

# Environmental Strategy



We will pursue decarbonization and resource recycling, and contribute to the creation of a society that can adapt to climate change.

## Our Approach to Climate Change

The Hitachi Construction Machinery Group has been a pioneer in addressing environmental issues and published the Environmental Report in 2005. In 2021, we reorganized materialities (key issues) from the viewpoints of relevance to our business and the expectations of society, and identified development of products and technologies to tackle climate change as one of our mate-

rialities. By conducting risk assessments and scenario analyses of future forecasts and impacts on the business environment going forward, we seek to avoid or mitigate losses caused by possible future climate change, as well as to explore potential opportunities to create new businesses.

## Achieving Carbon Neutrality

Development of products and technologies to tackle climate change is one of the Group's materialities. The Group is working to reduce CO<sub>2</sub> emissions in both product development and production processes with the aim of achieving carbon neutrality throughout the entire value chain by 2050.

Looking at CO<sub>2</sub> emissions over the entire life cycle of construction equipment, 90% of the emissions are generated during product operation, which constitute direct emissions by our customers (Scope 1). Lowering these emissions is important for reducing CO<sub>2</sub> emissions over the entire life cycle. With an eye on achieving carbon neutrality, we have set and are promoting the goal of reducing CO<sub>2</sub> emissions by 33% from the FY2010 level by FY2030. This will serve as an indicator of our ability to provide environmentally friendly products that emit less CO<sub>2</sub> to our customers and society.

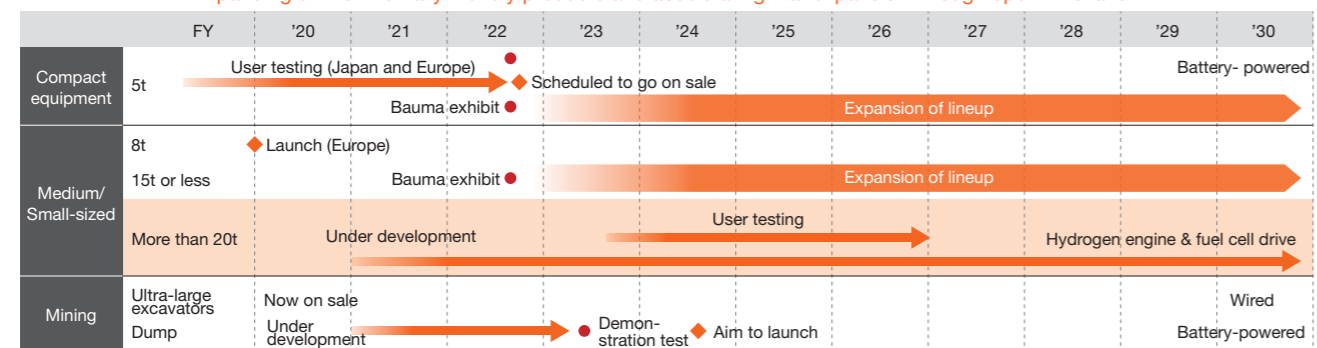
To achieve this goal, we are promoting to develop the entire product range—from compact equipment to ultra-large mining machines. In addition to reducing fuel consumption, we are also working on the early market launch of electrified construction equipment and identifying hydrogen-fueled products from a technological perspective. Furthermore, we are striving to provide solutions that enable our customers to reduce CO<sub>2</sub> while equipment is in use. In addition, major mining customers have set a goal of achieving net-zero emissions by 2050. As part of

this effort, there is a particularly strong demand to reduce the emissions of dump trucks, of which there are a large number, to zero. To meet this demand, we are working with ABB of Switzerland to make our dump trucks fully electric, and aiming to achieve net zero emissions for the entire mining site. By replacing the engine of our current trolley-type dump trucks, which can run on electric power, with a battery, we will be able to use both the trolley electric supply and battery electric supply to achieve a fully electric machine. When our EH3500AC-3 rigid dump truck is fully electric, operating 20 hours a day will result in a reduction of 6.8 tons of CO<sub>2</sub> emissions.

Meanwhile, in the production process, we are promoting reduction of CO<sub>2</sub> emissions from the perspective of energy conservation, conversion to renewable energy (in-house power generation through capital investment, introduction of renewable energy electricity), electrification, and fuel conversion. Energy conservation will be particularly effective in reducing energy costs, the cost of purchasing renewable energy credits, and the carbon tax that is expected in the future. In addition, we will introduce new capital investment standards that utilize Internal Carbon Pricing (ICP) and give priority to investment in facilities that achieve significant CO<sub>2</sub> reductions. We are promoting this standard by applying it to all domestic and overseas production sites and group companies.

