

J-POWER Green Bonds Framework

1. J-POWER Group History

Since its establishment by the government in 1952 to overcome the power shortages in postwar Japan, the J-POWER Group has developed its business in the wholesale supply of hydroelectric and thermal power, conducted a power transmission business through its trunk transmission lines that connect each domestic region, and contributed to the stable supply of electric power in Japan.

Listed on the Tokyo Stock Exchange's First Section and thus becoming fully privatized in 2004, the J-POWER Group has been expanding its fields of business, including in electric power generation businesses in foreign countries where growth is expected and renewable energy, such as wind and geothermal power.

Over the decades, the J-POWER Group has contributed to the solution of a variety of energy-related challenges through its businesses, adapting to changes in the world while expanding its businesses and continuing to grow.

Leveraging the technologies and track record it has amassed in Japan and around the world, the J-POWER Group aims for sustainable growth based on the concept of "coexistence of energy and the environment."

2. J-POWER Group's Environmental Activities

Based on our Corporate Philosophy— "We will meet people's needs for energy without fail, and play our part for the sustainable development of Japan and the rest of the world" —the J-POWER Group engages in business conduct aimed at harmonizing energy supply and the environment. Specifically, under our Corporate Conduct Rules and the J-POWER Group Environmental Management Vision, we regard contribution to the reduction of CO₂ emissions on a global scale and the preservation of local environments as important issues.

The J-POWER Group is implementing a medium-term management plan for the period leading up to 2025. Initiatives going forward under this plan include the expansion of renewable energy and achieving zero emissions from fossil fuel power generation as well as the promotion of the Ohma Nuclear Power Plant Project with safety as a major prerequisite.

In line with these policies, the J-POWER Group is promoting specific initiatives that address global environmental issues, including those concerning climate change, as well as initiatives directed at coexistence with the local environment.

(1) J-POWER Group Environmental Management Vision

The J-POWER Group has established the J-POWER Group Environmental Management Vision, comprising the J-POWER Group Environmental Management Vision Basic Policy and Action Programs. The Action Programs are made up of Corporate Targets etc.

J-POWER Group Environmental Management Vision

J-POWER Group Environmental Management Vision Basic Policy

Action Programs

Corporate Targets

Targets addressed by the entire Group that lay out medium-term issues to be addressed, targets, and means

Segment Targets

Targets established and addressed by each relevant department and subsidiary

J-POWER Group Environmental Action Guidelines

Issues to be addressed in the fiscal year

J-POWER Group Environmental Management Vision Basic Policy (Revised on May 14, 2020)

The J-POWER Group adheres to the following Basic Policy.

Basic Stance

As an energy supplier, we will contribute to the sustainable development of Japan and the rest of the world by harmonizing our operations with the environment and ensuring the constant supply of energy essential to human life and economic activity.

Addressing Global Environmental Issues

In addition to doing our utmost to ensure a stable energy supply, we will steadily advance initiatives toward the realization of zero emissions power supply both domestically and internationally and will contribute to the reduction of CO₂ emissions on a global scale.

To that end, aiming to expand CO₂-free power sources and achieve zero emissions from fossil fuel power generation by such means as the capture, utilization, and storage of CO₂ emitted from the combustion of fossil fuels, we will work from medium and long-term perspectives, with technology as our central focus, to realize a stable energy supply and reduction in CO₂ emissions domestically and internationally.

Addressing Local Environmental Issues

We will seek to operate in harmony with local environments by adopting measures to reduce the environmental impact of our operations while working to save, recycle, and reuse resources in order to limit waste.

Ensuring Transparency and Reliability

We will ensure that our business activities comply with all applicable laws and regulations, disclose a wide range of environmental information, and enhance communication with stakeholders.

(2) Corporate Targets

The Action Programs for the J-POWER Group Environmental Management Vision set Corporate Targets, which are medium-term targets to be addressed by the Group as a whole.

Corporate Targets

The following Corporate Targets have been created for the "Expansion of renewable energy", as an activity that contributes to global environmental issues.

- Advance the new installation, upgrading, and equipment replacement of hydroelectric power plants in order to expand the use of hydroelectric power.
- Work to significantly expand wind power facilities, including offshore wind power generation.
- Work to develop new geothermal power projects in Japan.

3. Purpose/Significance of Green Bond issuance

(1) Renewable Energy Activities to Date

The J-POWER Group utilizes hydroelectric power, wind power, and geothermal power—all sources of renewable energy—across Japan. Renewable energy accounts for approximately 40% of the Group's total generation capacity in Japan (owned capacity basis).

