Our Approach to Climate Change

Realizing Carbon Neutrality

The Hitachi Construction Machinery Group is working to reduce its CO_2 emissions to net zero throughout the entire value chain by 2050. To this end, we have formulated a roadmap for reduction measures to be undertaken with regard to the two aspects of product development and production processes.

With regard to product development, we have set and are promoting the goal of reducing CO_2 emissions by 22% and 33% by FY2025 and FY2030, respectively, from the FY2010 level (Diagram 1). This will serve as an indicator of our ability to provide our customers and society with environmentally friendly products that contribute to the reduction of CO_2 emissions. To achieve this goal, we are promoting the development of an entire product range—from compact equipment to ultra-large mining machines. In addition to reducing fuel consumption, we are also working on the use of substitute fuels and the expansion of lineup of electrified construction equipment and assessing the feasibility of hydrogen-fueled products from a technological perspective.

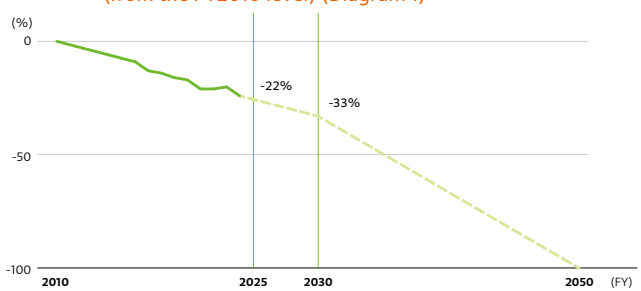
Furthermore, we are striving to provide solutions that enable our customers to reduce CO_2 emissions from their equipment in use. Specifically, we are making effective use of IoT and AI systems to provide customers with solutions such as a fleet management system to help them solve issues at their mining sites and increase the operational efficiency of their machines while reducing their CO_2 emissions. Moreover, we are committed to helping customers reduce their CO_2 emissions by predicting machine failures based on the monitoring of their machines, which enables the planned replacement of parts and ensures the high productivity of the machines (Diagram 2).

Meanwhile, as for the production process, we have set and are promoting the goal of reducing CO_2 emissions by 40% and 45% by FY2025 and FY2030, respectively, from the FY2010 level (Diagram 3). Our methods for reducing CO_2 emissions include energy conservation, conversion to renewable energy (in-house power generation through capital investment, introduction of renewable energy electricity), electrification and fuel conversion (Diagram 4).

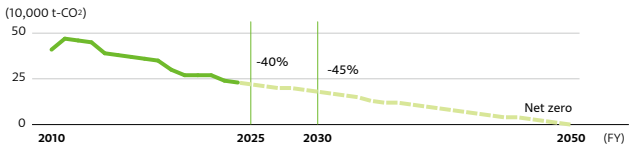
Also, in August 2025, we filed an application for the renewal of SBT*1 certification in our efforts to respond to the 1.5 degrees Celsius scenario. We will thereby foster our anti-climate change measures while also contributing to the creation of a decarbonized society.

*1 See “External Evaluation” on P.95.

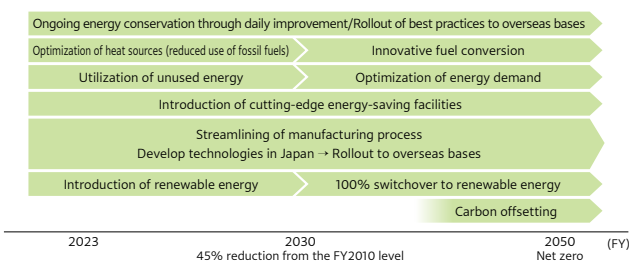
Products: Targets for the Reduction of CO_2 Emissions Volume (from the FY2010 level) (Diagram 1)



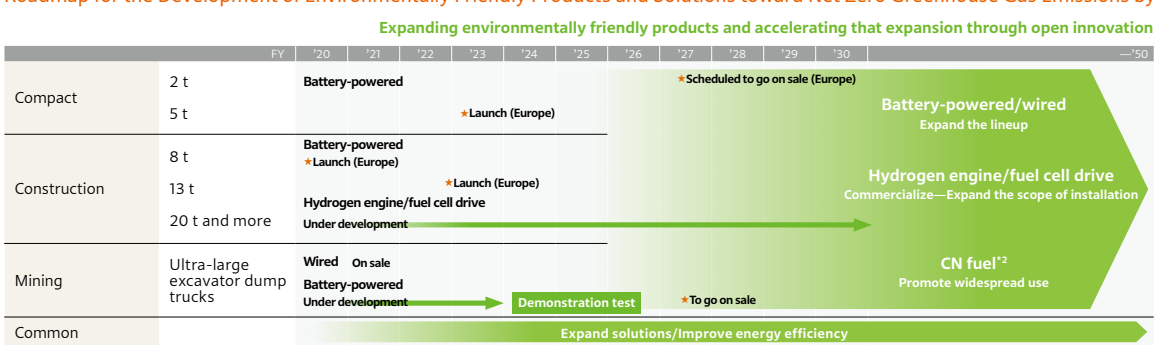
Production Process: Targets for the Reduction of CO_2 Emissions Volume (from the FY2010 level) (Diagram 3)



