mase

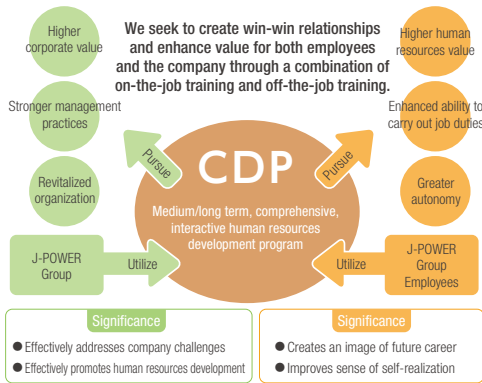


Human Resources Development

Human Resource Development Programs

Our aim in the J-POWER Group is to develop all our employees into independent, talented, professional human resources who contribute to the organization with a multiplicity of specialized knowledge and a broad perspective. We are adopting the Career Development Program (CDP) as a measure to achieve that aim.

Figure 1. CDP Overview



Evaluation and Assessment System

The J-POWER Group established an evaluation system in 2004 that is based upon a goal management system. Through initiatives aimed at achievement of specific goals, the system encourages every employee to perform work autonomously, heighten his or her achievement motivation, and improve his or her work performance. We also seek to realize our organizational strategies by having employees engage in mutual collaborative action that is based upon organizational goals.

Various Training Programs

The J-POWER Group is conducting various kinds of training as Off-JT, including level-specific training, career training, objective-specific training, and divisional training. These programs are conducted to develop human resources in line with CDP. We have also established training facilities for the technical divisions (civil engineering and architectural engineering divisions; hydroelectric power, transmission and substation, and telecommunications divisions; and thermal power divisions). Systematic development for engineers is conducted at these facilities.

Table 1. Track Record in Level-Specific Training, Career Training and Objective-Specific Training (J-POWER)

	FY 2011	FY 2012	FY 2013
Level-Specific Training	138	334	460
Career Training	163	248	276
Objective-Specific Training	216	235	254
Total	517	817	990

Helping Employees Voluntarily Develop Their Careers and Abilities

J-POWER is introducing a self-assessment system for employees to convey their career planning hopes and intentions to the company once a year and discuss them with their immediate superiors. We are also introducing a voluntary training incentive program and an academic training program to support employees developing their abilities on their own initiative.

Developing Environments to Create Dynamic Workplaces

Toward Realization of a Work-Life Balance

We are actively developing working environments and cultures that enable every employee to autonomously enhance their work and personal life and focus on highly creative work. To achieve this, we have enhanced and encouraged use of our childcare and nursing care support programs (see Figure 2), volunteer leave program, and other programs and have made efforts to normalize working hours (see Figure 3).

Figure 2. Overview of the Childcare and Nursing Care Support Programs and Results in FY 2013 (J-POWER Group)

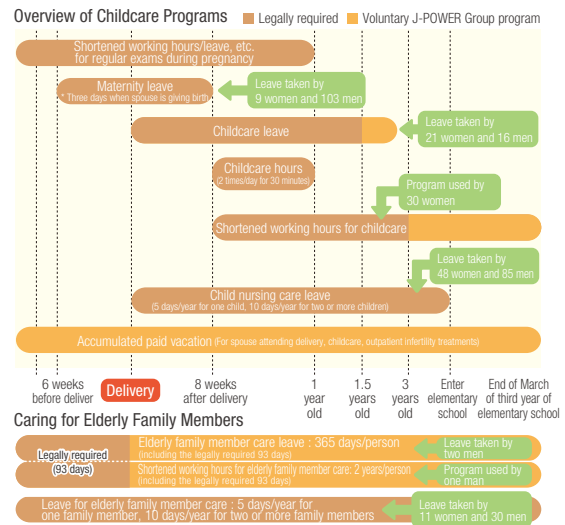
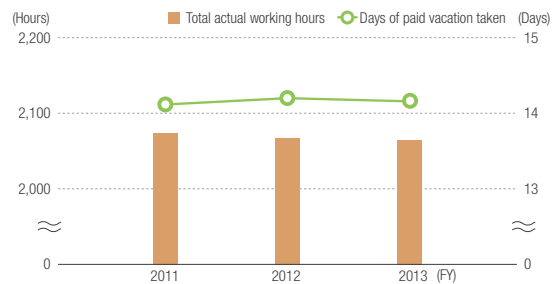


Figure 3. Change in Total Actual Working Hours and Paid Vacation Taken (J-POWER)



"Kurumin" Mark of Next-Generation Certification

Following certification in 2010 as a corporation that actively supports measures for developing the next generation, J-POWER again received the Kurumin mark of certification in 2013.

We will continue our efforts to establish even better working environments that enable each employee to maintain a balance between their work and private life and to provide meaningful and fulfilling work.



"Kurumin"

VOICE

Childcare Leave

I took childcare leave for about two months after my first son was born. I wanted to support my wife after the childbirth and to spend as much time with my son after he was born, so I took leave for that period. My wife returned to her family home in Osaka for the birth, but I was able to spend time with my family during the birth and in the hospital, at my wife's family home, and after we returned to our home in Tokushima. I was able to use this time to bond with my son and to deepen my relationship with my wife.

I am deeply grateful to my supervisor and colleagues for showing their understanding of me making use of this program.



Thermal Power Design
Department, Thermal Power
Construction Division
Gou Morii

Consultation Desk

We are working to build a work-friendly environment in the workplace by establishing a consultation desk where employees can discuss working hours, the workplace environment, sexual harassment, and power harassment.

We have also developed in-house regulations, manuals, and other such resources related to harassment, and we are implementing education for increased awareness in level-specific training courses, posters, and other such measures to resolve problems as well as to prevent them.

Our goal is a working environment where human rights and individuality are respected and where diverse personnel are completely at ease in going about their work.

Safety and Health Management

J-POWER Group's Health and Safety Measures

The J-POWER Group's health and safety measures are intended to create safe and healthy workplaces that provide meaningful work as the foundation of our business activities. J-POWER and Group companies each have roles and responsibilities and collaborate on implementing health and safety management to prevent workplace accidents and maintain and improve the health of our employees.

Measures Pursuant to the Group Occupational Safety and Health Plan

The J-POWER Group established a Group Occupational Safety and Health Plan that organizes common issues that the Group needs to address and set subsequent priority topics. Based on the plan, individual Group companies formulate their own occupational health and safety plans and take measures in cooperation with the Group.

Safety Priorities

- (1) Promoted Communications through Collaboration among Personnel at Different Worksites and Offices
- (2) Prevent recurring workplace accidents
- (3) Prevent traffic accidents resulting in injury or death and other commuting-related accidents

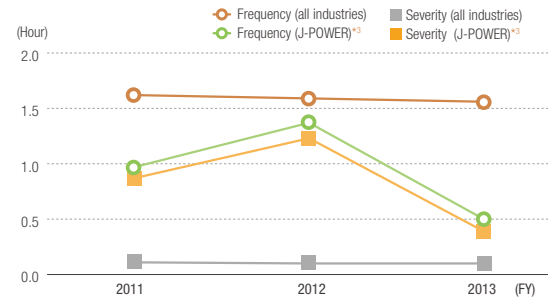
Health Issues

- (1) Promote mental and physical health

Initiatives for the Prevention of Workplace Accidents

Many of the occupational accidents that have occurred in recent years have involved contractors engaged in construction and other such work. For this reason, undertaking integrated safety measures in cooperation with business partners is crucial. We are working to achieve more active communications throughout worksites overall, raise awareness of safety, and implementing ongoing measures to prevent repetitive-pattern accidents and traffic accidents.

