

Ensuring Transparency and Reliability

The J-POWER Group is working to improve environmental management and ensure legal compliance in all its business activities. We also disclose a wide range of environmental information. Through good communications with our stakeholders, we strive to earn society's trust.

Continual Improvement in Environmental Management

In 1997 the J-POWER Group decided to put in place environmental management systems (EMS) complying with the ISO 14001 international standard for environmental management to guide our implementation of environmental initiatives based on our corporate philosophy. By 2002 EMSs had been put in place at all J-POWER business sites, and by the end of fiscal 2005 all of J-POWER's power generation, transmission, and communication facilities had obtained ISO 14001 certification.

The major group companies have each completed the introduction of an EMS as well, and the entire group is working to ensure that each of our consolidated subsidiaries has an EMS in place by the end of fiscal 2007.

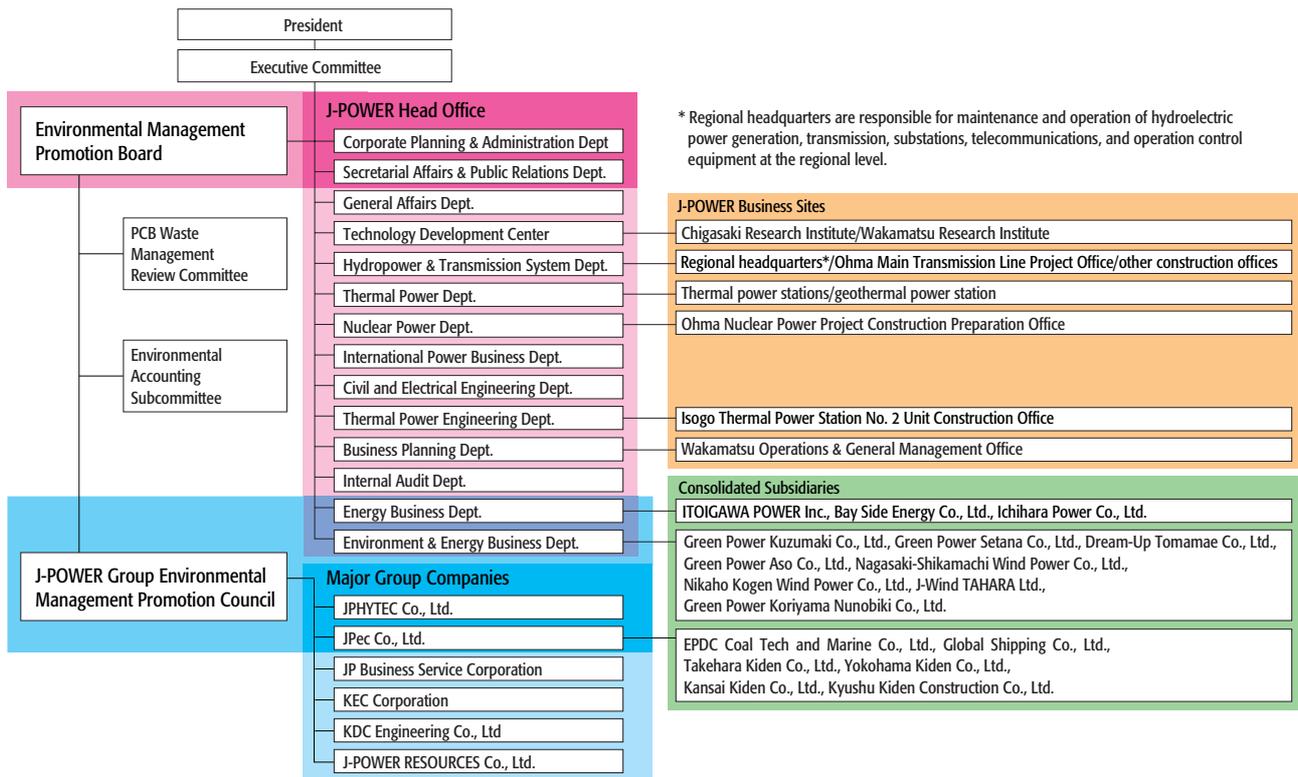
Environmental Management Structure

The Environmental Management Promotion Board was established to discuss, coordinate, and report on overall envi-

ronmental management in the J-POWER Group. It is led by an executive managing director in charge of environment and made up of relevant executives and division heads. In addition, the J-POWER Group Environmental Management Promotion Council was established as a subgroup of the Board to encourage cooperation and coordination throughout the group.