Roadmap for Carbon Neutrality in Production Process (Diagram 4)



Roadmap for the Development of Environmentally Friendly Products and Solutions toward Net Zero Greenhouse Gas Emissions by 2050 (Diagram 2)



*2 CN fuel: Carbon neutral fuel (biofuel, e-fuel and other synthetic fuel)

Our Approach to Climate Change

Response to TCFD Recommendations

In recognition of climate change action as a key issue, we have been carrying out initiatives and disclosures based on the recommendations issued by the Task Force on Climate-related Financial Disclosures (TCFD). In July 2020, we established an internal task force composed of the heads and key persons of our administrative departments and business departments. In October of the same year, we expressed our support for the TCFD recommendations. In 2023, our internal task force updated scenario analysis for both 1.5˚C and 4˚C increases in temperature, assessing the likelihood of climate change risks and financial impacts. Based on the TCFD Framework, we disclose the risks and opportunities posed by climate change and our corresponding strategies. We strive to strengthen our initiatives in accordance with these recommendations for sustainable business development.

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Governance

Important issues related to climate change are reported to the Sustainability Promotion Committee (which meets twice a year). The President and COO, who has the highest responsibility and authority for climate-related issues, chairs the Sustainability Promotion Committee, which deliberates and approves important management matters, including responses to climate change. Important matters are discussed and approved also by the Executive Committee and the Board of Directors for appropriate monitoring and supervision. Details of these deliberations and approvals are shared with the Global Sustainability Promotion Managers Meeting, in which representatives of both domestic and overseas Group companies participate, as well as by its subordinate organization the Global Sustainability Working Group.

History of Climate-Related Activities

FY	Activities
1991	• Established the Environmental Group
2005	• Established the CSR Promotion Dept • Published the Environmental Report
2011	• Published the CSR & Financial Report
2015	• Positioned climate change as an issue of materiality
2016	• Published the Long-Term Environmental Goals for 2030
2019	• Launched the Sustainability Promotion Group • Established the Sustainability Promotion Committee • Obtained SBT certification
2020	• Published four management indicators (ESG indicators) • Announced support for the TCFD Recommendations
2021	• Disclosed information in the Integrated Report in accordance with the TCFD Framework • Re-positioned climate change as an issue of materiality • Made first TCFD recommendations-based disclosure in the Corporate Governance Report
2022	• Established the Enterprise Risk Management (ERM) Committee • Conducted stakeholder dialogues on TCFD • Adopted ESG evaluation*3 as one of the evaluation indicators used to determine performance-linked compensation for executives • Declared intent to aim for carbon neutrality by 2050 • Introduced sustainable financing for the first time
2023	• Became a member of the GX League • Expanded collaboration on portable charging equipment for construction sites • Issued green bonds
2024	• Opened "ZERO EMISSION EV-LAB" as a research center

*3 ESG evaluation is conducted via the comprehensive assessment of ratings given by the CDP regarding the company's response to climate change and water security, its inclusion in the Dow Jones Sustainability Indices, and the progress made in reducing CO_2 emissions from products and production processes.

Sustainability Meetings and Deliberations

Meeting structure	Chairperson	Members	Frequency	Principal roles
Board of Directors	Chairman and CEO	Directors	At least once a year	Deliberation and final approval of the Hitachi Construction Machinery Group's sustainability promotion policies, key measures and KPIs
Executive Committee	Chairman and CEO	Executive Officers	At least once a year	Additional deliberation and approval of the sustainability promotion policies, key measures and KPIs discussed by the Sustainability Promotion Committee
Sustainability Promotion Committee	President and COO	Executive officers and those in higher positions (including CEO, COO, CSO, CFO, CHRO, CTO, CDIO and CRO)	Twice a year	Deliberation and approval of the Hitachi Construction Machinery Group's sustainability promotion policies, key measures and KPIs
Global Sustainability Promotion Managers Meeting	President, Sustainability Promotion Group	Heads of the business and administration departments, and presidents of domestic and overseas Group companies	Twice a year	Progress management for the Group's sustainability promotion measures and medium-term nonfinancial targets; sharing of key measures and response to the need for cooperation; and sharing of the details of deliberations and decisions made by the Sustainability Promotion Committee
Global Sustainability Working Group	President, Sustainability Promotion Group	Those in charge of sustainability at domestic and overseas Group companies	Once a year	Global, groupwide sharing of sustainability policies and measures

See "Sustainability Promotion System" on page 19.