Accident Frequency^{*1} and Severity^{*2}



*1 Frequency:

Index of the frequency of accident occurrence. (Number of deaths or injuries caused by occupational accidents per one million working hours. Covers accidents causing loss of one day or more of work. Does not include accidents of employees on temporary transfer.)

*2 Severity:

Index of accident severity. (Number of days of work lost per 1,000 working hours. Does not include accidents of employees on temporary transfer.)

*3 Accidents involving J-POWER employees and accidents involving contractors (principal contractors and subcontractors) doing construction and other work ordered by J-POWER

Incidence of workplace accidents^{*3}

	FY 2011	FY 2012	FY 2013
Deaths	2	3	1
Serious Injury	6	13	2
Minor Injury	9	8	7

Maintaining the Health of Employees and Their Families

To maintain and improve the health of employees and their families, we encourage them to receive health checks, health maintenance guidance, and infectious disease prevention measures. In addition, we place priority on the prevention of lifestyle-related disease and mental health disorders and conduct special health checks and designated health guidance as well as THP activities* to support good physical and mental health.

* THP Activities

Activities aimed at total health, both physical and mental, based on Ministry of Health, Labour and Welfare guidelines on Total Health Promotion Plans.

Coexistence with the Community and Society

The J-POWER Group rolls out business based on harmonious coexistence with local communities and society as an electric power company with power generation and power transmission and substation facilities throughout Japan and overseas. Going forward, we will perform business that centers on “Communication with society” and “Contribution to society” as advocated in the J-POWER Corporate Conduct Rules as a means to drive advancement in local communities and society.

Communication with Society

The J-POWER Group implements fair and transparent public relations (PR) activities and information disclosure in order to secure good lines of communication with many stakeholders in different communities and in society. We are committed to making pinpoint response when it comes to PR in light of the characteristics of the stakeholders and our relationship with them, including local residents, shareholders, investors and society at large. We also promote stakeholder dialog, cognizant of the importance of two-way communication. In terms of information disclosure, we distribute information through our PR activities and respond to inquiries while also disclosing IR information via the Disclosure Committee.

PR and IR Activities

PR Activities

PR activities aim to enhance awareness of J-POWER as widely as possible, beginning with people in local communities. With this in mind, our basic policy is to distribute corporate information accurately and in a timely manner through all of our business activities and respond to inquiries concerning J-POWER sincerely and respectfully.

With regard to reporting, we strive to distribute appropriate information at appropriate timing, including through press releases and notifications. We also utilize TV commercials and magazines for advertising and do our best to gain broad understanding of our business.

J-POWER provides the opportunity for face-to-face contact with stakeholders as well as through events that include tours of power stations by each business unit, so that stakeholders can track our business activities with peace of mind.

IR Activities for Investors and Individual Shareholders

For institutional investors, we hold presentation briefings related to management plans and financial results around twice a year and actively convene meetings in Japan and overseas as the need arises. For individual investors, we hold corporate presentation briefings several times a year and provide opportunities for them to talk directly with J-POWER members, including management.

For individual shareholders, we issue a biannual shareholder newsletter (Kabunushi Tsushin) and actively disclose information on management activities and the overall condition of the company by giving tours of our power stations and other facilities twice a year.

We're working to enhance information disclosures through these types of communications activities on our website and

by publishing annual reports and other documents. We also use communications tools such as Navi-Map and dam cards to conduct public relations in an accessible and user-friendly manner.

Information Disclosure

J-POWER endeavors to disseminate appropriate information on its PR and IR activities in a timely manner to stakeholders through press releases and notifications on its website.

In particular, we comply with all pertinent laws and regulations such as the Financial Instruments and Exchange Act and securities listing regulations for information related to the J-POWER Group business, operations or results that may have a significant impact on the investment decision of stakeholders. We also formulated internal disclosure regulations for IR information and instituted a basic policy to actively disclose information in a fair and transparent manner.

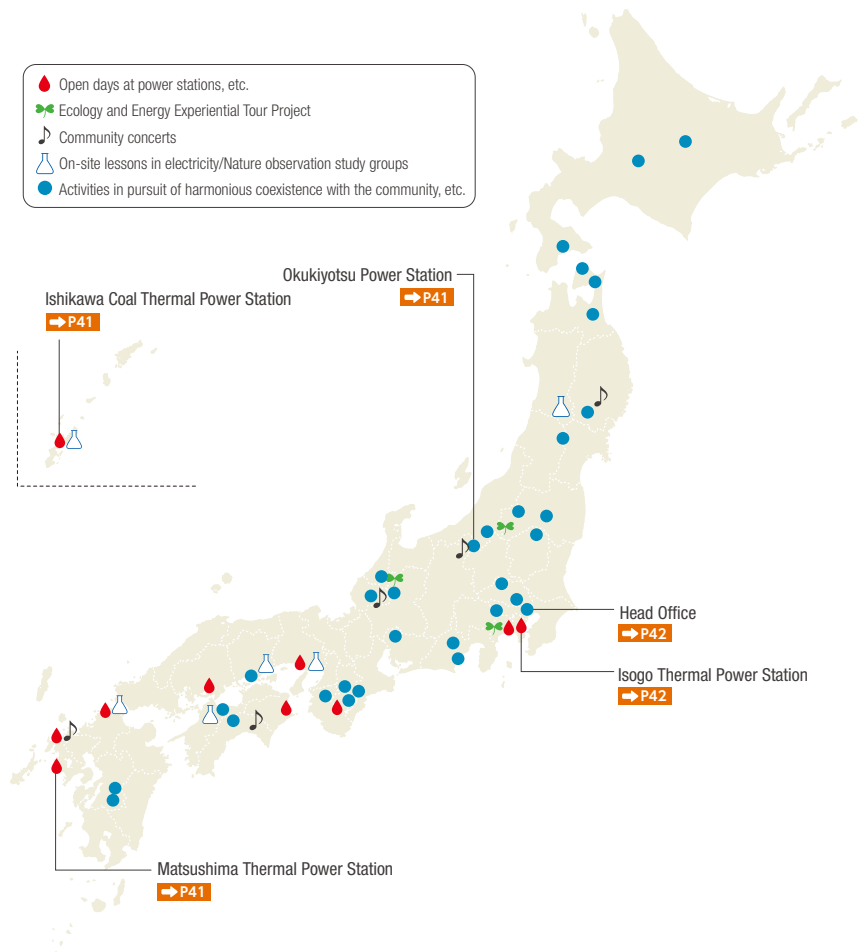
J-POWER established the Disclosure Committee, chaired by the president, to investigate and set up a system for disclosing IR information and also to examine and make judgments on information that ought to be disclosed with the aim of establishing a reputation in the market and gaining the trust of society.