Based on the J-POWER Group Environmental Action Guidelines reviewed annually by management (see pages 71–72), J-POWER business sites and group companies with an EMS in place draw up their own Environmental Action Plans. They periodically review and evaluate their initiatives and revise measures to be taken, following the PDCA (plan-do-check-act) cycle.

■ J-POWER Group Environmental Management Organization Chart (FY 2006)



Overview of EMS Adoption in J-POWER Group Business Sites

Each business site in the J-POWER Group establishes and implements its own EMS for planning/design, construction, and maintenance/operation, while continually striving to make improvements in the system. Group companies

engaged in maintenance and management of power facilities implement an EMS in each maintenance/operating business site (thermal and geothermal power stations and regional headquarters for hydropower stations) in close cooperation with J-POWER.

■ J-POWER

* ISO 14001 certification received

Category	Business site name	Overview
Planning/design	Civil and Electrical Engineering Dept.* Environment & Energy Business Dept. (Water Treatment Engineering Group, Subsurface Space Engineering Group)*	EMS adopted and implemented for construction of generation facilities as well as to ensure new business projects are environmentally responsible from the planning and design stage. ISO 14001 certification obtained in February 2001.
Construction	Ohma Nuclear Power Project Construction Preparation Office Isogo Thermal Power Station No. 2 Unit Construction Office Ohma Main-Transmission Line Construction Office Nishi-Tokyo Main Transmission Line Construction Office	EMS adopted and implemented to ensure implementation of measures arising from environmental impact assessments, such as prevention of water pollution, noise and vibration, and the reuse of byproducts.
Maintenance/operation	Thermal power stations* (Isogo, Takasago, Takehara, Tachibanawan, Matsushima, Matsuura, Ishikawa Coal), Onikobe Geothermal Power Station*, Regional headquarters (Hokkaido, East Japan, Chubu, West Japan)*	EMS adopted and implemented in accordance with environmental laws, regulations, and agreements with the aim of reducing environmental load. Adoption began in 1998 at Matsuura Thermal Power Station and was completed by the end of fiscal 2001. Matsuura Thermal Power Station obtained ISO 14001 certification in June 1999. In fiscal 2004, ISO 14001 certification was obtained for all other coal-fired and geothermal power stations, with scope of registration covering JPec, which is involved in operation and maintenance.
Other	Technology Development Center (including Chigasaki Research Institute) Wakamatsu Operations & General Management Office (including Wakamatsu Research Institute)	In fiscal 2005, J-POWER and group company JPHYTEC jointly received ISO 14001 certification for all regional headquarters (Hokkaido, East Japan, Chubu, West Japan), including hydropower and transmission facilities.
	Head Office	EMS adopted for Head Office
Total: 21 business sites (as of the end of March 2007)		

■ J-POWER Group Companies

*ISO 14001 certification received (including extension of scope of registration)

Group company	Overview
Consolidated subsidiaries including JPHYTEC Co., Ltd.*, JPec Co., Ltd.*, JP Business Service Corporation	Adopted EMS and are striving for continual improvement. Push for adoption at all subsidiaries continues. Some business sites/divisions have also obtained ISO 14001 certification.
KEC Corporation*	ISO 14001 certification previously received by individual divisions was applied to the company as a whole by extending scope of registration at the end of November 2006. The company is striving as a team for continual improvement.
IPP wind power generation companies	EMS adoption complete at Tahara Seaside Wind Farm (J-Wind TAHARA). EMS to be adopted in April 2007 at other wind power farms (Green Power Kuzumaki, Green Power Setana, Dream-Up Tomamae, Green Power Aso, Nagasaki-Shikamachi Wind Power, Nikaho Kogen Wind Power, and Green Power Koriyama Nunobiki).
PPS-oriented thermal power generation companies (ITOIGAWA POWER Inc., Ichihara Power Co., Ltd.*, Bay Side Energy Co., Ltd.)	EMS adopted by ITOIGAWA POWER in November 2005. In April 2006, scope of registration extended to cover Ichihara Power. EMS adopted by Bay Side Energy in July 2006.
Other consolidated subsidiaries	EMS adopted by EPDC Coal Tech and Marine and Global Shipping in April 2006 and by each of the thermal power maintenance companies (Takehara, Yokohama, Kansai, Kyushu) by September 2006. These companies are working with each thermal power plant unit of J-POWER to continually improve their systems.