## Roadmap for the Development of Environmentally Friendly Products by FY2030

Expanding environmentally friendly products and accelerating that expansion through open innovation



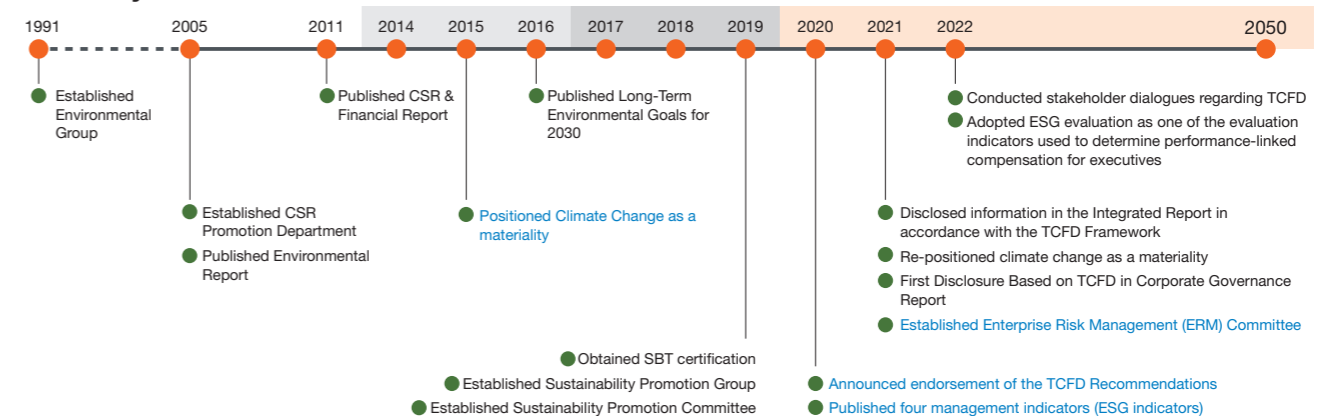
## Response to TCFD Recommendations



In July 2020, we established an internal task force consisting of group managers and key personnel from corporate and business groups across the company. In October of the same year, we expressed our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). In 2022, we are conducting scenario analyses for both 1.5°C and 4°C

increases in temperature, as well as an assessment of 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.

### History of Climate-Related Activities



### TCFD Disclosure Requirements

	TCFD Recommended Disclosure Items	Hitachi Construction Machinery Response Status
<b>Governance</b>	<ul style="list-style-type: none"> <li>Board of Directors' oversight of climate-related risks and opportunities</li> <li>Management's role in assessing and managing climate-related risks and opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Executive Committee/Board of Directors' deliberation and approval</li> <li>Hold Sustainability Promotion Committee chaired by CEO</li> </ul>
<b>Strategy</b>	<ul style="list-style-type: none"> <li>Short-, medium-, and long-term climate-related risks and opportunities</li> <li>Impact of climate-related risks and opportunities on business, strategic, and financial planning</li> <li>Resilience of strategies based on different climate-related scenarios</li> </ul>	<ul style="list-style-type: none"> <li>Identify short-, medium-, and long-term climate-related risks and opportunities</li> <li>Quantify the financial impact of climate-related risks and opportunities</li> <li>Identify priority measures and confirm resilience of strategies</li> </ul>
<b>Risk Management</b>	<ul style="list-style-type: none"> <li>Process for identifying and assessing climate-related risks</li> <li>Process for managing climate-related risks</li> <li>Integration of climate-related risks into enterprise-wide risk management</li> </ul>	<ul style="list-style-type: none"> <li>Identify, assess, and prioritize risks</li> <li>Establish ERM Committee</li> </ul>
<b>Indicators and Targets</b>	<ul style="list-style-type: none"> <li>Evaluation Indicators for Climate-related Strategies and Risk Management</li> <li>Scope 1-3 GHG emissions and associated risks</li> <li>Climate-related risk and opportunity management targets and performance</li> </ul>	<ul style="list-style-type: none"> <li>Goal to achieve carbon neutrality throughout the value chain by 2050</li> <li>Report CO<sub>2</sub> emissions performance</li> </ul>

## TOPICS

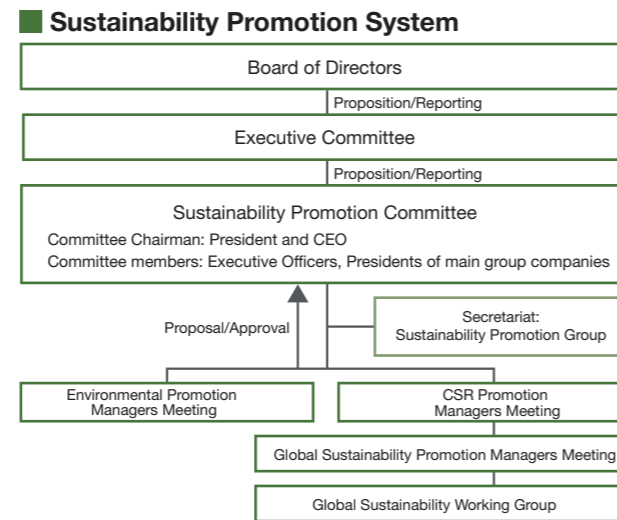
### Conduct TCFD Stakeholder Dialogue (June 2022)

To deepen the TCFD, the Group held a dialogue with the aim of delving deeper into challenges and issues we face and learning from the best practices of other companies. The facilitator was Mr. Masahiko Kawamura, Director of Sun Messe Innovative Network Center. Panelists TODA CORPORATION and Honda Motor Co., Ltd. presented information from the perspective of decarbonization, and Sampo Japan Insurance Inc. presented information from the perspective of disaster prevention and disaster mitigation. Active discussions were held on climate change countermeasures, such as how to perceive management risks and business opportunities that may arise from 1.5°C and 4°C scenarios. Participants were able to learn about advanced case studies from various companies through these dialogues. We will continue to organize dialogues in order to resolve our own issues and strengthen TCFD promotion.