Contribution to the Community and Society

J-POWER Group Approach to Social Contribution Activities

“We pursue harmony with the environment, and thrive in the trust of communities where we live and work. We regard profits as the source of our growth, and share the fruits with the society.” Under this corporate philosophy, the J-POWER Group has long engaged in social contribution activities as a member of society to help society develop soundly and sustainably. Our activities largely fall into two categories: community involvement and harmonizing energy supply with the environment.

We place high value on open communication with local community members and people working to harmonize energy supply with the environment and on sharing knowledge and learning with one another. We will steadily engage in activities on this basis as well as support the volunteer activities of our employees.



Nara prefecture

Power Station Events Open to the Public and Facility Tours

We conduct events that allow local residents to visit power stations and other business sites and to tour facilities, increasing their understanding of the J-POWER Group. We strive to enhance our presence as a member of the community by having personnel interact directly with local residents.



A power station tour at the Kitayamakawa Power Station (Nara Prefecture)

Akita prefecture

Off-Site Electricity Lessons

J-POWER conducts off-site lessons on electricity and nature observation study groups in cooperation with local schools and governments to encourage interest in and raise understanding of energy and the natural environment by students at local schools.



Off-site lesson conducted by the Thermal Power Construction Division (Akita Prefecture)

Niigata prefecture

Community concerts

We hold concerts, primarily of classical music, performed by professional musicians around Japan, to convey our constant appreciation to everyone who lives in the areas where our power plants are located. More than 100 such concerts have been held since they began in 1992. In recent years, we have been holding many mini-concerts at schools and social welfare institutions.



A community concert held by the Okukiyotsu Power Station (Niigata Prefecture)

Community Involvement

The corporate activities of the J-POWER Group are supported by members of local communities. In response, power stations and other business sites strive to be good corporate citizens while each employee works to be a good resident in these communities by being a useful presence, and they all work to be trusted and accepted by local residents.

In addition to the programs discussed below, individual business sites undertake measures tailored to their specific communities such as cooperating with local governments to plant trees, release fish, and implement other measures and participating in and cooperating with local festivals and other events.

Niigata

Snow Removal Volunteer Program

Okukiyotsu Power Station is located in Yuzawa-machi, an area that gets heavy snowfall. Employees participate in a snow removal volunteer program sponsored by the village to remove snow from the homes of senior citizens. Initially, the work can be quite difficult before one gets used to it, but after working with diligence and determination, one feels a sense of satisfaction when the job is done, and seeing the smiling faces of the seniors, many of whom live alone, provides encouragement for the future.



Nagasaki

Oseto Regatta

Holding regattas in Chinese-style canoes is a traditional event in Nagasaki Prefecture. Personnel from the Matsushima Thermal Power Station have been participating in the Oseto Regatta in the local village of Oseto continuously for more than 30 years since the power station was constructed. This Regatta is an important event for strengthening feelings of community by competing with local residents.



Harmonizing Energy Supply with the Environment

In order for people to lead enriching lives, both energy, which supports enriching lives, and a better environment are needed. Leveraging environmental knowledge acquired through our business activities to date, we partner with people seeking to harmonize energy supply with the environment and conduct activities to raise awareness and develop technologies for energy and the environment in an effort to facilitate the sustainable development of Japan and the rest of the world.

Okinawa

Butterfly-Filled Power Station

The Ishikawa Coal Thermal Power Station conducts environmental programs in cooperation with local elementary schools. Green areas within the power station site are similar to natural forest and seashore environments, and these areas are used to teach students about the relationship between living things and the environment. There are a total of three programs including exploration and observation study groups that enable participants to experience firsthand the wildlife in a natural forest and study of the characteristics of the tree nymph, Japan's largest butterfly. The children enjoy the experience of setting free the tree nymph butterflies that were bred and raised on the power station grounds.



For the Benefit of Broader Society

The J-POWER Group undertakes social contribution initiatives not just for the benefit of local communities, but also for the benefit of broader society and each region of the world where it operates.

Described below are some of the measures taken to support the future generations that will create the society of tomorrow. In addition to these programs, we will continue cooperating with volunteer activities targeting disaster areas including areas struck by the Great East Japan Earthquake as well as children suffering from malnutrition in various parts of the world, providing work training at power plants in Asia and support to persons affected by flooding.

Kanagawa Internships

J-POWER, JPHYTEC Co., Ltd., and JPec Co., Ltd. offered summer internships to science students in graduate school, university, or technical college. The internships provide experience in certain operations at power stations and other facilities with the aim of helping the interns' studies and support them in making future occupation choices. In the 2013 fiscal year, 36 interns from various areas of Japan took up the challenge of practical training in the maintenance and operation of electric power facilities.



Public Relations Department Minister of Energy Workshops

J-POWER conducts an Eco-Energy Hands-On Project (a hands-on, participation-based energy and environment study program) for university students, the leaders of tomorrow.

One aspect of this program is an off-site workshop entitled "Become the Minister of Energy" conducted in response to requests from students and various organizations.

The workshop challenges participants to formulate an optimal energy and environmental policy under the restrictions imposed by national economic strength and resource conditions. Power plant cards, country cards, and accident cards are used to help participants become the Minister of Energy for a certain country and consider energy and environmental policies.



VOICE

I Was the Minister of Energy!

I previously participated in a tour of the Takasago Thermal Power Station and learned about the Become the Minister of Energy workshop. While talking to a staff member, the discussion turned to how it would be interesting to try this as a club, and we asked J-POWER to hold the workshop during a new student welcome event.

We use electricity all the time without even thinking about it, and there are not many opportunities to consider how electricity is made and supplied. Through the game, the participants had fun and learned about electricity including generation methods and systems and their attributes. For the new students, the welcome event was something of a challenge, but a relaxing atmosphere was created through interaction with the J-POWER personnel and the game, and the event was quite a success.

I hope to plan other such events in the future and have as many students as possible participate in the workshop.

Member of ANGLEs, Sophia University (Ms. Ogawa is on the far left)



Sophia University ANGLEs Environmental Club
Maya Ogawa

Environmental Management

Based on its corporate principle of achieving harmony between energy and the environment, the J-POWER Group undertakes environmental a sustainable society. To carry this out, we undertake various measures pursuant to the J-POWER Group Environmental Management Vision, a statement management levels while maintaining strict compliance with laws, regulations, and agreements from the perspective of ensuring transparency and trust.

Corporate Target and Fiscal 2013 Results

The Action Programs for the J-POWER Group Environmental Management Vision define Corporate Targets*, which are mid-term targets that the Group as

* In addition to Group-wide Corporate Targets, business divisions and affiliates formulate their own targets tailored to their operations.