Environmental Information for Employees

In order to enhance environmental management and raise group employees' awareness, information is made available for all employees to view at any time through media such as electronic bulletin boards, an environmental information network, and the group magazine, *J-POWERs*.

Medium	Name	Content
Electronic bulletin board	Environmental Laws, Regulations, and Data	• Implementation and revision of laws and regulations
	Environmental Management and Events	• Social trends • In-house environmental events • EMS
	Nature, Environment, and Wildlife Forum	• Forum for free exchange of ideas among employees
Intranet	Environmental Information Network	• Overview of laws and regulations • Overview of EMS • Environmental education and training

Education and Training

The J-POWER Group conducts various in-house and external environmental training programs to raise employee awareness and cultivate a sense of personal responsibility regarding environmental issues.

In fiscal 2006 we implemented a wide range of training programs with the goal of promoting a better understanding of environmental statutes and ensuring full compliance. In particular, two training programs that placed emphasis on the Waste Management and Public Cleansing Law were carried out. One was on Industrial Waste Disposer Selection Skills Upgrade and the other was on Waste Management Risk Assessments, which was conducted by outside specialists.

We also added a new course, Global Warming, to our e-learning program for group employees to enhance their knowledge of measures to stem global warming in Japan and abroad, as well as J-POWER Group's own measures, while deepening their understanding of environmental issues.

■ Environmental In-House Training in Fiscal 2006 (group-wide programs)

Category	Type of training	Trainees	Main content
Environmental management (general)	Environmental briefings, various lecture presentations on the environment	1,425	J-POWER Group's efforts
EMS implementation	Internal environmental auditor training	180	Requirements of ISO 14001, internal environmental audit method
	Follow-up training for internal environmental auditors	44	Practice in identifying noncompliance, etc.
Environmental laws and regulations	Industrial waste disposer selection skills upgrade	168	Waste Management and Public Cleansing Law, skills upgrade for selection of waste disposers, etc.
	Waste management risk assessments	3 sites	Agreements, manifestos, check of legal requirements concerned, etc.
E-learning*	Introduction to environmental issues	4,220	General overview of environmental issues
	J-POWER Group's efforts (group-wide efforts)	3,184	Content and status of environmental efforts, etc.
	The J-POWER Group Environmental Management Report ("Environmental Management")	1,752	Overview of the Environmental Management Report
	Global warming	1,745	J-POWER Group's efforts to fight global warming, etc.
	EMS course (overview)	3,167	Overview of ISO 14001
	EMS course (advanced)	6,176	Requirements of ISO 14001, audit method, etc.

Note: The list consists primarily of programs sponsored by J-POWER. Numbers include employees of non-consolidated subsidiaries and J-POWER partner companies.

* The number of e-learning trainees is the cumulative total, including those who took courses last year.

Employees with Official Environment-Related Qualifications

In the J-POWER Group we take pains to assign employees with the appropriate official qualifications in such a way that they can best support our business activities. At the same time, we actively encourage employees to acquire various professional qualifications and guide and support them in these efforts with a view to enhancing knowledge and skills.