## Governance

Important issues related to climate change are discussed at the CSR Promotion Managers Meeting and the Environmental Promotion Managers Meeting. After the discussion, they are reported to the Sustainability Promotion Committee (held twice a year), which consists of executive officers and the Presidents of main Group companies. The President and CEO, 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 deliberated and approved by the Executive Committee and the Board of Directors, and are appropriately monitored and supervised. The deliberations and approvals are also shared with the Global Sustainability Promotion Managers' Meeting, which consists of overseas Group companies, and its subordinate organization, the Global Sustainability Working Group.



## Meeting Committee Structure and Deliberations regarding Sustainability

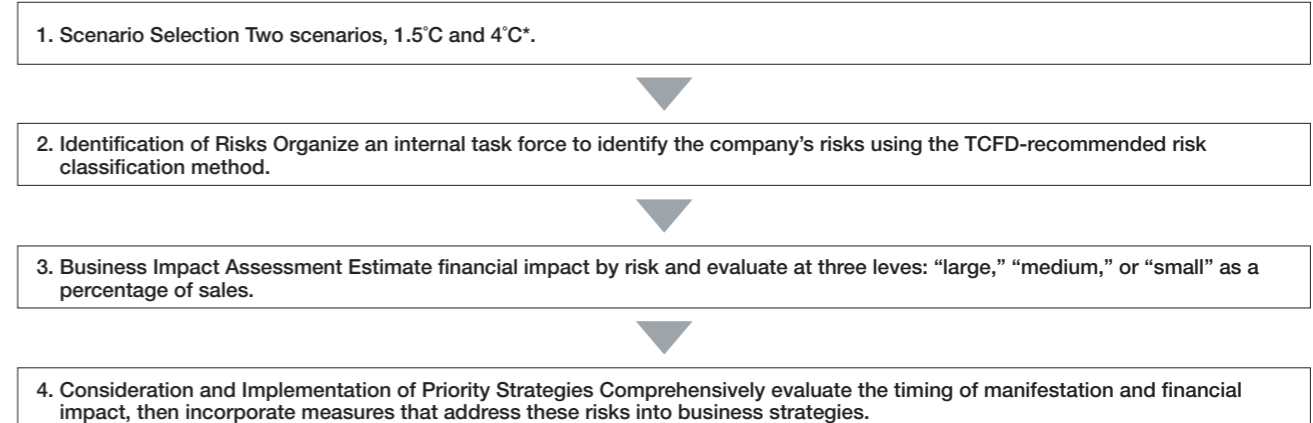
Meeting Committee Structure	Chairman	Members	Main Role	Main Agenda Items for FY2021
Sustainability Promotion Committee	President and Chief Executive Officer	Executive Officers including CEO, CSO, COO, CFO, CHRO, CTO, CDIO, CPO, CMO, Presidents of main Group companies	Deliberation and approval of the Group's sustainability promotion policy, including climate change, as well as key measures and KPIs	Deliberation and approval of policies to promote overall sustainability, including carbon neutrality, circular economy, TCFD, and ESG assessment
Environmental Promotion Managers Meeting	General Manager, Sustainability Promotion Group	Presidents of domestic and overseas group companies, General Managers of Business Group	Deliberation and approval of environmental policies in accordance with the Action Guidelines for Environmental Conservation, management of KPI progress toward maintaining and enhancing environmental conservation initiatives, sharing of key measures and requests for cooperation	Examining our course of action with regard to promoting a carbon neutral and circular economy
CSR Promotion Managers Meeting	General Manager, Sustainability Promotion Group	General Manager of Corporate Group, General Manager of Business Group, Presidents of domestic group companies	Group's efforts to promote sustainability, manage the progress of non-financial mid-term targets, and share and request cooperation on priority measures	Sharing of our approach, challenges we face, and a roadmap for TCFD promotion
Global Sustainability Promotion Managers Meeting	General Manager of Sustainability Promotion Group	Presidents of overseas group companies	Sharing deliberations and decisions of the Sustainability Promotion Committee and CSR Promotion Managers Meeting	Sharing the Group's global sustainability promotion approach
Global Sustainability Working Group	General Manager of Sustainability Promotion Group	Sustainability officers from overseas group companies	Sharing of the Group's global sustainability policies and measures	Sharing case studies from overseas group companies and formulating social contribution policy

## Strategy

Looking ahead to an uncertain future with regard to climate change, which is a key management issue, companies must conduct scenario analyses to estimate the risks and opportunities they pose to the companies, and to formulate their own response measures and strategies based on these scenarios.

We have restructured the internal task force we organized in 2020 to analyze climate-related scenarios under an assumed 1.5°C and 4°C rise in global temperature in the following four processes.

### Scenario Analysis Process



\* References are made to reports of the Intergovernmental Panel on Climate Change (IPCC), established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP), as well as information from the International Energy Agency (IEA).  
 \* Under the 1.5°C scenario, environmental regulations and laws aimed at mitigating climate change are strengthened to advance decarbonizing technologies and innovations, leading to a society that achieves zero emissions globally by 2050. For the transition to a decarbonized society based, risks were identified from four categories: policy and legal risk, technological risk, market risk, and reputational risk (changes in customer behavior and investor judgment).  
 Under the 4°C scenario, as a result of prioritizing economic activities, global warming will increase, and businesses will be subject to physical impacts due to the growing intensity of extreme weather events. Risk items were identified from two categories of physical risks: chronic risks (average temperature rise and sea level rise) and acute risks (intensification of extreme weather events such as typhoons and floods).