	Item	Target		
Efforts Relating to Global Environmental Issues	Reducing CO ₂ Emissions from Power Generation and Promoting Technological Development	As an electric utility, in addition to continuing to contribute to the Environmental Action Plan by the Japanese Electric Utility Industry, looking towards 2020 we are working to provide a stable supply of energy and reduce CO ₂ emissions in Japan and overseas by promoting the following measures.		
		● Work to replace aging coal-fired power facilities, such as Takehara Thermal Power Station Unit No. 1 and 2, scheduled to be replaced with the latest high efficiency USC plant technology.		
		● Promote mixed combustion of biomass fuels in coal-fired power stations (Effective exploitation of untapped resources).		
		● Contribute to the reduction of CO ₂ emissions and technology transfer on a global scale by promoting the overseas expansion of coal-fired power using J-POWER's advanced, high-efficiency power generation technologies, in particular in the Asian region.		
		● Promote the development of higher-efficiency oxygen-blown integrated coal gasification combined cycle (IGCC) technology through the realization of the Osaki CoolGen Project.		
		● Advance research and development in the area of CO ₂ capture and storage (CCS) technologies through the implementation of the EAGLE Project, the Osaki CoolGen Project, and the Callide Oxyfuel Project in Australia.		
		● In relation to the Ohma Nuclear Power Station Plan, do our utmost to ensure the construction of a safe and trusted nuclear facility, always appropriately incorporating the necessary measures for the realization of enhanced safety based on serious consideration of the accident at the Fukushima Daiichi Nuclear Power Station and following government and other guidelines, at the same time maintaining the approval of residents of the region in which the station is located.		
		● Build new hydroelectric power facilities, expand, upgrade and replace existing facilities, and expand the use of hydroelectric power.		
		● Significantly expand domestic wind power facilities and advance research and development towards the realization of ocean-based wind power generation technologies.		
			● Work to develop new geothermal power sites in Japan.	
	Item	Target	Target base-year performance, etc.	FY 2012 performance
Efforts Relating to Local Environmental Issues	● Maintain/improve thermal efficiency of thermal power stations [HHV (higher heating value)]	Maintain current level [about 40%] (FY 2008 and each FY thereafter)	FY 2008 40.1% (Reference: LHV* = 41.1%)	40.5% (Reference: LHV = 41.5%)
	● Reduce SF ₆ emissions; increase recovery rate during inspection and retirement of equipment	Inspection: at least 97%; Retirement: at least 99% (FY 2008 and each FY thereafter)	FY 2008 Inspection: 99% Retirement: 99%	Inspection: 99% Retirement: 99%
	● Reduce SO _x emissions per unit of electric power generated (point of generation, thermal power stations)	Maintain current level [about 0.2 g/kWh] (FY 2008 and each FY thereafter)	FY 2008 0.20g/kWh	0.21 g/kWh
	● Reduce NO _x emissions per unit of electric power generated (point of generation, thermal power stations)	Maintain current level [about 0.5 g/kWh] (FY 2008 and each FY thereafter)	FY 2008 0.50g/kWh	0.51 g/kWh
	● Increase recycling rate for industrial waste	Maintain current level [about 97%] (FY 2011 and each FY thereafter)	—	98%
Ensuring Transparency and Reliability	● Protection of the Water Environment	Consider protection of river and ocean environments in business activities (FY 2013 and each FY thereafter)	—	—
	● Protect biological diversity	Consider the protection of biological diversity in relation to business activities (FY 2011 and each FY thereafter)	—	Efforts to Preserve Biodiversity
	● Improvement of Environmental Management Level	Continuous improvement of EMSs (FY 2008 and each FY thereafter)	—	Consistent use of PDCA cycle

management intended to achieve improvements in both environmental considerations and economic value so that it can contribute to the development of internal and external Group initiatives, and strive to enhance the disclosure of information relating to environmental programs and environmental

a whole is expected to work towards. As shown below, all of the items included in the Corporate Targets for fiscal 2013 were achieved.

