Material issues



Coexistence with Local Environment

- The J-POWER Group owns large-scale power generation and transmission facilities in a wide area and has been engaged in business for a long time under the banner of the material issue of engagement with local communities.
- We are committed to building a relationship of trust with the local community, while respecting considerations for the environment at every stage of our business and striving to preserve the local environment with the latest technology and knowledge.

Addressing Local Environment Issues

Controlling Environmentally Harmful Substances

Thermal power plants release pollutants into the atmosphere such as soot, dust, nitrogen oxide (NOx), and sulfur oxide (SOx). High efficiency emissions reductions have been made possible through advances in combustion techniques and stable operation of flue gas treatment equipment.

In order to ensure that emissions of environmentally harmful substances comply with applicable laws, regulations, and environmental preservation agreements, we also monitor their operational conditions and smoke emissions 24 hours.

As shown in the figure below, the NOx and SOx emissions from the coal-fired power plants operated by the Company are comparable to average values for each developed country without fuel category, while our state-of-the-art units operate with a low environmental impact even by global standards.

International Comparison of SOx and NOx Emission Intensity for Thermal Power Generation



Notes: 1. Emissions: OECD Stat Extracts Power generated: IEA "Data and statistics"

2. Average for J-POWER and J-POWER Isogo figures (coal-fired) are FY2023 results

Promoting the Creation of a Recycling-Oriented Society

Maintaining and Improving the Effective Utilization Rate of Industrial Waste

The Group's emissions of industrial waste totaled 1.53 million tons in FY2023. Coal ash and gypsum discharged from thermal power plants accounted for 98%, of which more than 90% were successfully used as raw materials for cement, land reclamation material, and other supplies. The Company works to reduce the amount of industrial waste, and the overall effective utilization rate of industrial waste for FY2023 was 94.8%.



Dealing with Waste Plastics

We are also focusing on sorting and the 3Rs (Reduce, Reuse, Recycle) to increase recycling and decrease waste plastic emissions.

For details on the amount of plastic waste the Group produces and recycles, please refer to Supplementary Material: Environment.

https://www.jpower.co.jp/english/ir/library/pdf/2024/ jpower_integrated2024e_appx_environement.pdf

Environmental Impact Assessments

Environmental impact assessments in line with laws and regulations are conducted when planning and developing power facilities. We also take the views of the local residents into consideration and work hard to preserve the environment.

In accordance with signed agreements such as those for environmental preservation, we continue to monitor and verify the efficiency of environmental preservation measures once operation has begun. There are now 17 projects currently undergoing the environmental impact assessment process (as of August 2024).

Protecting Aquatic Environments

Initiatives at Power Plants

The J-POWER Group has established protecting aquatic environments as one of its environmental targets, and is working toward relevant preservation methods for the rivers and marine areas of each region. At our hydroelectric power plants, we assess water quality and sediment deposition in dam lakes and downstream areas. Appropriate action is taken at our thermal power plants (such as discharge into the sea, reduced water consumption through reuse of treated wastewater) in accordance with relevant laws, regulations, and environmental preservation agreements. We also cooperate with flood control efforts, in accordance with agreements, by lowering dam water levels to secure free capacity within the dam prior to any expected major flooding event, such as a torrential downpour.

Groundwater Purification Project

Approximately 60 facilities across the country, including hospitals and universities have benefited from our disaster-resistant, onsite groundwater treatment services. In addition to this track record, we have collaborated with the start up WOTA

to address a number of water-related environmental issues, and will make contributions to local communities through the provision of water supply services.



72

Material issues 🕨 💦 🦻



Coexistence with Local Environment

Biodiversity Preservation

Biodiversity preservation is another of the J-POWER Group's environmental targets. From the design stage of power plant construction to the operation of our business activities, our goal is to preserve the environment by taking into consideration the habitat, growth environment, and ecosystems of rare species of plants and animals.

Preservation of plant and animal habitats

We are striving to safeguard and protect raptors like Japanese golden eagles, as well as flora and other fauna, in the Okutadami and Otori Dam area. In particular, we are focusing on raptor-conscious outdoor work plans and the maintenance of wetlands that were previously reclaimed and subsequently restored.

At the construction office for expansion of Tozai Interconnection Line Construction Office in Shizuoka, we compiled a pocketable book with information on rare plants and animals that inhabit and grow in the area around the construction site and use it to share information with those involved with the construction, aiming to help protect rare flora and fauna.



Pocketable Book with Informatio on Rare Plants and Animals

Forest Conservation and Utilization of Forest Offcuts

By preserving Company-owned forests near hydroelectric power plants, turning forest offcuts into biomass fuel, and introducing its mixed combustion with coal at thermal power plants, J-POWER contributes to forest conservation and the reduction of CO₂ emissions.

Ensuring Transparency and Reliability

Improvement of Environmental Management Level

Every business site of the J-POWER Group has an environmental management system (EMS) that is compliant with the ISO 14001:2004 standard of the International Organization for Standardization and the JIS Q 14001 standard of the Japanese Industrial Standards, and we are constantly working to raise the bar regarding environmental management. To ensure that every employee is aware of environmental management and works with a feeling of responsibility as a party to a business that entails numerous environmental burdens, we also carry out environmental education by offering various training courses that take into account each employee's position and role.

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

We aim to maintain and enhance the operation of our facilities while abiding by laws, regulations, and agreements in order to reduce the environmental impact of our commercial activities. In the event that environmental incidents arise, we have a system in place to stop the impact from spreading and to quickly convey information.

In addition, we strive to prevent past incidents from reoccurring.

Environmental Communication Activities

Through environmental conservation initiatives such as cleanups of local communities, we are aiming to improve environmental communication with our diverse stakeholders in addition to improving the disclosure of environmental information. In order to share environmental management information with Group companies and improve communication, we also organize events such as environmental information exchange meetings.

• Major Environmental Educations in FY2023