## Scenario Analysis Results

In order to further promote the TCFD, we have listed the climate-related risks and opportunities we face in terms of products, services, solutions, and supply chain under the 1.5°C and 4°C scenarios, and grouped them according to the following four key themes.

- <1.5°C Scenario> **Expand development of products, services, and solutions for decarbonization**
- <1.5°C Scenario> **Build supply chains aimed at decarbonization**
- <4°C Scenario> **Provide products/services that contribute to disaster prevention and mitigation**
- <4°C Scenario> **Building a Supply Chain that is Resilient to Extreme Weather Conditions**

These climate-related risks and opportunities were evaluated at three levels in terms of timing of manifestation and financial impact, and a comprehensive assessment of overall significance was then carried out.

Within each grouping, we are working with internal task force members to reorganize climate-related business strategies for items that we believe are of high importance.

The scenario analyses revealed that both the 1.5°C and 4°C climate change scenarios offer great potential for expanding future business opportunities. Based on these considerations, we will strengthen the resilience of the Hitachi Construction Machinery Group by closely monitoring market trends and developing flexible and strategic businesses with the aim of maximizing opportunities and minimizing risks.

## Financial Impact and Key Measures

**Time of manifestation** : Short-term: Medium-term management plan (2020-2022) Medium-term: Medium-term management plan by 2030  
Long-term: beyond 2030 to 2050

**Financial Impact** : Small: 1 billion yen or less Medium: 1-10 billion yen Large: Over 10 billion yen

### <1.5°C Scenario> Expanding Development of Products, Services, and Solutions for Decarbonization

#### (1) Impact of the transition to decarbonization on products, services, and solutions

[Risks] Risk of a possible changes in investment and lending behavior due to tighter decarbonization regulations and increased decarbonization awareness

[Opportunities] Establish competitive advantages and differentiate from competitors by developing decarbonization technologies ahead of others

#### Strategies for Turning Risk into Business Growth

##### Strategies for reducing CO<sub>2</sub> emissions

The Group has set a goal of achieving carbon neutrality throughout its entire value chain (from materials procurement to disposal) by 2050, and is accelerating its advance toward decarbonization.

##### Research and development strategies to encourage the development of decarbonization technology

In order to achieve sustainable growth, we aim to accelerate development by increasing R&D investment in advanced development areas of decarbonization and productivity improvement (automation/autonomous function, driver assistance, etc.): nearly tripling the FY2017 level by FY2025. In particular, to respond to Europe's high level of environmental awareness and strict regulations, we established a joint venture in Germany in 2018 to develop electrified products in collaboration with a German distributor. We promote the development of environmentally-conscious products focusing on the development of clean technology.

##### Strategies to expand the lineup of decarbonization products and increase their market penetration

By 2030, we aim to expand our lineup of decarbonization products, services, and solutions and increase their market penetration.

	Classification	Strategies to Increase the Diffusion of Technologies for Decarbonization
Decarbonated Product	Development of battery-powered electrified mini to small excavators	<ul style="list-style-type: none"> <li>Following the launch of the 8-ton class in the European market, we began receiving orders for the 5-ton class battery-powered mini excavator in June 2022</li> <li>Hitachi Construction Machinery Tierra has expanded the functions of its development and testing facility to accommodate more sophisticated testing of electrified construction machinery and other equipment</li> <li>Increase production capacity to approximately 1.3 times the current level by FY2025 to meet growing demand for compact products in the North American and European markets</li> <li>Scheduled to be released as a mass-produced machine with profitability secured by 2050</li> </ul>
	Support for hydrogen engine & fuel cell drive in medium and large excavators	<ul style="list-style-type: none"> <li>Conduct user testing of hydrogen engine &amp; fuel cell drive technology to be realized by 2030</li> <li>Accelerate the pace of development through collaboration with research institutes, universities, and partner companies</li> </ul>
	Support for wired electric or battery power in mining	<ul style="list-style-type: none"> <li>Signed a joint development agreement with ABB for an engine-less, fully electric rigid dump truck for achieving net-zero emissions from mining machinery in 2021. PoC (Proof of Concept) is scheduled to start in December 2023.</li> <li>Expand sales of trolley-powered dump trucks</li> <li>Consider development of stationary rechargeable EVs and fuel cell EVs/hydrogen batteries to improve dump truck user-friendliness</li> </ul>
Service	Increase market penetration of ICT construction equipment	<ul style="list-style-type: none"> <li>Set ICT construction equipment market penetration as a management goal (social value) related to productivity improvement, and aim to have 2,800 units operating at a cumulative total of more than 5,000 work sites by 2022</li> </ul>
Solution	SolutionLinkage*	<ul style="list-style-type: none"> <li>Optimize CO<sub>2</sub> emissions throughout the value chain by implementing Hitachi Construction Machinery's ICT and IoT solutions, which improve safety and productivity, and reduce lifecycle costs—key issues for our customers</li> </ul>

\*Composed of ICT Construction Solution/Solution Linkage Mobile/Fleet Management System (FMS)/ConSite