As of the end of March 2007

Qualification	No. of holders
Professional Engineer, Construction Division (Construction Environment)	13
Professional Engineer, Environment Division (Environmental Conservation Planning)	3
Professional Engineer, Environment Division (Environmental Measurement)	1
Professional Engineer, Environment Division (Conservation of the Natural Environment)	3
Manager in Charge of Pollution Control, Air (Types 1-4)	244
Manager in Charge of Pollution Control, Water Quality (Types 1-4)	196
Manager in Charge of Pollution Control, Noise	98
Manager in Charge of Pollution Control, Vibration	45
Manager in Charge of Pollution Control, Dioxins	45
Manager in Charge of Pollution Control, Senior Level	8
Manager in Charge of Pollution Control, General Dust	3
Certified Measurer, Environment	21
Working Environment Measurement Expert (Classes 1 & 2)	29
Manager of Specially Controlled Industrial Waste	501
Technical Manager in Charge of Industrial Waste at Final Disposal Site	52
Technical Manager in Charge of Waste Disposal Facilities	38
Technical Supervisor for Landscape Construction (Grades 1 & 2)	72
Biotope Design Supervisor (Grades 1 & 2)	5
Biotope Construction Supervisor (Grades 1 & 2)	3
Chief Electrical Engineer (Classes 1-3)	909
Radiation Protection Supervisor (Classes 1 & 2)	97
Energy Supervisor, Thermal	320
Energy Supervisor, Electricity	275
Manager in Charge of High-pressure Gas Production and Storage (Classes A, B, & C)	598
Hazardous Materials Officer, Class A	75
Boiler Technician (Grades 1 & 2)	1,421
Boiler Mechanic	65
Sanitation Manager (Classes 1 & 2)	544
Sanitary Engineering Sanitation Manager	2
Works Supervisor for Specific Chemicals	1,700
Manager in Charge of Poisonous and Deleterious Substances (General and Specific)	45
Works Supervisor for Organic Solvents	1,132
Works Supervisor for Lead	1
Works Supervisor for Tetraalkyl Lead	3
EMS Auditor (Prov. Auditor)	37
Internal Environmental Auditor	1,621

Environmental Incidents

One environmental incident occurred between April 2006 and March 2007. On this occasion a press release was issued, and improvements were made to facilities and procedures to prevent a recurrence. No impact on the surrounding environment was detected as a result of this incident.

Location	Situation/Response
Taki Power Station (Onuma-gun, Fukushima Prefecture)	On October 23 and 27, 2006, during a regular maintenance check (overhaul) of the Taki Power Station, oil was found mixed in with the water in the draft tube under the hydraulic turbine of the power generator, and this was mistakenly discharged into the river (oil slick measuring 30 m x 30 m). The cause was a malfunction of a pump resulting from the fact that the discharge-pump water-level detection equipment was not in its proper position. The route of the water discharge was altered to ensure that effluent is not discharged directly into the river.

Violations of Environmental Statutes (see p. 22)

In August 2006, the Japan Coast Guard issued instructions to prevent recurrence of the following three violations of environmental statutes.

Location	Situation/Response
Ohma Nuclear Power Project Construction Preparation Office (Shimokita-gun, Aomori Prefecture)	The Japan Coast Guard issued instructions in connection with the following violation of the Law Relating to the Prevention of Marine Pollution and Maritime Disasters, which prohibits the disposal of waste at sea from vessels. In September 2003, owing to the impact of Typhoon No. 14, approximately 27 tons of floating kelp had accumulated offshore around the site of port construction for the Ohma Nuclear Power Station and was hindering construction work. After consulting with the local fisheries cooperative, construction personnel transported the kelp further offshore by ship and disposed of it there without determining the legality of this action. We are working to provide employees with rigorous compliance education and training to prevent any recurrence.
Isogo Thermal Power Station No. 2 Unit Construction Office (Yokohama, Kanagawa Prefecture)	The Japan Coast Guard issued instructions in connection with the following violation of the Water Pollution Control Law. On January 17, 2006, approximately 18.8 m ³ of untreated rainwater with a pH of 9.9 overflowed from the construction site owing to an error in the water-level setting for the new No. 2 unit pump station, which was being used as a water storage tank. The water ran off into the coastal waters via the new No. 1 unit wastewater pit. To prevent recurrence, we enhanced water level control of the water storage tank and closed the drain hole from which the water had escaped. In addition, we improved management guidelines and strengthened monitoring by initiating patrols.
Takehara Thermal Power Station (Takehara, Hiroshima Prefecture)	The Japan Coast Guard issued instructions in connection with the following violation of the Water Pollution Control Law. On March 2, 2006, workers failed to recover all the coal ash that had dispersed as a result of operations to remove ash accumulated in the boiler as part of a regular inspection of the No. 2 unit, and the dispersed coal ash came into contact with rainwater, resulting in coastal discharge of rainwater with an alkalinity in excess of the wastewater standards established under the Water Pollution Control Law. To prevent recurrence, we installed automatic gates hooked up to pH meters at all rainwater drain outlets. In addition, we tightened management through training of construction personnel and a revision of the checking process in the new work procedures document.