Our Approach to Climate Change

Strategies

Looking ahead to an uncertain future, companies must analyze scenarios in terms of the risks and opportunities they face and then develop their own response measures and strategies. The Hitachi Construction Machinery Group formed an internal task force in 2020 that has updated scenario analyses for 1.5°C and 4°C increases in temperature through the following four processes.

Scenario Analysis Processes

1 Scenario Selection	Assume two scenarios for 1.5°C and 4°C increases in temperature
2 Identification of Risks	Organize an internal task force to identify the company's risks using the TCFD recommended risk classification method
3 Business Impact Assessment	Estimate financial impacts by risk and rate them on a 3-level scale of "large," "medium," or "small" as a percentage of sales
4 Consideration and Implementation of Priority Strategies	Comprehensively assess the likely timing of manifestation and financial impact of risks and then reflect risk countermeasures in business strategies

Assessment Results Based on Scenario Analysis

We have listed the climate-related risks and opportunities we face in terms of products, services, solutions and supply chains under the 1.5˚C and 4˚C scenarios.

Climate-related risks and opportunities were evaluated at three levels in terms of their likely timing of manifestation and financial impact, and a comprehensive assessment of overall significance was then carried out. We are working with internal task force members to reorganize climate-related business strategies for items that we believe are of high importance within each scenario.

Our scenario analyses helped us identify risks and opportunities in both the 1.5°C and 4°C climate change scenarios, and we are working to achieve carbon neutrality with strategies to address these risks and opportunities. We will strengthen the resilience of the Hitachi Construction Machinery Group by developing flexible and strategic businesses aimed at minimizing risks and maximizing opportunities.

See "Assessment Results Based on Scenario Analysis" on page 73.

Risk Management

New risks, such as those posed by climate change, geopolitical risks and human rights issues in supply chains, could shake the very foundations of our business, and it is becoming increasingly important to manage these emerging risks. Accordingly, we regarded new risks that require company-wide response policies and management decisions as "company-wide risks," and established the Enterprise Risk Management (ERM) Committee in April 2022 as a forum to manage these risks. Under the leadership of the Chief Risk management Officer (CRO) and other members of management, we have established a system to ensure the overall management of and prompt response to these company-wide risks. The ERM Committee reports to the Executive Committee and the Board of Directors on important matters such as company-wide risk management policies.

See "ERM Committee Structure" on page 90.

Indicators and Targets

We are working to reduce CO_2 emissions in both product development and production processes with the aim of achieving carbon neutrality throughout the entire value chain by 2050.

Interim targets for 2030

Reduction of CO_2 emissions (absolute emissions)	Production (Scope 1+2)	45% reduction (from the FY2010 level)
	Product use (Scope 3, Category 11)	33% reduction (from the FY2010 level)

Target for 2050

Achieve carbon neutrality throughout the entire value chain

We filed an application to renew SBT 1.5°C scenario certification in August 2025, aiming to make further contributions to the realization of a decarbonized society.

Our Approach to Climate Change

Assessment Results Based on Scenario Analysis

Timing of manifestation	Short-term: Medium-term management plan (2023 to 2025) Medium-term: 2026 to 2030 Long-term: 2031 to 2050
Financial impact	Small: 1 billion yen or less Medium: 1-10 billion yen Large: Over 10 billion yen