##### Expansion of used machine and parts remanufacturing business

- The Group has long been engaged in the used machine business. We contribute to the longevity of our products by sending used machines back into the world as PREMIUM USED machines that have been serviced and given a warranty. In servicing and replacing parts for PREMIUM USED machines, only genuine Hitachi Construction Machinery parts are used, and these parts meet the standards set by the Group. Since construction equipment weighs between 0.8 and 800 tons, this contributes significantly to the reduction of raw materials. It can also contribute to the reduction of CO<sub>2</sub> associated with the procurement of materials and parts, as well as the reduction of CO<sub>2</sub> associated with product manufacturing.
- The machine body regeneration process, which began in FY2021, aims to further extend the service life of products by repairing and rebuilding the entire body to the same level of functionality as a new machine. A 20-ton class, medium-sized hydraulic excavator submerged in the torrential rains of July 2018, which caused extensive damage mainly in western Japan, was rebuilt to the equivalent of a new machine and sold as a PREMIUM USED, certified pre-owned machine with warranty.
- In the global market, Hitachi Construction Machinery Zambia has been rebuilding ultra-large hydraulic excavators (EX1200, 120-ton class). It is not just a simple restoration to its original condition as a new machine, but reflects even minor changes to the product, resulting in a more valuable product.
- In order to promote the reuse of parts in addition to the reuse of products, we have been developing a global business to recycle parts for hydraulic pumps, hydraulic cylinders, and travel devices, etc. since 1998. In FY2021, we were able to reuse approximately 77% of the parts collected (7,868 tons in total). This will contribute to the reduction of raw materials and CO<sub>2</sub> emissions associated with the procurement of materials and parts as well as the manufacturing of products.

#### Resilience Assessment

We have established a carbon neutrality goal for 2050 and we are actively advancing towards it.

If things proceed as planned, we consider the risk of the transition toward decarbonization to be small.

#### (2) Impact of the transition to decarbonization on the mining machinery business

[Risks] Risk of decline in coal demand

[Opportunities] Increased demand for hard rock, establish a competitive advantage and differentiate from competitors by developing decarbonization technologies for net zero emissions mining ahead of competitors

#### Strategies for Turning Risk into Business Growth

- The sales revenue component of the mining machinery business related to fuel coal comprises only about 5% of the Group's total business. The Group's dependence on this business is low, as it has been on a declining trend. Due to the fact that accelerated development of EVs in the automotive industry will expand opportunities for sales of mining machinery for hard rock (iron ore, copper, nickel, etc.), we also have a strategy to grow our mining machinery business. Mining sales revenue in FY2021 was 28% higher than the previous year.
- The all-electric power system is an indispensable technological element for our customers to achieve net-zero emissions by 2050. We will expand our solutions business and deploy decarbonization technologies and other new technologies, including electric-powered ultra-large hydraulic excavators, trolley-powered dump trucks, the Autonomous Haulage System (AHS), an autonomous driving system for dump trucks used in mining and the Fleet Management System (FMS), a mine operation management system.
- In Latin America, we will strengthen our mining sales and service system in cooperation with the Marubeni Group, and promote the strengthening of ties with the ITOCHU Corporation Group in North America.

#### Resilience Assessment

We consider the business risk to be medium given the very low dependence on fuel coal in the mining machinery business and the prospect that demand for hard rock will expand in the future due to the accelerated development of EVs in the automobile industry and other sectors.

### <1.5°C Scenario> Building Supply Chains Aimed at Decarbonization

#### Impact of the Transition to Decarbonization on Supply Chains

[Risks] Increased external pressure to decarbonize, risk of reputational damage

[Opportunities] Carbon tax savings

#### Strategies for Turning Risk into Business Growth

The Group has set a goal of achieving carbon neutrality throughout its entire value chain by 2050, and is working globally to reduce CO<sub>2</sub>. To realize this goal, we are promoting initiatives from the two perspectives; development of thorough energy conservation and CO<sub>2</sub> reduction activities, and active use of renewable energy.

##### Measures to support the development of thorough energy conservation and CO<sub>2</sub> reduction activities

- Since FY2019, we have incorporated an internal carbon pricing system to consider the carbon price in investment decisions. In the last fiscal year, we raised our carbon price from 5,000 yen/t-CO<sub>2</sub> at the time of introduction to 14,000 yen/t-CO<sub>2</sub>. We plan to accelerate the pace of investment in energy-saving facilities and the introduction of renewable energy.
- Hitachi Construction Machinery Energy Management System, an integrated energy and facilities management system that utilizes advanced IoT technology, has been introduced at six plants in Japan. The system reduces peak power consumption and standby power consumption based on the visualized data. In addition, we are promoting the use of IoT for factory production equipment to monitor equipment operating conditions, thereby helping to improve productivity and reduce CO<sub>2</sub>.

##### Measures to support active use of renewable energy

- Renewable power is being introduced at Tsuchiura Plant, Hitachinaka Rinko Plant, Banshu Plant, Hitachi Construction Machinery Tierra, Shin Tohoku Metal, Tada Kiko, Hitachi Construction Machinery (China), Tata Hitachi, Hitachi Construction Machinery Indonesia, and Bradken. In FY2022, Bradken's India site will also install new renewable electricity to the extent that it will cover approximately 20% of the power needs of its operations.
- We promote optimization of global production and procurement, including optimization of product inventory and transportation.
- We provide support for main suppliers so that they can save electricity and improve energy productivity at their production facilities.

#### Resilience Assessment

We have established a carbon neutrality goal for 2050 and we are actively promoting it.