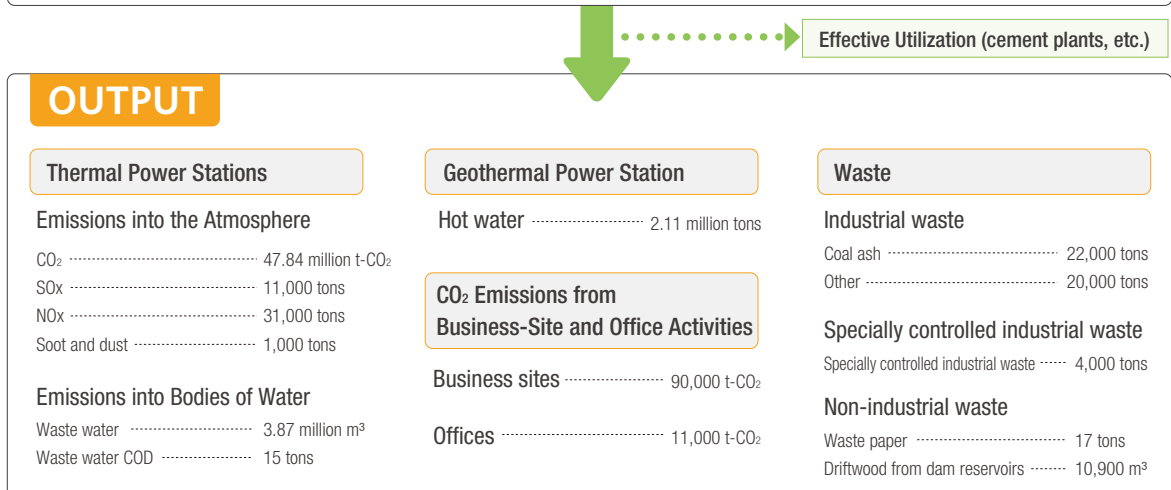
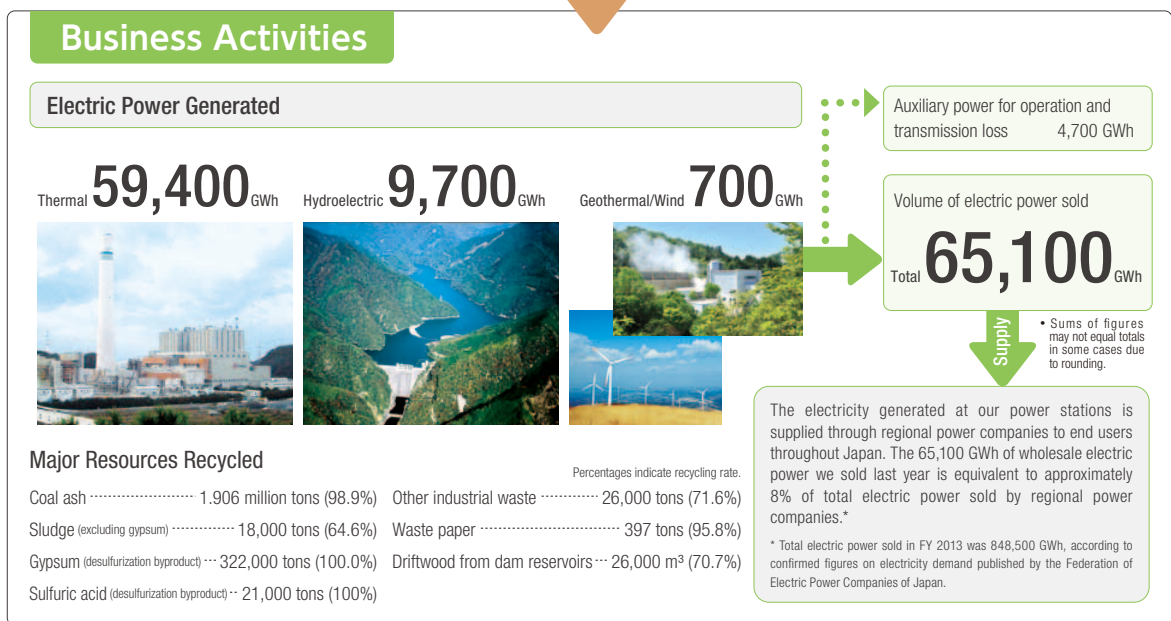
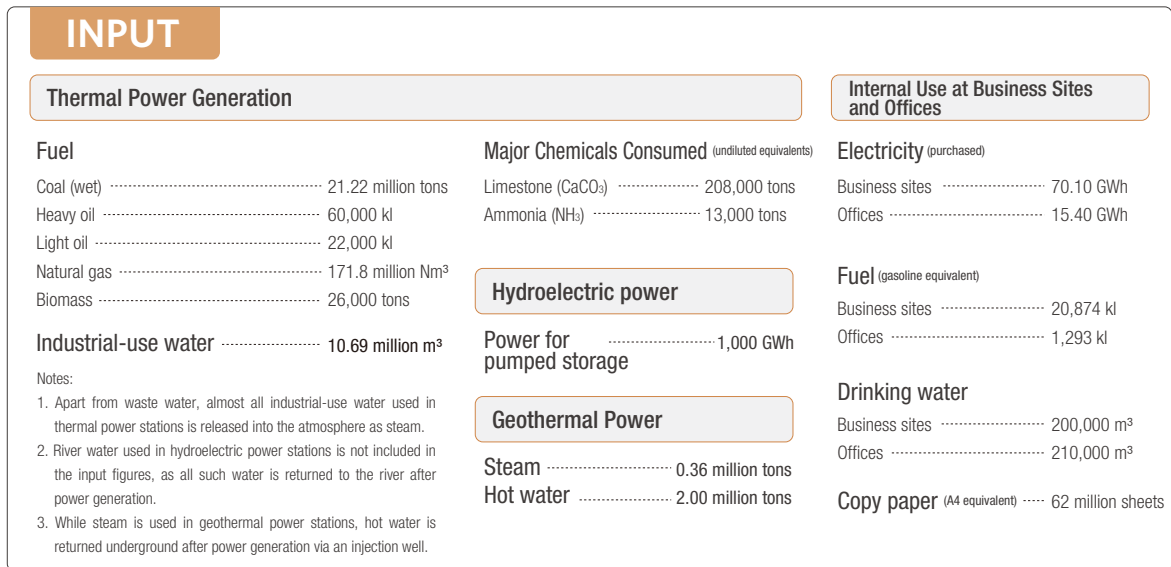
Main results for FY 2013			
		<ul style="list-style-type: none"> ● Environmental impact assessment procedures for the Takehara Thermal Power Station Replacement Project were completed and building construction was started. ● Mixed combustion according to target fuels was conducted at the Matsuura Thermal Power Station and Takehara Thermal Power Station. 	
		<ul style="list-style-type: none"> ● Preparatory measures for construction work conducted for the Central Java Project in Indonesia. 	
		<ul style="list-style-type: none"> ● With regard to IGCC and CCS technology research and development, CO₂ separation and recovery technology trials were conducted under the EAGLE Project, power plant construction was conducted to perform trials of the Osaki CoolGen Project, and trial operation of the power station was conducted under the Callide Oxyfuel Project in Australia. 	
		<ul style="list-style-type: none"> ● Measures to enhance safety were investigated under the Ohma Nuclear Power Station Plan and efforts were made to obtain the understanding and trust of local residents. 	
		<ul style="list-style-type: none"> ● To expand the use of hydroelectric power, construction of the new Isawa No. 1 Power Station and other measures were implemented. 	
		<ul style="list-style-type: none"> ● With regard to land-based wind power, operation of the Kaminokuni Wind Farm was started, trials of offshore wind power were conducted near Kitakyushu (a joint project with NEDO), and other activities were conducted. 	
		<ul style="list-style-type: none"> ● Environmental impact assessment procedures were conducted in the Wasabizawa-Akinomiya region for development of a new domestic geothermal power plant site. 	
FY 2013 performance	Fiscal 2013 Evaluation and Next Steps		Page Reference
40.3% (Reference: LHV = 41.4%)	<ul style="list-style-type: none"> ● The J-POWER Group met its target, realizing a total thermal efficiency of 40.3% (HHV) for thermal power generation thanks to efforts to maintain high-efficiency operation in existing thermal power stations and to adopt high-efficiency technologies when upgrading facilities. We will continue working to maintain and improve energy efficiency in our thermal power stations. 		P50
Inspection: 99% Retirement: 99%	<ul style="list-style-type: none"> ● The FY 2013 target was met, with a recovery rate of 99% during inspections and 99% at retirement, thanks to efforts to curb emissions during equipment inspection through careful and consistent recovery and reuse. We will continue to stress careful and consistent recovery and reuse to curb atmospheric emissions of SF₆ from gas insulation equipment. 		P49
0.18 g/kWh	<ul style="list-style-type: none"> ● Efforts including the application of fuel control and the appropriate operation of flue gas desulfurization systems saw us curb our SO_x emissions and achieve our target for emissions per unit of power generated. We will continue our efforts to curb emissions through good management practices. 		P30
0.52 g/kWh	<ul style="list-style-type: none"> ● Efforts including the application of fuel control and the appropriate operation of flue gas denitrification systems saw us curb our NO_x emissions and realize our emissions target per unit of power generated. We will continue our efforts to curb emissions through good management practices. 		P30
98%	<ul style="list-style-type: none"> ● We achieved our targets for the fiscal year through efforts to promote the recycling of coal ash and to reduce industrial waste generated by the maintenance and operation of power stations. We will go on working to maintain this level. 		P50
Practices of consideration for protection of river and ocean environments	<ul style="list-style-type: none"> ● When operating power generation facilities that involve rivers, we implemented measures for protection of the river environment according to the conditions at each location, sedimentation control measures and measures to mitigate the long-term persistence of turbidity. ● When operating power generation facilities adjacent to the ocean, we exercised precise control over the discharge of wastewater in compliance with environmental protection agreements and other such arrangements. 		P32
Efforts to Preserve Biodiversity	<ul style="list-style-type: none"> ● We showed consideration for the protection of ecosystems and the diversity of species in conducting our business activities and worked to protect rare animal and plant species and their habitats. 		P32
Consistent use of PDCA cycle	<ul style="list-style-type: none"> ● Efforts were made to raise the level of environmental management through consistent implementation of the PDCA cycle. We will remain diligent in striving for continual improvement. 		P47

*: LHV (lower heating value) estimated from actual HHV (higher heating value) using conversion coefficients supplied in the Agency of Natural Resources and Energy's Comprehensive Energy Statistics (FY 2004 edition).