Scenario	Type		Risk	Opportunity	Timing of manifestation	Financial impact	Measures
1.5°C scenario	Transition to a decarbonized society	Products, services & solutions	Possible changes in investment/lending behavior due to tighter decarbonization regulations and increased decarbonization awareness	Establishment of a competitive advantage by developing decarbonization technologies ahead of competitors	Medium to long term	Medium	• Increase production facility capacity by approximately 1.3 times from the FY2021 level by FY2025 to meet growing demand for compact products in the North American and European markets • Expand the functions of Hitachi Construction Machinery Tierra's development and testing facility to accommodate more sophisticated testing of electrified construction machinery and other equipment • Conduct user tests with an eye to making practical use of hydrogen engine & fuel cell drive technologies in medium and large hydraulic excavators • Signed a joint development agreement with ABB for an engine-less, fully electric rigid dump truck and started demonstration experiments in June 2024 for its commercialization in FY2027 • Expand sales of trolley-powered dump trucks • Consider the development of stationary rechargeable EVs and fuel cell EVs/hydrogen batteries to improve dump truck user-friendliness • Extend the life of our machines by servicing used machines and releasing them with a warranty into the market as "PREMIUM USED" machines • Opened ZERO EMISSION EV-LAB as a research center for the co-creation of zero-emission construction sites, and utilize the installed machines and equipment to develop new solutions by measures such as visualizing the cycle from recharging to use and customizing power management for individual customers' construction sites • Aim to extend the operating life of our machines from 10 years to 15 years through the use of ConSite, parts recycling, and body remanufacturing
			Decline in coal demand	Increasing demand for hard rock	Medium to long term	Medium	• In order to help customers achieve net-zero emissions by 2050, enhance the development of decarbonization technologies, other new technologies and solutions, including electric-powered ultra-large hydraulic excavators, trolley-powered dump trucks, the autonomous haulage system (AHS) for dump trucks used in mining, and the fleet management system (FMS) designed for operation management at mining sites • Strengthen our mining sales and service system in cooperation with the Marubeni Group in Latin America, and seek closer ties with the ITOCHU Corporation Group in North America
		Supply chains	Growing pressure to decarbonize, reputation damage	Carbon tax savings	Medium to long term	Large	• Introduced an internal carbon pricing system in 2019, which takes carbon price into account in investment decisions, and raised our carbon price from the initially set price of 5,000 yen/t-CO_2 to 14,000 yen/t-CO_2 in FY2022 to promote decarbonization investment • Promote the introduction of solar power generation, energy-saving equipment, and low-carbon product manufacturing equipment with a view to replacing all energy used for manufacturing with renewable energy • Foster the use of renewable energy-derived electricity at the Tsuchiura Works, Kasumigaura Works, Hitachinaka Works and Banshu Works, Hitachi Construction Machinery Tierra, Hitachi Construction Machinery Camino, Tada Kiko, Tata Hitachi Construction Machinery Company and Bradken • Introduced the Hitachi Construction Machinery Energy Management System, which utilizes IoT technology, to six plants in Japan to reduce peak power and standby power consumption based on visualized data • Make proactive use of IoT at our manufacturing facilities to monitor equipment operating status, thereby improving productivity while reducing CO_2 emissions • Promote the optimization of global production and procurement, including the optimization of product inventory and transportation • Provide support for major procurement partners so they can save electricity and improve energy productivity at their production facilities
4°C Scenario	Rapid increase in natural disasters and extreme weather events	Products, services & solutions	Rapid increase in the frequency and intensity of such natural disasters as typhoons and floods due to climate change	Increased demand for products, services, and solutions that can contribute to disaster control and mitigation	Short to long term	Small	• Offer products, including those for rental, that contribute to measures to enhance infrastructure resilience for disaster control and mitigation (light dump trucks, small general-purpose products, attachments such as fork grapples and the like.) • Offer optimal solutions to meet demand at disaster-afflicted sites through the provision of Solution Linkage series and other technologies • Provide the RBT Series hydraulic excavators that can be remotely operated for use at inaccessible sites, including use for reconstruction work at disaster-afflicted sites • Expand the usage of portable charging equipment designed to supply power to electric construction machines operated at construction sites, for example to use it as an emergency power source • Prioritizes the provision of construction equipment and materials to disaster-stricken areas based on agreements concluded by Hitachi Construction Machinery Japan with local governments and other parties
		Supply chains	Production stoppage due to the suspension of parts supply or the disruption of logistics networks	Establishment of a stable production system through emergency measures	Short to long term	Large	• Give timely restoration support to procurement partners whose facilities have been affected by disasters and make production adjustments within the Group to avoid shipment delays • Secure multiple suppliers for critical parts and establish systems to avoid delays in parts supply • Promote measures such as installing drainage channels and defense walls around key facilities at our own plants located in areas with high flooding risks • Take into account natural disaster risks, including those arising from climate change, when building/relocating our plants and offices • Plan to introduce a system that bolsters supply chain BCPs
			Risk of heat stroke due to rising temperatures	Establishment of a stable production system through emergency measures	Short to long term	Small	• Use WBGT (heat index) meters to evaluate the level of heat stress in hot environments at manufacturing sites and send out early alerts to warn of heat stroke if dangerously hot conditions are expected • Seek to automate and robotize production to avoid the risk of heat stroke and other human injury risk