If things proceed as planned, we consider the risk of a Scope 1+2 transition toward decarbonization to be medium. We need to actively promote initiatives to strengthen the entire supply chain.

## <4°C Scenario> Providing Products/Services that Contribute to Disaster Prevention and Mitigation

### Impact of Disasters on Society

[Risks] Increase and intensification of natural disasters such as typhoons and floods due to climate change

[Opportunities] Increased demand for products and services that can contribute to disaster prevention and mitigation, supported by programs such as the Three-Year Emergency Measures for Disaster Prevention and Mitigation and Building National Resilience

### Strategies for Transforming Climate Change Risks into Business Opportunities

- By providing construction machinery products, rental products (light dump trucks, small general-purpose products, and attachments such as fork grapples, etc.), and technologies such as the Solution Linkage series that can contribute to infrastructure resilient measures related to disaster prevention and disaster mitigation, we strive to provide the best solutions to meet the demands of disaster sites.
- Hitachi Construction Machinery Japan has concluded 114 disaster agreements (as of March 2022) with local governments, etc. We will place priority on providing construction equipment and materials to disaster-stricken areas, contributing to rapid recovery when disasters occur. We plan to expand the number of disaster agreements to 155 in FY2022 and 195 in FY2023.
- In the field of disaster prevention and mitigation, we will contribute to the stable operation of our customers' machines through condition monitoring and machine maintenance using ConSite.

### Resilience Assessment

The scope of our ability to meet the demand for products/services that can contribute to infrastructure resilience for the purpose of disaster prevention and mitigation is still limited. However, we will continue to contribute to the realization of a resilient society that can withstand disasters.

## <4°C Scenario> Building a Supply Chain that is Resilient to Extreme Weather Conditions

### (1) Impact of natural disasters on supply chains

[Risks] Risk of suspension of parts supply due to rapid increase in natural disasters and intensification of disasters /increasing temperatures, risk of production stoppage due to disruption of transportation infrastructure, and risk of inability to report for work

[Opportunities] Build a stable production system through immediate measures

### Risk-Response Strategies

The group must engage in risk response measures from various perspectives. These perspectives include maintaining business continuity and the rapid resumption of business activities in the event of an accident or disaster.

#### ■ Reinforcement of risk countermeasures in our company

- To identify areas of high water stress levels, we used the AQUEDUCT tool published by the World Resources Institute (WRI) to quantify water stress levels at all domestic and international production sites and identify areas of high water stress.
- Typhoon 19 in 2019 flooded the Group's suppliers and required some production adjustments at some plants. However, timely restoration support provided to suppliers and production adjustment flexibility within the Group enabled us to avoid shipment delays, and the impact on consolidated results was minimal.
- We need to establish a system to ensure that any factory in the world can continue to produce products of the same quality and that we can cover the production of the affected factories. We need to be prepared not only for disasters which impact our company, but also for the risk of suspension of parts supply and the risk of production stoppage due to disruption of the transportation infrastructure. To this end, we are pursuing initiatives to diversify risks by building a global production and procurement system to prepare for disasters. These include thorough earthquake resistance measures, optimization of inventories in consideration of disasters, establishment of a system that allows products to be transferred between bases, purchasing of critical parts from multiple suppliers, and establishment of production planning processes and optimized allocation processes that will enable the early resumption of production. We plan to investigate the risk of natural disasters, including climate change, when building/relocating new factories and offices.
- In non-production sites, we will respond to disasters by continuing business activities through the widespread use of telework and by providing multiple means of transportation.

#### ■ Strengthening risk countermeasures in the supply chain

- We are working to build disaster-resistant global production and procurement by optimizing product inventories.
- We conducted the BCP checklist analysis for the Tokiwa-kai, a cooperative association comprised of major suppliers. For suppliers identified as requiring enhanced measures, we assessed the risk of flooding against municipal hazard maps and quantitatively determined the financial impact

on production. In the future, we will incorporate these results into production planning simulation software to further strengthen our countermeasures. We will assist suppliers who need our support, in order that they can consider their BCPs (Business Continuity Plans) independently and develop measures on their own.

### Resilience Assessment

We consider natural disaster risk to be large. We will prioritize the highest risk areas and take appropriate measures to ensure stable business activities throughout the supply chain. In addition, we will conduct periodic reviews to keep abreast of the latest climate change risks, which will be useful for disaster prevention and mitigation.

## (2) Impact of the increase in extreme heat days on the company

[Risks] Risk of heat stroke due to rising temperatures

[Opportunities] Establish a stable production system through emergency measures

### Strategies to Address Risk

- We aim to avoid the risk of infectious diseases, reduce human damage, and improve work efficiency by improving the work environment through automation and robotization of production.
- WBGT (heat index) meters have been installed at manufacturing sites to evaluate the level of heat stress in hot environments. When dangerously hot weather is expected, early alerts for heat stroke alerts promote awareness of the heat and help workers manage their physical condition by calling for heat stroke precautions. We plan to take into account the risk of heat stroke when we build/relocate new factories and offices in the future.

### Resilience Assessment

We consider the risk of heat stroke to be small. We will protect the health of our employees and ensure stable business activities by strengthening employee health management and heat stroke countermeasures.