Business Activities and the Environment

The charts below detail the resource consumption and environmental load of the FY 2013 J-POWER Group operations within Japan.

Note: The scope of applicability will include J-POWER and its 25 consolidated domestic subsidiaries, such as electric power businesses and ancillary businesses related to electric power. The amounts attributed to consolidated subsidiaries are based on percentages corresponding to J-POWER's equity share.



Environmental Accounting/Eco-Efficiency

Environmental Accounting

To calculate the costs and benefits of the J-POWER Group's environmental conservation activities in FY 2013 in keeping with the nature of our business, we referred to the Environmental Accounting Guidelines 2005 issued by the Ministry of the Environment.

Environmental Conservation Cost and Benefit

Total costs for FY 2013 were approximately 44.5 billion yen, with pollution control costs for preventing contamination of the air, water, etc., accounting for about 36% of the total.

Category	Main measures and efforts	Cost
Pollution control	Air pollution control (desulfurization/denitrification, soot and dust treatment), water pollution control (wastewater treatment), etc.	15.8
Global environmental conservation	Measures to reduce greenhouse gas emissions (maintaining high-efficiency operation of coal-fired power stations, developing renewable and unutilized energy sources, maintenance costs for energy-saving equipment, emission control of greenhouse gases other than CO ₂)	2.0
Resource recycling	Waste reduction through reuse and recycling; treatment and disposal of waste	18.4
Management activities	Monitoring and measurement of environmental load, labor costs for environmental conservation organizations, costs for environmental education, etc.	1.5
Research and development	High-efficiency power generation, use of fuel cells, CO ₂ capture and fixation, recycling of coal ash and gypsum, etc.	2.1
Social activities	Tree-planting, environmental advertising, environmental beautification, membership in environmental groups, preparation of sustainability report, etc.	1.9
International projects	Overseas cooperation projects for environmental conservation technologies	1.1
Other	Pollution load levy	1.7
Total		44.5

Note: Sums of figures may not equal totals in some cases due to rounding.

Environmental conservation benefit

Environmental conservation benefit	FY 2013
SOx emissions intensity (g/kWh)	0.18
NOx emissions intensity (g/kWh)	0.52
Soot and dust emissions intensity (g/kWh)	0.01
CO ₂ emissions intensity (kg-CO ₂ /kWh)	0.74
Average coal-fired power efficiency (%)	40.3
Coal ash recycling rate (%)	98.9
Industrial waste recycling rate (%)	98
Gypsum recycling rate (%)	100
Volume of driftwood recycled (1,000 m ³)	26
Employees completing internal environmental auditor training	99
Sustainability report (copies published)	20,000
Overseas consulting projects (cumulative total)	344

Note: For detailed data, see pp. 49-50, Environment-Related Data.

When considering environmental load, the nature of our business requires that instead of tabulating total emissions, we assess the overall environmental conservation benefit of our conservation measures on the basis of emissions intensity, thermal efficiency, and reuse/recycling rate.

Economic Benefit

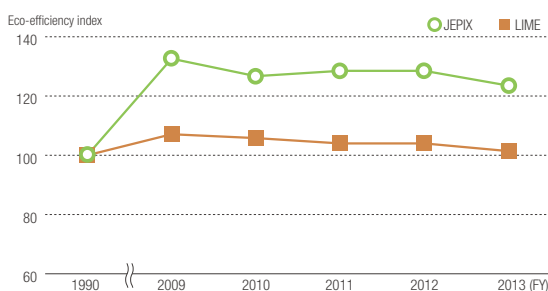
Efforts contributing to earnings and cost reductions were calculated to have had an economic benefit of approximately 11.5 billion yen.

Category	Details	Benefit
Revenue	Sales of marketable commodities from coal ash, gypsum, and sulfuric acid	0.4
Cost reduction	Reduction in fuel costs due to improved coal-fired power efficiency (introduction of USC)	3.6
	Reduction in disposal costs due to coal ash, gypsum, and sulfuric acid recycling	7.5
Total		11.5

Eco-Efficiency

J-POWER initiatives to date have been evaluated by the JEPIX^{*1} and LIME^{*2} methods. These two approaches assign different coefficients to environmental loads (coal, CO₂, SOx, NOx, coal ash), and the resulting recent trends in eco-efficiency are as shown in the graph below.

Integrated Index of Eco-Efficiency (electric power sold per environmental load)



Note: Eco-efficiency: 100 = FY 1990 integrated index (electric power sold per environmental load).

*1 JEPIX (Japan Environmental Policy Index)

An index that calculates a single score for overall environmental impact using the Ecopoints system, which assigns weights to more than 300 environmental pollutants according to their impact on water and air quality.

*2 LIME (Life-cycle Impact assessment Method based on Endpoint modeling)

An integrated environmental impact assessment method that assigns weights to potentially harmful substances by scientifically analyzing their contribution to such environmental problems as global warming and destruction of the ozone layer and calculating their damage to human health, ecosystems, etc.

Ensuring Transparency and Reliability

Continual Improvement in Environmental Management

The J-POWER Group conducts environmental preservation activities in accordance with corporate principles, and the introduction of environmental management systems (EMS) at all J-POWER business sites was completed in 2002. The introduction of EMS at J-POWER subsidiaries and affiliates and at subsequently established business sites is also proceeding, and we are continuing our efforts to enhance environmental preservation measures.

Improvement of Environmental Management Level

On the basis of the J-POWER Group Environmental Action Guidelines, reviewed annually by management, each J-POWER Group draws up its own Environmental Action Plan. They periodically review and evaluate their initiatives and revise the measures to be taken, following the PDCA cycle.

Raising Employee Awareness of Environmental Problems

The J-POWER Group puts efforts into environmental training for employees to deepen their awareness of environmental issues and instill a sense of personal responsibility.

In-House Environmental Training, FY 2013

Category/course		Contents
General	Lectures and Briefings	Lecture presentations on the environment
	E-learning	Basic knowledge concerning PM 2.5
Technical	EMS implementation	Internal environmental auditor training
	Environmental laws and regulations	Environmental law and regulation training and waste-processing risk assessment
	E-learning	EMS course

Full Compliance with Laws, Regulations, Agreements, and other Rules

In order to reduce the impact on the surrounding environment due to business activities, we take appropriate steps to implement the laws, regulations, agreements, and other such rules applicable to our business activities and make them widely known. We are also engaged in ongoing efforts to improve our facilities and operations.

In order to dispose of waste properly, we take measures to maintain and improve the disposal capabilities of waste disposal operators and other personnel involved, and we employ waste disposal consulting firms to directly confirm the status of waste disposal by local organizations.

