Coexistence with Local Environment

Material issues ▶ Response to climate change | Engagement with local communities

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

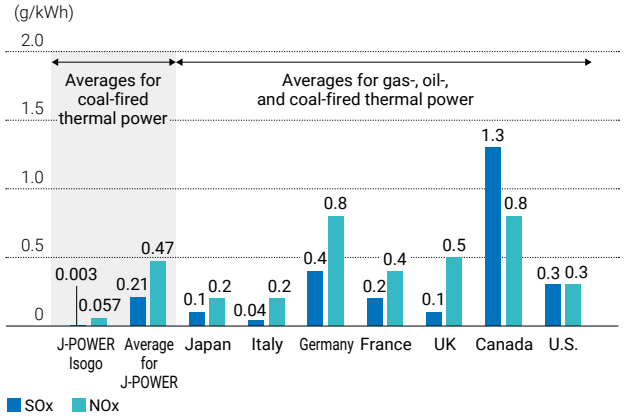
Controlling environmentally harmful substances

Thermal power plants release pollutants into the atmosphere such as soot and 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

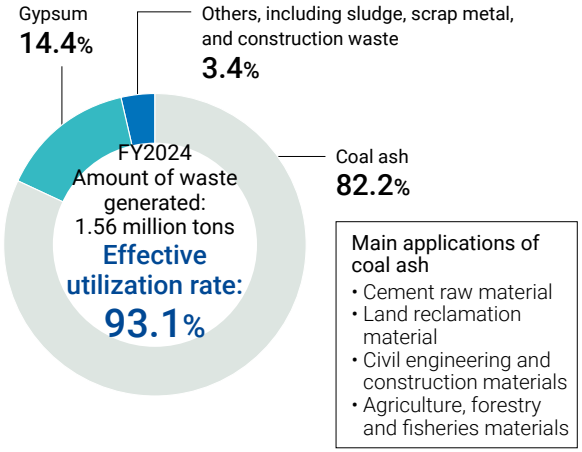


Notes: 1. Emissions: OECD Stat Extracts; Power generated: IEA "Data and statistics"
2. Average for J-POWER and J-POWER Isogo figures (coal-fired) are FY2023 results.

Promoting the creation of a recycling-oriented society

Maintaining and improving the effective utilization rate of industrial waste

Industrial waste discharged by the Group totaled 1.56 million tons in FY2024. Coal ash and gypsum discharged from thermal power plants accounted for 97%, 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 FY2024 was 93.1%. From this fiscal year onward, we will continue to work on the effective use of industrial waste with the aim of achieving an environmental target "effective utilization rate of industrial waste of around 97%."



Main applications of coal ash
- Cement raw material
- Land reclamation material
- Civil engineering and construction materials
- Agriculture, forestry and fisheries materials

Dealing with waste plastics

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

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

Reducing resource usage

The J-POWER Group will phase out inefficient coal-fired power plants and select the most appropriate replacement technology, including biomass, hydrogen, or ammonia, based on factors such as the characteristics of each site and the status of equipment. Through such measures, we will promote the creation of a recycling-oriented society by preventing the depletion of resources through the reduced use of coal, while reducing waste generated.

P.26 Direction for thermal power transition in Japan

Commercializing environmentally friendly high-performance recycled fiber

J-POWER has built a cooperative framework with Nippon Sheet Glass Co., Ltd. (NSG) and Nippon Fiber Corporation KK (Nippon Fiber Corporation) for the commercialization of an environmentally friendly high-performance recycled fiber called BASHFIBER®.

BASHFIBER®, a continuous filament fiber developed by Nippon Fiber Corporation, is made of coal ash, and there are potential applications as an alternative to existing industrial fiber reinforcement materials in a wide range of fields.

In addition, BASHFIBER® is expected to reduce the amounts of resource usage and industrial waste generated by using coal ash as a substitute for natural resources.

BASHFIBER® product range

Coexistence with Local Environment

Material issues: Response to climate change / Engagement with local communities

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 18 projects currently undergoing the environmental impact assessment process (as of July 31, 2025).

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 in 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 startup WOTA to address a number of water-related environmental issues, and will make contributions to local communities through the provision of water supply services based on a technology for cyclic use of recycled wastewater.

WOTA PLANT

Biodiversity preservation/recovery

Please refer to P.67 Disclosure Based on TNFD Recommendations.

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 recurring.

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 education in FY2024