Environment

Environmental Initiatives

The intensification of earthquakes, massive typhoons, torrential rain, and other natural disasters has become a major social issue. As global warming, deforestation, and various forms of pollution become more serious, social infrastructure development is becoming increasingly necessary to protect our lives and businesses from such natural disasters. The YBHD Group must minimize impact on the natural environment in civil engineering and construction projects that involve nature while striving to build resilient infrastructure through its business activities.

Accordingly, in our Seventh Medium-Term Management Plan, we identified "contributing to a people-friendly and nature-friendly environment with partners" as a material issue (key issue). To resolve this issue, we will implement the following four measures.

Reduction of environmental impact

We recognize the impact of our business activities on the natural environment and are taking steps to reduce our environmental impact. By reducing waste and using resources sustainably, we contribute to conserving water resources and forests, and resolving other environmental issues.

Specifically, we are moving ahead with efforts to use renewable energy, increase recycling rates, develop products with lower environmental impact, reuse equipment and materials, and save electricity and energy at all of our locations.

Reference Environmental Policy and Biodiversity Policy
→ https://www.ybhd.co.jp/en/sustainability/policy/

KPI	FY2024 result	FY2025 target	FY2027 target
Continuation of a 100% steel recycling rate	100%	100%	100%

See P.71 16

Initiatives for biodiversity

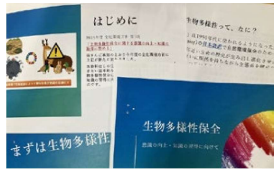
The YBHD Group strives to minimize the impact of its business activities on biodiversity.

Some construction requires biodiversity-conscious construction methods, and failure to implement such methods carries a risk of breach of contract. To address this risk, we gather information on and implement measures to protect and restore rare plants and animals in areas where we operate under our biodiversity policy.

For example, when constructing the Shin-Nobi Bridge, which opened in May 2025, we developed a proprietary construction method and specialized equipment to reduce the impact on the Itasenpara bitterling, a rare species in the Kiso River, as one form of natural environmental protection. These efforts were highly regarded, and because of them, we received the 2024 Tanaka Award from the Japan Society of Civil Engineers.

The safety and quality management departments of our operating companies have launched initiatives to raise awareness and acquire knowledge about biodiversity conservation. Specifically, ideas for conservation activities are identified among familiar matters at monthly meetings, and all participants discuss and further their understanding of these ideas.

Looking ahead, we intend to expand these activities throughout the Group and promote awareness and behavioral changes toward realizing a sustainable society by encouraging participation in activities that individuals can perform on their own as well as practical activities in collaboration with the Company and local communities.



Materials to promote understanding of biodiversity conservation

Reference Shin-Nobi Bridge initiatives
→ P.49–50

Materials flow (as of FY2024)

Inputs	
Energy	
Electric power	24.51 million kWh
Gasoline	534kL
Diesel	773kL
Kerosene	132kL
Gas	776,000 m³
Water	70,000 m³
Main construction materials (steel)	92,000 t

Yokogawa Bridge Holdings Corp.

Bridge Business
Engineered structure system
Engineering Business
Precision Equipment Business
Other businesses

Output	
CO_2 emissions	9,177t-CO_2
Construction waste	19,078t
Steel-related emissions Steel recycling rate	9,463t 100%

Achieving carbon neutrality

Disclosures in line with the Task Force on Climate-Related Financial Disclosures (TCFD)

The international community strongly advocates a transition to a decarbonized society as climate change causes more frequent abnormal weather events and more severe flood damage. As a group of companies responsible for social infrastructure development, we have been addressing various issues caused by climate change through our business, including developing disaster-resistant infrastructure, long-term bridge maintenance, and disaster recovery support.

The YBHD Group recognizes climate change as a critical management issue and, in 2020, identified "Responding to the material risk associated with climate change and natural disasters" as a materiality.

Furthermore, we publicly endorsed the TCFD Recommendations in December 2021, and five months later set a target for achieving carbon neutrality by eliminating CO_2 emissions (Scope 1 and 2) from our business activities by FY2050. To achieve this target, we set a mid-term target (50% reduction* of Scope 1 and 2 CO_2 emissions by FY2030) and a short-term target (20% reduction* of Scope 1 and 2 CO_2 emissions by FY2024).

In 2025, while formulating our Seventh Medium-Term Management Plan, we set a target of 35% reduction* of Scope 1 and 2 CO_2 emissions by FY2027 (the final year of the plan) and formulated a transition plan that outlines the path to achieve this target. Accordingly, the Group will continue to promote further initiatives to achieve carbon neutrality and disclose the results thereof and other information in line with the framework of the TCFD Recommendations. In addition to our own initiatives, we will contribute to the realization of a decarbonized society through dialogue and collaboration with investors and other stakeholders.