In addition to the above, surveys or inspections of power generating facilities uncovered the following three cases of improper operation.

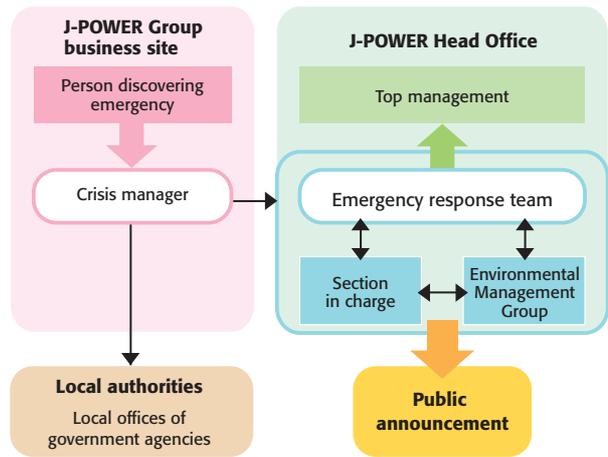
Location	Situation/Response
Matsushima Thermal Power Station (Saikai, Nagasaki Prefecture)	From 2000 to about 2004, and again in 2006, ash and other industrial waste found at the final disposal site within the power station site (of which construction was completed in 1989) were used as landfill within the site. We are working to ensure that henceforth improperly managed industrial waste is disposed of properly in a timely fashion in keeping with instructions from the relevant government agencies.
Ishikawa Thermal Power Station (Uruma, Okinawa Prefecture)	From 1986 to 2005, unauthorized refuse was disposed of at the station's final disposal site, including muddy refuse, sludge-like matter consisting of dead leaves mixed with dirt, and waste water generated when pipes were cleaned at the time of start-up. We have taken corrective measures after consultation with the relevant agencies and are working to prevent any recurrence.
Numappara Power Station (Nasushiobara, Tochigi Prefecture)	Construction waste materials (asphalt, etc.) generated during work to repair the station's regulating reservoir in 1993 were used as landfill in a (company owned) land disposal site. After consultation with the relevant agencies, we have since disposed of the material in accordance with the Waste Management and Public Cleansing Law (disposal completed at the end of May 2007).

Response and Information Disclosure in the Event of an Environmental Emergency

In the event of an environmental emergency:

1. The official in charge of crisis management at each business site will take the necessary steps to prevent damage from spreading and will contact the relevant local organizations, the Head Office Emergency Response Team, and the Head Office section in charge of the business site.
2. The Head Office Emergency Response Team will promptly report to top management and provide information on the emergency to the media and other interested parties.

Response and Information Disclosure in the Event of an Environmental Emergency



Promoting Green Purchasing

With a view to contributing to the development of a recycling-based society, we have adopted the J-POWER Group Green Purchasing Guidelines. The entire group is involved in green purchasing efforts, including use of recycled paper and energy-saving office equipment such as PCs and photocopiers.

The scope of these efforts goes beyond office supplies to encompass a broad range of initiatives, including purchase of other products used in our business activities, consideration of environmental factors in our contractual specifications when ordering work from subcontractors, and efforts to promote environmental responsibility among our suppliers. We are currently conducting a questionnaire survey of our major suppliers to assess their environmental management programs.

In addition, we have specified the type of copy paper to be purchased and are working toward the goal of 99% green purchasing for copy paper by 2010 (a year-on-year improvement of 1%).

The chart below outlines the results of our green purchasing efforts for office supplies and other products in fiscal 2006.

FY 2006 Green Purchasing

Item	Green purchasing volume	Green purchasing ratio
Copy paper (A4 equivalent)	65.87 million sheets	95%
Toilet paper	114,000 rolls	86%
Uniforms/work clothes	7,941 units	99%
Stationery items (cost)*	—	68%

* Green purchasing ratio for stationery items is calculated on a cost basis.

Uniforms and Work Clothes

As part of our effort to reduce environmental load, since fiscal 2004 material made from recycled PET bottles has been adopted as standard for all J-POWER Group uniforms and work clothes.