J-POWER Group Environmental Targets and Results

Material issues 🕨



• Addressing Climate Change

	Target	Main Achievements in FY2023	Evaluation
Accelerating the development of CO₂-free power sources	Development of more than 1,500 MW by FY2025* *Target was revised as below on June 2024. Power generation volume of domestic renewable energy +4.0 billion kWh/year by FY2030 (compared to FY2022)	 Compared to the new development of 1,500 MW (compared to FY2017) targeted for FY2025, the total of start of operation, start of construction, and start of survey projects was 2,638 MW. We are confident that the target will be achieved. Major projects to begin operation on or after April 2023 *Figures in parenthesis indicate owned capacity New Nikaho Kogen Wind Farm (24.75 MW), Ishikari Hachinosawa Wind Farm (14.7 MW), Onikobe Geothermal Power Station (14.9 MW), etc. Construction already started Hibikinada Offshore Wind Power Project (max. 88 MW), Hibikinada Solar Power Plant (approx. 30 MW), Himeji Oshio Solar Power Plant (approx. 2 MW), etc. Repowering of other existing hydroelectric and wind power plants are also underway.	Ongoing
	Promotion of the Ohma Nuclear Power Plant Project with safety as a major prerequisite	 For the Ohma Nuclear Power Plant Project, we carried out studies for safety enhancement measures and responded to the review of compliance with the new safety standards. In addition, we implemented initiatives to gain the understanding and trust of the local community. Construction work to improve safety will begin in the second half of 2024 and targeted to finish in the second half of 2029. 	Ongoing
Reducing greenhouse gas (GHG) emissions	<u>9.20 million ton</u> CO ₂ reduction from domes- tic power generation business by FY2025 (compared to FY2013 results)	 FY2025 target was achieved, with FY2023 CO₂ emissions reduction at 15.09 million tons (emission of 33.68 million tons). *Compared to FY2013 results In view of lower utilization rate of thermal power plants due to their use as intermediate load power source and some equipment troubles, we continue to work on steadily to achieve the FY2025 target. Expansion of mixed combustion of biomass (Takehara Thermal Power Plant New Unit No. 1) and consideration of curbing operation of aging coal-fired power plants are underway. Announced the discontinuation of the existing Matsushima Unit No. 1 and the suspension of the operation of Unit No. 2 as of the end of FY2024, in view of the preparation of construction for GENESIS Matsushima Project.	Ongoing
	22.50 million ton CO ₂ reduction from domestic power generation projects by 2030 (46% decrease) (compared to FY2013 results)	 We are working to expand mixed combustion of biomass, introduce mixed combustion of ammonia, achieve domestic CCS, and study ways to curtail or eliminate the operation of aging coal-fired power plants. The GENESIS Matsushima Project, the first step toward CO₂-free hydrogen power generation, has been undergoing environmental impact assessment procedures since September 2021 to add a coal gasification facility to the existing power plant. 	Ongoing
	Achieve the benchmark for thermal power generation under the Act on Rationalizing Energy Use by FY2030	In order to achieve the FY2030 benchmark, we are maintaining high-efficiency operations at existing thermal power plants while exploring means to expand biomass generation and develop practical applications for mixed combustion of ammonia. FY2023 results Power supply industry Index A: 0.930 Index B: 38.1% Coal-fired power supply industry: 39.16%	Ongoing

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• Addressing Local Environment Issues

Not yet achieved Kostly achieved Kostly achieved

	Target	Main Achievements in FY2023	Evaluation
Creation of a recycling-oriented	Effective utilization rate of industrial waste: Approx. 97%	94.8% We worked to reduce industrial waste generated from the maintenance and operation of power plants and to effectively utilize coal ash, which accounts for the majority of waste.	
society	Reduction of waste plastic emissions and recycling of resources	We have been monitoring the status of waste plastic emissions and recycling, etc., and have worked to control emissions and promote recycling, etc., through thorough separation of waste plastics and review of their treatment.	
Biodiversity preservation	Consideration for biodiversity preservation in business activities	We made efforts to preserve the environment, giving due consideration to biodiversity. These efforts included conserving rare species of plants and animals and their habitats by establishing protected areas that encompass these habitats and sharing information about rare species existing in the area around the construction sites with the people involved in construction.	
Protecting aquatic environments	Consideration for the preservation of river and marine environments in business activities	At operating power generation facilities that are involved with rivers, we implemented measures for the protection of the river environment, such as sedimentation treatment and reduction of turbid water resident, as appropriate to the conditions at each location. We have abided by environmental preservation agreements, among other things, and correctly controlled water discharged into marine regions while operating power plants close to marine areas.	

• Ensuring Transparency and Reliability

	Target	Main Achievements in FY2023	Evaluation
Improvement of environmental management level	Continuous improvement of EMS	We implemented the PDCA cycle consistently and worked to raise the level of environmen- tal management.	
Full compliance with environmental laws and agreements	Zero serious violations of environmental laws and agreements	No serious violations were found as a result of our efforts to ensure compliance with environmental laws and regulations. We will continue to ensure thorough compliance with environmental laws and regulations throughout the Group.	
Environmental communication activities	Environmental communication activities in local communities and within the Company	In order to realize harmonious coexistence of the Company and local communities, we made efforts to build trust through environmental preservation activities such as tree planting and community cleanups. We also enhanced environmental communication within the company through environmental information exchange meetings and environmental education.	