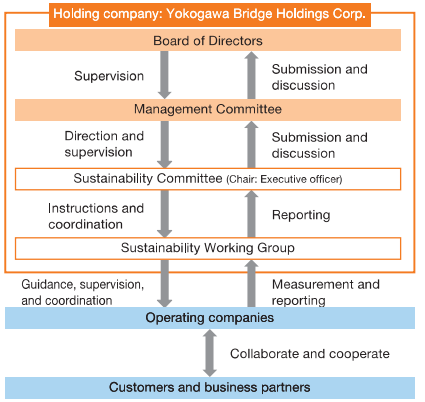
* Using fiscal 2020 as the base year

1. Governance

In its Sustainability Basic Policy, formulated in fiscal 2021, the YBHD Group declared its commitment to working actively and proactively to resolve social, environmental, and other sustainability issues. Climate change was deliberated as a materiality for the Group by the Sustainability Committee, a cross-group meeting body, and decided by the Board of Directors.

The Sustainability Committee examines proposals related to basic management policies on sustainability and ESG, including climate change response, and policies and strategies for business activities and corporate governance. The Management Committee deliberates on important policies and measures, which are then reported to, deliberated on, and decided by the Board of Directors. The Sustainability Committee is chaired by an executive officer of the Company and comprises senior staff and executive officers from each operating company. The Sustainability Working Group, a sub-organization of the Sustainability Committee, is responsible for promoting the implementation of policies and strategies decided by the Management Committee and the Board of Directors. The Sustainability Working Group comprises general affairs department heads from each operating company and carries out practical tasks such as promoting CO_2 emission reduction measures and monitoring progress in operating companies.

Matters deliberated and decided by the Management Committee and the Board of Directors are incorporated into the initiatives of each operating company's operational departments. We collaborate and cooperate with our customers and business partners in efforts to reduce CO_2 emissions in our supply chain (Scope 3 emissions). The Management Committee and Board of Directors monitor the status of initiatives to address climate-related issues and other material issues at least once a year, and provide direction and supervision.



Environment

Environmental Initiatives

2. Strategy

We conduct scenario analysis to clarify how climate change affects the YBHD Group's business and finances. The analysis covers the Group's main businesses (bridge, engineered structure system, engineering, and precision equipment) and considers present, short-term (2–3 years), medium-term (around 2030), and long-term (around 2050) time frames.

The process of identifying climate-related risks and opportunities starts with identifying risk and opportunity factors in the value chain for both transition and physical climate impacts for each target business. These are then organized into classifications (procurement, direct operations, and product/service demand). For each factor, we consider the specifics of the impact, the likelihood and magnitude of the impact, and when the impact may occur to identify the final business impact.

While the YBHD Group's direct CO_2 emissions (Scope 1 and 2) from business activities are not substantial, the bridges and engineered structures we provide use steel, cement, and other materials that involve substantial CO_2 emissions when they are manufactured. CO_2 emissions are also generated from the transportation of these raw materials and building materials, and from the operation of heavy machinery during construction. Additionally, as national and local governments and private sector companies—our main customers—increasingly call for environmental consideration, we are developing low-carbon construction methods, low maintenance products, and other technology, pursuing a 100% recycling rate for steel materials, and the like, throughout the Group.

Given these business characteristics, the main risks we have identified include increased construction and procurement costs due to tighter CO_2 emission regulations and new carbon taxes, damage to our facilities and supply chain disruptions due to more frequent and intense extreme weather events, and lower labor productivity at construction sites due to chronic temperature increases. We have also identified opportunities such as the expansion of markets for national resilience, disaster risk reduction and mitigation, and maintenance, as well as increased demand for environmentally friendly bridges and buildings.

Major climate change-related risks and opportunities identified as having a significant impact, and their countermeasures