## Risk Management

New risks have emerged that could shake the very foundations of our business, such as climate change, geopolitical risks, and human rights issues in the supply chain. Managing these risks is becoming increasingly important. Against this backdrop, we have designated new risks that require company-wide response policies and management decisions as company-wide risks. We established the ERM (Enterprise Risk Management) Committee

in April 2022 as a forum to manage these risks. Under the leadership of the CSO (Chief Strategy Officer) and other members of management, we have established a system for overall management of and prompt responses to company-wide risks. The ERM Committee reports important matters, such as company-wide risk management policies, to the Executive Committee and the Board of Directors.

## Indicators and Targets

In setting decarbonization targets, we use backcasting from ideal conditions that should exist in 2050 to establish targets for 2030 as well as three-year medium-term management goals. In 2019, we have set a target of 45% reduction in Scope 1+2 and a 33% reduction in Scope 3 (compared to FY2010) by 2030. This target has been certified as a SBT2°C-level target by SBTi (Science Based Targets initiative), an international initiative for climate

change. Since climate-related risks are a key management issue for the Group, we have shifted to the highest standard, the 1.5°C scenario. So our goal of carbon neutrality throughout the value chain by 2050 was formally approved at the Sustainability Promotion Committee, which is chaired by the CEO. We plan to formulate our 2030 target, which marks the mid-point of this period, this fiscal year in order to achieve this long-term goal.

### Shifting to a Resource-recycling Business

One of the Group's materialities is to shift to a resource-recycling business. The unsustainable business model of mining, using, and then disposing of resources will eventually reach its limits. The Group contributes to resource recycling through its value-chain business, which consists of businesses such as remanufacturing, used equipment, rentals, and service.

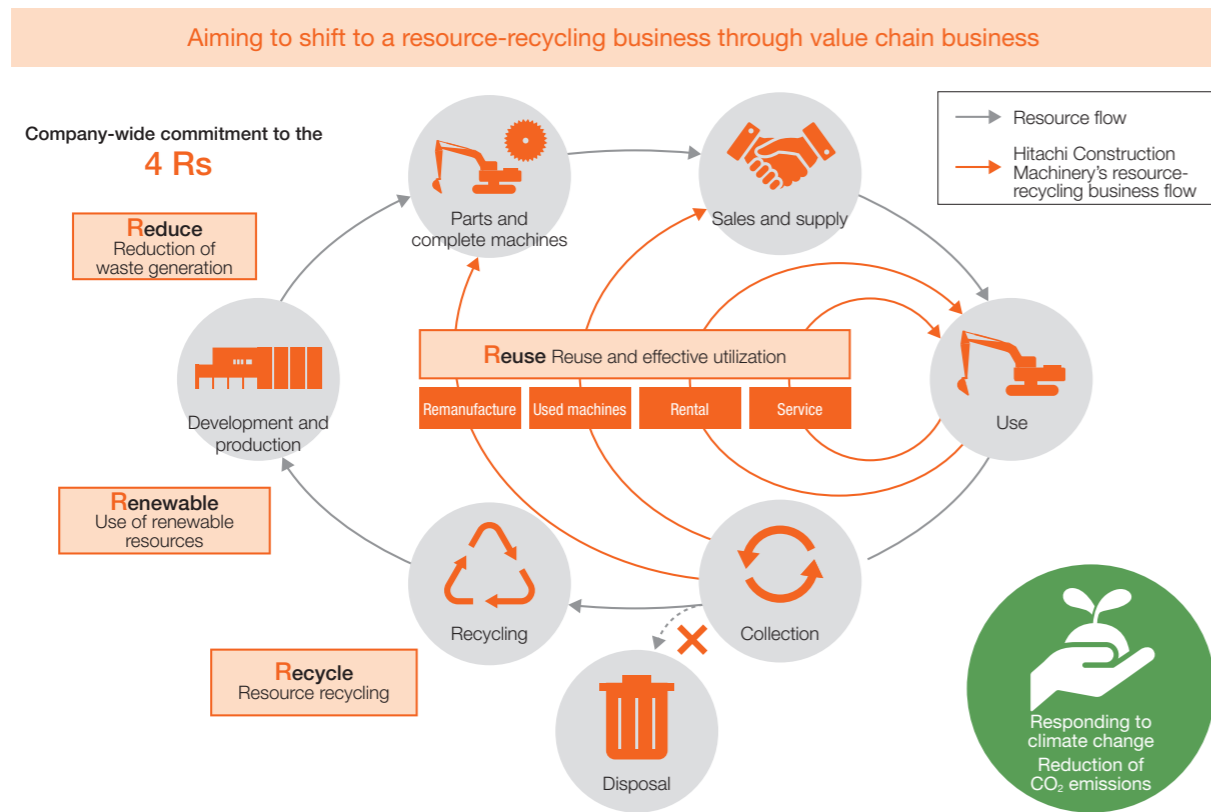
In the parts remanufacturing business, we manufacture refurbished parts that guarantee the same functionality and performance as new parts. Parts collected from customers are disassembled, serviced, and inspected, and consumable parts are replaced as needed. Advanced remanufacturing technologies can help reduce resource inputs by extending the life of components. In addition, we utilize our accumulated expertise to recondition discarded aircraft so that they are again the equivalent of new machines, which are then sold as used machines. This reduces the use of new materials and contributes to a new resource-recycling business model. Hitachi Construction Machinery Zambia is refurbishing ultra-large hydraulic excavators (EX1200) to make them as good as new. In addition, they are also working to remanufacture them as high-value products that reflect even minor changes in the product.