Nationwide, the Group owns 60 hydroelectric power plants with a total capacity of 8,560 MW and 24 wind power facilities with a total capacity of 531 MW, making it Japan's second-ranked company in terms of both hydropower and wind power generation capacity.

(2) Expansion Plan for the Introduction of Renewable Energy in the Medium-Term Management Plan

The J-POWER Group established the Renewable Energy Business Strategy Department in April 2019 and is reinforcing new project development and the technological development that supports such projects. Through these efforts, we are steadily advancing toward the achievement of the Medium-Term Management Plan's target for fiscal 2025 of approximately 1 GW in new development (compared with fiscal 2017, a 0.3 TWh/year increase in hydroelectric and 2.5 TWh/year increase in wind and others).

(3) Referenced Rules and Guidelines

The framework for raising funds for these activities being undertaken by J-POWER Group was drawn up in accordance with the following rules and guidelines. We believe this framework aligns with the purpose of issuing the green bonds.

- Climate Bonds Standard version 3.0
- ICMA Green Bond Principles 2018
- Green Bond Guidelines 2020

4. Use of Proceeds

The proceeds from J-POWER Green Bonds are planned to be allocated for new investments or refinancing, for projects that meet the following eligibility criteria (eligible projects).

For refinancing, the project must have commenced operation or have been invested in within 24 months prior to the issue date of the green bonds.

Eligibility Criteria

"Projects related to renewable energy"

- Projects related to the development, construction, operation and maintenance of renewable energy projects (wind, hydro, geothermal and solar energy)

5. Process for Project Selection and Evaluation

(1) Selection and Evaluation of Eligible Projects

For eligible projects for which the funds will be used, the department in charge of renewable energy projects will select candidates based on the eligibility criteria set forth in the preceding paragraph. The Financial Department will confirm whether it meets the eligibility criteria and then make a decision.

(2) Reducing Environmental and Social Risk

Environmental Impact Assessments

Before building or expanding power plants, we conduct environmental impact assessments in accordance with applicable laws and regulations and implement adequate environmental preservation measures, taking the opinions of local residents into consideration. After a power plant becomes operational, we carry out ongoing monitoring in accordance with environmental protection agreements entered into with related local governments to ensure that our environmental preservation measures are effective.

Preservation of Aquatic Environments

From fiscal 2013 onward, the preservation of aquatic environments has been designated as one of the Corporate Targets under the J-POWER Group Environmental Management Vision with the aim of reinforcing our environmental preservation initiatives regarding rivers and seas. We undertake environmental preservation measures based on the specific regional environment and characteristics of each business site. For example, near hydroelectric power stations, we take measures regarding water quality and the accumulation of silt in dam lakes and downstream areas.

Preservation of Biodiversity

During the planning and design stages of power generation facilities, we incorporate environmental preservation measures to mitigate the impact on habitats, breeding environments and ecological systems as determined through environmental impact assessments that look at the wildlife and ecological systems of the surrounding land and marine areas. We strive to preserve wildlife living in the vicinity of operating power plants, particularly rare species, and their habitats.

6. Management of Proceeds

The allocation and management of proceeds is conducted by the Financial Department. In order for the proceeds to be tracked at any time, eligible projects are assigned a funding management code so that the allocated amount for each eligible project can be checked and the unallocated funds can also be checked in the internal management system. Unallocated proceeds will be managed as cash or cash equivalents until they are fully allocated to eligible projects.

7. Reporting

J-POWER plans to disclose the following items in the annual "J-POWER Group Integrated Report" or its website, until the bond proceeds are fully allocated. In addition, during the redemption period, we will disclose the status of the bond proceeds allocation and whether there have been significant changes in impact.

(1) Reporting on Allocation of Funds

- Allocated amount of proceeds
- Balance of unallocated proceeds
- Approximate amount (or percentage) of proceeds used for refinancing

(2) Impact Reporting

With regard to environmental benefits gained from eligible projects, we will, within the scope of confidentiality and also where reasonably possible, disclose some or all of the following indicators.

Project candidates	Reporting of environmental benefits
Projects related to the development, construction, operation and maintenance of renewable energy projects (wind, hydro, geothermal and solar energy)	<ul style="list-style-type: none">● Capacity of facility according to renewable energy type (MW)● Annual CO₂ reduction (t-CO₂/y) according to renewable energy type

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