Basic Approach

The JFE Group recognizes biodiversity preservation as a key challenge and conducts assessments to minimize the ecological impact from business activity. Our initiatives include cooperating with the community to monitor biodiversity and carry out preservation activities in order to minimize ecological impact around the steelworks, as key facilities for our business, and in surrounding areas. It also involves developing iron and steelmaking slag products that can help restore the marine environment. Furthermore, outside of our business operations, we launched a joint research program with the local government and are conducting environment-related training for local communities.

Initiatives to Preserve Biodiversity

The JFE Group engages with members of the community in activities to preserve biodiversity.

Environmental Impact Assessment

To minimize the ecological impact of our business activities on surrounding areas, we are monitoring biodiversity around all of our business sites and planting trees while also preserving rare species in the compound.

An environmental impact assessment is conducted in accordance with laws and regulations before launching construction of a new manufacturing site or business. We assess the biodiversity of the surrounding areas as well as our premises to fully understand the situation and to implement the necessary measures for preserving the ecosystem.

Replanted a Rare Species of Orchid Found at a Planned Construction Site

We conducted an environmental prediction and evaluation for the renovation of an aging facility, Plant No. 1 in the JFE Ohgishima Thermal Power Plant, in accordance with the Environmental Impact Assessment Act and Electricity Business Act. As a result, the Kugenuma orchid, a plant listed in Japan’s Ministry of Environment Red List 2017 as an endangered species, was discovered at the planned construction site for power generation facilities. To preserve the orchids, we replanted them in a different location of the site that had a similar environment.

Firefly Festival

JFE Steel has opened its Environment Pond at the Chita Works to the community for a firefly festival every year since 2014. Children at the event have the opportunity to release fireflies.

Initiatives in Relation to Construction Works

For large-scale construction or construction work carried out near watersheds or mountainsides, customers and/or the relevant authorities may conduct preliminary investigations depending on the importance of preserving the surrounding environment. Various preservation conditions may then be required, including the protection of living creatures.
In an example of how JFE Engineering has responded to such requirements, the company proposed a construction method that minimizes the impact of noise or drainage pollution on biodiversity. We respect the proposed conditions and thoughtfully consider biodiversity preservation by keeping the impact of construction works at a minimum.

The condition of biodiversity in areas surrounding the steelworks or its premises are checked, and necessary measures are taken to ensure preservation.

**Biotope for the Children’s Learning Experience**
Since 2009, JFE Engineering has been inviting children in the community to learn about the ecosystem at a biotope, Dragonfly Pond, along the JFE Dragonfly Path in the Tsurumi Works.

In 2018, the JFE Dragonfly Path Fan Club, a group mainly composed of neighborhood residents, organized a research event that involved capturing dragonflies in order to learn about their ecology and the local environment. Furthermore, an organization dedicated to dragonflies, composed of members from businesses, residents, administrations, and professionals, is conducting a habitat study to help improve the quality of a green space along the Keihin coastal areas as well as to support biodiversity. The organization captures dragonflies that gather around the biotope and tags them for follow-up surveys.

**JFE 21st Century Foundation**
The JFE 21st Century Foundation cosponsors the dragonfly organization as part of its activities to support cultural development.

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**Endorsing and Participating in External Initiatives**
As a member of the Keidanren Committee on Nature Conservation, the JFE Group actively engages in the conservation of nature and biodiversity.

Furthermore, the Group participates in the Japan Business and Biodiversity Partnership and exchanges information with various parties, including NGOs, researchers, and public agencies.

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**Products and Technologies (Preserving Biodiversity)**

- **Restoring Marine Ecosystems Using Steel Slag Products**
  
  Marine Stone™, a gravel-type steel slag product, is a habitat forming material that suppresses hydrogen sulfide, which arises from an unhealthy seabed and improves water and sediment quality in enclosed coastal waters.

  Its effectiveness in improving marine environments has been widely recognized, and the joint project with Hiroshima University received the Minister’s Prize (Ministry of Agriculture, Forestry and Fisheries) in the 12th Eco Products Awards and the Grand Prize in the 26th Nikkei Global Environmental Technology Award.

  Hiroshima Prefecture has used a total of 38,000 tonnes of Marine Stone™ in its Fukuyama Port Marine Environment Creation Project (inner harbor area). Its marine environment improvement property was confirmed to still be effective in 2019, four years after its initial placement.

- **Contributing to the Creation of an Attractive Seaside Town by Utilizing Steel Slag Products**
  
  In a joint research project* with the City of Yokohama, JFE Steel has confirmed that steel slag products, including Marine Block™, which is steel slag absorbing CO₂ gas, provide a highly effective base for nurturing and growing sea organisms while also facilitating the natural cleansing of seaboards and seawater. We will continue to work on this project with the City of Yokohama toward improving the marine environment in Yokohama Bay and developing an attractive seaside town.

*Joint research related to research on techniques to improve a marine life environment and facilitate the natural cleansing ability of seawater near the shores of Yamashita Park.