Category	Description	Time frame*1	Impact on business*2	Measures
Risks	Increase in steel prices and shortages due to introduction of low-carbon technologies	Long term	Price increases due to the introduction of new technologies to achieve decarbonization in the steel manufacturing process, and domestic steel shortages due to the export of low-carbon steel	• Cooperation with steel manufacturers in the development of decarbonization technologies • Application of new materials such as FRP-balsa materials, lumber, and low-carbon concrete to the Group's business fields
	Increased incidents of heatstroke and reduced work efficiency due to rising temperatures, and increased costs for heatstroke countermeasures	Present	Increased incidents of heatstroke due to rising temperatures, leading to lower productivity and difficulty securing personnel; Additional safety measures become necessary, incurring costs	• Achievement of CO_2 reduction targets • Introduction and use of ICT for working environments and health management • Promotion of labor savings through robotization of welding operations and use of ICT • Provision of air-conditioned clothing, etc., in the workplace • Strengthening BCP-related investment, facilities, and personnel • BCP formulation and continued effective utilization and training • Utilization of products and construction methods that facilitate early recovery in the event of an unanticipated disaster
	Extreme weather conditions impacting procurement networks, disrupting or delaying construction	Present	Frequent cases of supply chain disruption and operational restrictions, or factory/construction site shutdowns due to typhoons and heavy rains	
	Damage to own facilities due to extreme weather	Present	Damage to company facilities due to flooding and strong winds from abnormal weather	
Opportunities	Expansion of national resilience, disaster prevention, mitigation, and maintenance markets	Present	Increased construction demand for bridges with high durability and easy maintenance, and disaster-resistant civil engineering steel structures	• Responding to increased orders and production expansion by developing a DX-based production management system and sales management system • Accurately identifying demand for bridge replacement and facility relocation, and strengthening technical proposal capabilities • Promoting construction DX to contribute to improved safety and workability at disaster sites • Provision of offshore, port, and harbor structures that limit damage from tsunamis and storm surges • Provision of internal water pressure-compatible tunnel segments for underground rivers that are prepared for heavy rainfall disasters • Provision of technology for replacing aging road bridge decks • Provision of maintenance-related products made of aluminum and stainless steel • Provision of hybrid steel and wood products • Utilization of green steel • Provision of engineered structures with excellent insulation performance • Application of effective elemental technologies such as electric furnace steel, low-carbon concrete, and environmentally friendly paints • Use of the new technology of decarbonized processing machinery (electric and hydrogen) • Promotion of technological developments such as pre-casting and rapid construction methods to shorten construction periods on-site

*1: Time frames: present, short term (2–3 years), medium term (around 2030), long term (around 2050)
*2 The impacts on business listed here are those identified as having a significant impact based on a four-point scale according to the affected businesses' percentage of net sales.

3. Risk management

The Sustainability Committee identifies risks attributable to climate change and assesses their impact on business. The Sustainability Committee and the Sustainability Working Group, which handles practical matters, work together to consider countermeasures for identified risks, and report issues of particular importance to the Board of Directors for them to deliberate. Additionally, information on these risks is shared with the cooperation of the Integrated Risk Management Committee, an advisory body to the Board of Directors, and they are centrally managed as company-wide risks.

4. Indicators and targets

In May 2022, the YBHD Group announced the long-term goal of achieving carbon neutrality by 2050 and established short-term and medium-term CO_2 emission reduction targets as milestones toward realizing this goal that also serve as indicators and targets used to assess and manage climate-related risks and opportunities.

As part of our efforts to achieve the short-term target—a 20% reduction from FY2020 under the Sixth Medium-Term Management Plan (FY2022–FY2024)—we switched to electricity derived from renewable energy sources at our Osaka Plant (the Group's largest plant) in September 2024 and at our Muroran Plant in January 2025. Consequently, the Group's main locations (e.g., head office and plants) now run on renewable energy, and we have installed solar power generation facilities to the extent possible.

Category 1 (purchased goods and services) now accounts for a higher percentage of our Scope 3 emissions. The bridges and engineered structures provided by the Group often feature steel, concrete, and coating as the main raw materials. Reducing CO_2 emissions from purchasing these raw materials is a key issue for achieving carbon neutrality. Given our policy to reduce CO_2 emissions from raw materials by striving to utilize new technology through technological innovation by each of our suppliers, we have a shared understanding with our suppliers. One technology that will lead to future innovations in steel manufacturing is green steel, which steel manufacturers have begun to market. The YBHD Group became the first company in Japan to use green steel on bridges. We have discussed and confirmed our policy for using new technology to reduce CO_2 emissions with clients through an industry association. Current challenges include establishing methods for evaluating the benefits and costs of introducing new technology and reducing CO_2 emissions across the life cycles of our products. Accordingly, we will actively promote the use of new technology and work on resolving issues in collaboration with clients, business partners, and product users.

CO_2 emissions reduction target

Scope	Base year	Target year	Target
Scopes 1 & 2	FY2020	FY2024 (end of the Sixth Medium-Term Management Plan)	20% reduction
		FY2027 (end of the Seventh Medium-Term Management Plan)	35% reduction
		FY2030	50% reduction
		FY2050	Carbon neutrality
Scope 3	Collaborate and cooperate with customers and business partners to reduce		

See P.71 15

CO_2 emissions performance over time

	FY2020	FY2022	FY2023	FY2024	
	Emissions	Emissions	Emissions	Emissions	Percentage
Scope 1	2,539	4,508	5,406	5,190	1.7%
Scope 2	10,779	6,241*	6,844	3,987	1.3%
Scope 1 & 2 total	13,318	10,749	12,250	9,177	2.9%
Rate of change	Base year	-19%	-8%	-31%	
Scope 3	332,518	431,556	341,579	304,394	97.1%
Scope 1, 2 & 3 total	345,836	442,305	353,829	313,571	100%

*In FY2022, we switched part of our purchased electricity to a CO_2 reduction plan. We are also installing solar power generation equipment at our main locations, significantly reducing Scope 2 emissions