Responding to Environmental Problems

We make every effort to prevent environmental problems before they occur. When problems arise that require emergency handling, however, we promptly take whatever measures are required to

contain the damage and we notify the local agencies concerned as well as the J-POWER Head Office Emergency Response Team and departments.

The J-POWER Head Office Emergency Response Team promptly notifies top management and, in the interest of information disclosure, provides information on the emergency to the media and other interested parties for publication. We also devise measures to prevent recurrence of the problem.

Environmental Incidents

Of the incidents impacting the environment that occurred within the J-POWER Group in FY 2013, four incidents were reported by the mass media.

Status of Environmental Incidents

Location	Situation and Countermeasures
Isogo Thermal Power Station Unit No. 2 (Yokohama City, Kanagawa Prefecture)	On May 13, 2013, a portion of a natural rubber sponge ball used to clean narrow condenser pipes was released into the ocean because of improper assembly following an equipment inspection. The released ball was recovered, the ball recovery unit discharge valve assembly format was modified to prevent recurrence, and measures were taken to prevent future improper attachment.
Matsuura Thermal Power Station Unit No. 1 (Matsuura City, Nagasaki Prefecture)	On March 15, 2013, during removal work for inspection and maintenance of an electrostatic precipitator transformer and rectifier unit, approximately 30 liters out of a total of 955 liters of insulating oil in the unit leaked. The leaked oil was properly disposed of as a PCB-free substance based on composition analysis performed previously. Later, J-POWER received a report that measurements by the manufacturer detected a minute amount of PCB (1.2 mg/kilogram), and a follow-up investigation of the discarded material was conducted, but it was determined that it had already been processed. We are continuing to investigate the background to this minute amount of PCB and the cause of the accident, but based on the follow-up investigation, we believe that there was no impact on the environment.
Matsuura Thermal Power Station Unit No.2 (Matsuura City, Nagasaki Prefecture)	On June 24, 2013, it was discovered that solid ash material had dispersed from a smokestack and fallen on the power station grounds, and the No. 2 unit was shut down and an inspection and cleaning of the smokestack interior was conducted. It was determined that the incident occurred in conjunction with washing of a heat exchanger previously installed in the chimney flue. We changed work methods to prevent recurrence in the future.
Takehara Thermal Power Station (Takehara City, Hiroshima Prefecture)	On February 6, 2014, J-POWER determined that there was an omission and insufficient detail in a portion of a construction plan filing for a noise and vibration-emitting facility and dust-producing facility pursuant to the provisions of Article 48, Paragraph 1 of the Electric Business Act as a result of a misinterpretation of the law. We reported the details to the Ministry of Economy, Trade and Industry and the Chugoku and Shikoku Industrial Safety Supervision Bureaus, and filed a new construction plan. Measures to prevent recurrence will be implemented and we are making efforts to strengthen compliance and continue improvements.

Corporate Targets for FY 2014

Efforts Relating to Global Environmental Issues

Item	Target
<ul style="list-style-type: none"> Reducing CO₂ Emissions from Power Generation and Promoting Technological Development 	<p>As an electric utility, in addition to continuing to contribute to the Environmental Action Plan by the Japanese Electric Utility Industry, looking towards 2020 we are working to provide a stable supply of energy and reduce CO₂ emissions in Japan and overseas by promoting the following measures.</p> <ul style="list-style-type: none"> We will replace aging coal-fired power stations with new facilities with higher efficiency at the world's highest levels. Promote mixed combustion of biomass fuels in coal-fired power stations (Effective exploitation of untapped resources). Contribute to the reduction of CO₂ emissions and technology transfer on a global scale by promoting the overseas expansion of coal-fired power using J-POWER's advanced, high-efficiency power generation technologies, in particular in the Asian region. Promote the development of higher-efficiency oxygen-blown integrated coal gasification combined cycle (IGCC) technology through the realization of the Osaki CoolGen Project. Advance research and development in the area of CO₂ capture and storage (CCS) technologies through the implementation of the EAGLE Project, the Osaki CoolGen Project, and the Callide Oxyfuel Project in Australia. In relation to the Ohma Nuclear Power Station Plan, do our utmost to ensure the construction of a safe and trusted nuclear facility, always appropriately incorporating the necessary measures for the realization of enhanced safety based on serious consideration of the accident at the Fukushima Daiichi Nuclear Power Station and following government and other guidelines, at the same time maintaining the approval of residents of the region in which the station is located. Build new hydroelectric power facilities, expand, upgrade and replace existing facilities, and expand the use of hydroelectric power. Significantly expand domestic wind power facilities and advance research and development towards the realization of ocean-based wind power generation technologies. Work to develop new geothermal power sites in Japan.
<ul style="list-style-type: none"> Maintain/improve thermal efficiency of thermal power stations [HHV (higher heating value)] 	Maintain current level [about 40%] (FY 2008 and each FY thereafter)
<ul style="list-style-type: none"> Reduce SF₆ emissions; increase recovery rate during inspection and retirement of equipment 	Inspection: at least 97%; Retirement: at least 99% (FY 2008 and each FY thereafter)

Efforts Relating to Local Environmental Issues

Item	Target
<ul style="list-style-type: none"> Reduce SO_x emissions per unit of electric power generated (point of generation, thermal power stations) 	Maintain current level [about 0.2 g/kWh] (FY 2008 and each FY thereafter)
<ul style="list-style-type: none"> Reduce NO_x emissions per unit of electric power generated (point of generation, thermal power stations) 	Maintain current level [about 0.5 g/kWh] (FY 2008 and each FY thereafter)
<ul style="list-style-type: none"> Increase recycling rate for industrial waste 	Maintain current level [about 97%] (FY 2011 and each FY thereafter)
<ul style="list-style-type: none"> Protect the water environment 	Consider the protection of the river and ocean environment in business activities (FY 2013 and each FY thereafter)
<ul style="list-style-type: none"> Protect biological diversity 	Consider the protection of biological diversity in relation to business activities (FY 2011 and each FY thereafter)

Ensuring Transparency and Reliability

Item	Target
<ul style="list-style-type: none"> Improvement of Environmental Management Level 	Continuous improvement of EMSs (FY 2008 and each FY thereafter)

Environment-Related Data

The following data represent annual values or year-end values in each fiscal year. Unless specifically noted, includes data for Group companies*1.

*1 J-POWER and its 25 consolidated domestic subsidiaries, such as electric power businesses and ancillary businesses related to electric power. The amounts attributed to consolidated subsidiaries are based on percentages corresponding to J-POWER's equity share. For information on companies included in the statistics, see the list of main Group companies on page 1. Figures may not add up to totals because of rounding.