In the rental and used equipment business, Hitachi Construction Machinery provides advanced maintenance services through ConSite during the usage period of PREMIUM RENTAL machines that are certified by Hitachi Construction Machinery. We extend the operational life of the machines and distribute them to emerging countries as PREMIUM USED, high-quality used machines with a manufacturer's warranty. This contributes to reducing the number of discarded machines.

In the parts and service business, through the ConSite menu, we are working to extend the service life of machinery through appropriate maintenance using IoT. At the same time, we monitor the operation of each machine and make proposals to reduce fuel consumption through work improvement proposals, thereby contributing to the reduction of CO2. We extended ConSite services to our hydraulic excavators for North and South America starting in March 2022.

In this way, the Group's value chain business is a sustainable business that contributes to the circular economy by simultaneously helping to solve the problems of customers, society, and the environment, thereby creating a resource-recycling business.

### Hitachi Construction Machinery Group's Goal of Shifting to a Resource-recycling Business



# Technology Strategy

The Hitachi Construction Machinery Group is working to develop unique technologies, products, and solutions with the aim of realizing future construction sites where people and machines cooperate.

## Promoting DX (Digital Transformation)

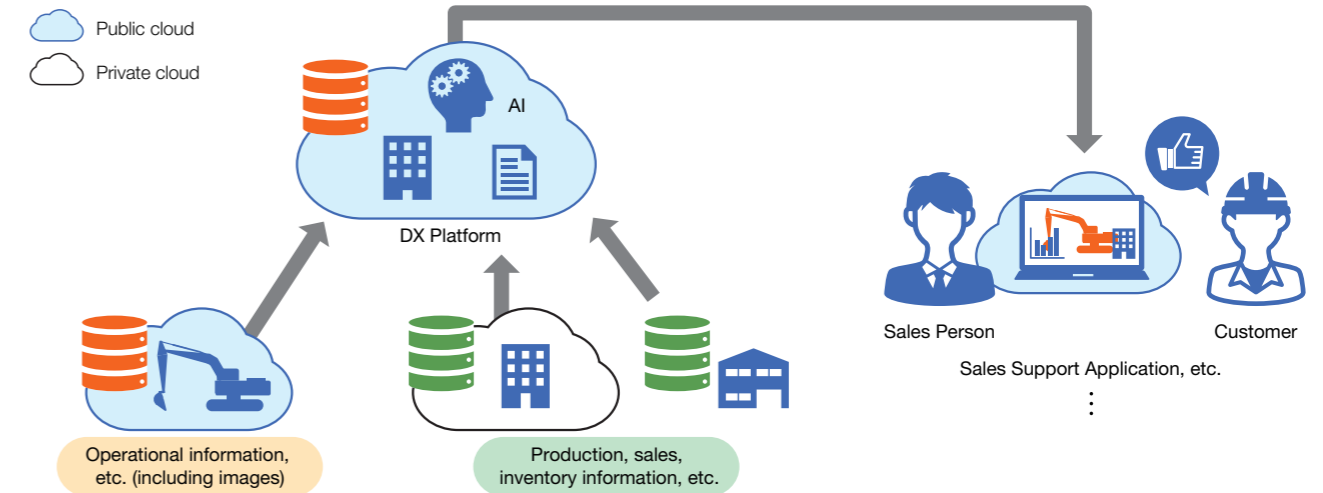
### Establishment of DX Platform

The Group aims to help provide solutions to our customers' issues by deepening the value chain and utilizing digital technology. In April 2020, the DX Promotion Group was established as an organization to lead company-wide DX and is developing various initiatives.

In January 2022, in collaboration with Hitachi, Ltd., we established the DX Platform, a platform for utilizing data on construction machinery operational information, production, sales, and inventory. In the past, systems to utilize this data were built separately, but by utilizing the DX Platform, the collection, analysis, and utilization of data will become much more efficient.

For the first initiative using the DX Platform, we began operating a Sales Support Application in Japan in fiscal 2022. This application is provide to all Hitachi Construction Machinery Japan personnel (approximately 1,000 people at 243 locations nationwide) who are in charge of construction machinery sales, parts and service business in Japan. It allows users to collectively view information such as the operational information of their machines, maintenance plans, and transaction histories. Then, based on this big data, it can instantly display proposals determined by AI that utilize multiple patterns. We will utilize this application to create new value.

### Overview of Data Utilization Platform "DX Platform" and Sales Support Application



### Selected as a Noteworthy DX Company

In June 2022, Hitachi Construction Machinery was jointly selected by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange as a Noteworthy DX Company, and was included on the list of Digital Transformation Stocks 2022 (DX Stocks). DX Stocks are selected by industry from among companies listed on the Tokyo Stock Exchange. The selected companies have established internal mechanisms to promote DX that have led to increased corporate value, and have demonstrated outstanding achievements in the use of digital technology. In addition to DX Stocks, companies that are implementing initiatives that deserve attention are selected as Noteworthy DX Companies.

In our medium-term management plan, we are shifting our

business model from a focus on new machinery sales to a value chain business that utilizes DX and targets machines in operation worldwide. Furthermore, we are promoting the provision of digital solutions to improve safety and productivity and reduce lifecycle costs—issues faced by our customers. These initiatives received positive recognition. 15 companies have been selected for 2022, including Hitachi Construction Machinery.