Power Facilities (maximum output)

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Hydroelectric	GW	8.56	8.56	8.56	8.56	8.56	8.56
Thermal	GW	8.18	8.79	8.79	8.79	8.79	8.85
Coal-fired	GW	7.95	8.55	8.55	8.55	8.55	8.51
Natural gas	GW	0.22	0.22	0.22	0.22	0.22	0.32
Geothermal	GW	0.01	0.02	0.02	0.02	0.02	0.02
Wind power	GW	0.25	0.27	0.35	0.35	0.35	0.38
Total	GW	16.99	17.61	17.69	17.69	17.69	17.78

Electricity Output

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Hydroelectric	GWh	9,470	10,004	11,301	11,557	10,330	9,708
Thermal	GWh	53,648	50,742	58,511	58,522	59,303	59,456
Coal-fired	GWh	52,979	50,224	58,084	57,624	58,377	58,423
Natural gas	GWh	589	415	355	862	898	1,007
Geothermal	GWh	80	103	72	36	29	25
Wind power	GWh	322	393	458	590	620	638
Total	GWh	63,439	61,140	70,271	70,669	70,253	69,801

Electric Power Sold

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Hydroelectric (excluding pumped storage)	GWh	8,384	9,214	10,267	10,318	9,033	8,760
Thermal	GWh	50,122	47,364	54,786	54,777	55,577	55,697
Coal-fired	GWh	49,505	46,887	54,388	53,946	54,722	54,730
Natural gas	GWh	547	383	327	803	836	952
Geothermal	GWh	70	94	71	28	19	15
Wind power	GWh	310	379	442	562	596	614
Total	GWh	58,816	56,957	65,495	65,657	65,206	65,071

Fuel Consumption

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Coal (dry coal 28 MJ/kg equivalent)	million t	16.97	16.09	18.51	18.04	18.49	18.61
Use intensity (coal-fired)	t/GWh	343	343	340	338	338	340
Natural gas	million m ³ N	99	71	60	142	148	172
Heavy oil	million kl	0.04	0.04	0.04	0.04	0.05	0.06
Diesel	million kl	0.03	0.05	0.03	0.03	0.02	0.02

Note: Denominator for use intensity represents electric power sold by coal-fired power stations.

Greenhouse Gas Emissions*2

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
CO ₂ emissions (domestic and overseas power generation)*3	million t-CO ₂	49.07	46.52	52.54	52.24	54.09	56.33
CO ₂ emission intensity	kg-CO ₂ /kWh	0.69	0.66	0.67	0.67	0.67	0.68
CO ₂ emissions (domestic power generation)	million t-CO ₂	44.35	40.88	47.01	46.77	47.56	47.84
CO ₂ emission intensity	kg-CO ₂ /kWh	0.74	0.72	0.72	0.71	0.73	0.74
SF ₆ emissions	t	0.1	0.0	0.1	0.1	0.1	0.0
Handled	t	7.9	5.9	12.0	11.1	6.5	7.7
Recovery rate	%	99	99	99	99	99	99
HFC emissions*4	t	0.1	0.2	0.1	0.1	0.2	0.2
N ₂ O emissions	t	1,660	1,610	1,650	1,660	1,362	1,553

*2: CO₂ is calculated based on fuel combusted in conjunction with electric power generation.

Other greenhouse gases (PFC, CH₄, and NF₃) are effectively not emitted. Calculation of CO₂ emissions is performed in accordance with the Act on Promotion of Global Warming Countermeasures for both Japan and overseas.

*3: This covers J-POWER and consolidated subsidiaries, such as electric power businesses and overseas businesses, as well as equity method affiliates (12 domestic and 30 overseas companies). The portions attributed to consolidated subsidiaries and equity method affiliates are based on the percentage of J-POWER's equity share. For information on companies included in the statistics, see the list of main Group companies on page 1.

*4: The same tabulation as for Usage of Specific CFCs was used.

Note: Denominators for emission intensity represent electric power sold.

Average Thermal Efficiency of Coal-fired Power Stations (at generation point)

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Average thermal efficiency (at generation point) based on HHV	%	40.1	40.3	40.5	40.6	40.5	40.3

Usage of Specified CFCs

		Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Specified CFCs	Stocked	t	1.7	1.0	1.0	1.0	1.0	1.0
	Consumed	t	0.0	0.0	0.0	0.0	0.0	0.0
Halons	Stocked	t	4.6	4.6	4.6	4.6	4.6	4.6
	Consumed	t	0.0	0.0	0.0	0.0	0.0	0.0
Other CFCs	Stocked	t	9.2	12.6	11.9	11.4	10.8	10.8
	Consumed	t	0.3	0.1	0.2	0.2	0.1	0.1
HFCs (CFC alternatives)	Stocked	t	10.8	11.3	12.0	12.0	12.9	13.3
	Consumed	t	0.1	0.2	0.1	0.1	0.2	0.2

SO_x, NO_x, and Soot and Dust Emissions

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
SO _x emissions	1,000 t	10.6	8.1	10.1	12.1	12.3	10.7
Intensity (thermal)	g/kWh	0.20	0.16	0.17	0.21	0.21	0.18
NO _x emissions	1,000 t	26.7	22.3	28.0	28.5	30.3	31.1
Intensity (thermal)	g/kWh	0.50	0.44	0.48	0.48	0.51	0.52
Soot and dust emissions	1,000 t	0.8	0.6	0.8	0.7	0.8	0.8
Intensity (thermal)	g/kWh	0.02	0.01	0.01	0.01	0.01	0.01

* Soot and dust emissions are calculated from monthly measurements.
* Denominators for emissions represent the electricity output of thermal power stations (excluding geothermal stations).

Industrial Waste Recycling

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Volume generated	million t	2.14	2.00	2.34	2.38	2.30	2.32
Volume recycled	million t	2.10	1.96	2.26	2.33	2.26	2.27
Recycle rate	%	98	98	97	98	98	98

Coal-Ash and Gypsum Recycling

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Coal-ash created	1,000 t	1,747	1,669	1,936	1,957	1,900	1,928
Volume recycled	1,000 t	1,736	1,660	1,900	1,939	1,882	1,906
Recycle rate	%	99.4	99.4	98.1	99.0	99.0	98.9
Gypsum created	1,000 t	330	263	320	362	352	322
Recycle rate	%	100	100	100	99.8	99.9	100

Office Power Consumption

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Power consumed by offices (company total)	GWh	21.24	21.06	21.39	19.40	19.48	19.04
Head office ^{*5} power consumption	GWh	8.61	8.53	8.22	7.31	6.99	6.94
Lighting/power sockets	GWh	1.72	1.71	1.65	1.25	1.33	1.29

*5: J-POWER head office building

- Figures have been adjusted in accordance with the expansion/contraction of the range of data available for compilation.

Fuel Consumption in Offices (Gasoline Equivalent)

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Consumption	kl	1,308	1,345	1,289	1,299	1,290	1,293

- Corrected for expansion, contraction, etc. of the range of data available for compilation.

Rate of Procurement of Recycled Copy Paper

	Unit	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Copy paper ^{*6} purchased	million sheets	56.05	57.17	56.77	58.77	61.50	61.79
Recycled copy paper ^{*6} purchased	million sheets	55.18	56.79	56.38	58.14	61.25	61.45
Recycled copy paper ^{*6} purchase rate	%	98	99	99	99	99	99

*6: A4 paper-size equivalent