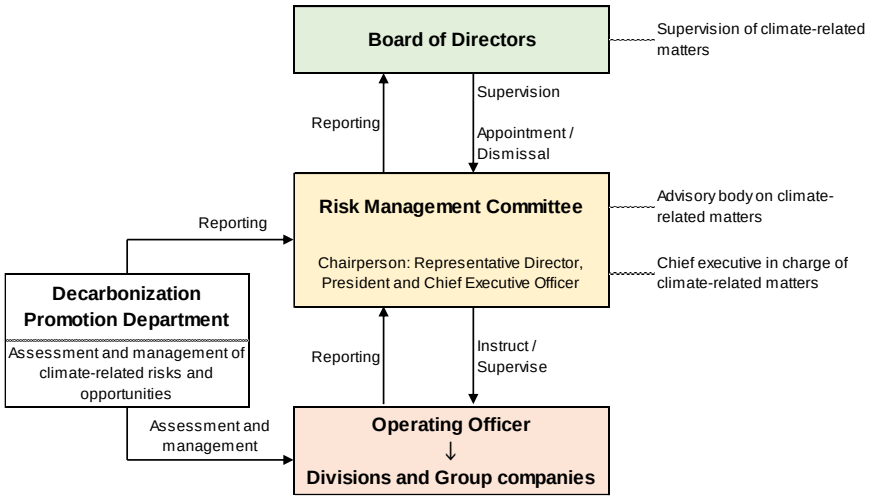
Information Disclosure Based on the TCFD Recommendations

In its Medium-Term Management Plan, the Okabe Group focuses on addressing the Sustainable Development Goals (SDGs) through management, including decarbonization initiatives, based on its vision of becoming “a global manufacturer that will contribute to resolving global issues by providing comprehensive solutions.” The Group will proactively pursue initiatives to reduce the environmental impact of its business activities, aiming to become carbon neutral in the future through actions such as contributing to zero emissions from construction sites and increasing the absorption of CO_2 in the marine business, in addition to reducing GHG emissions.
Going forward, the Group will continue stepping up such initiatives to help solve the global issues addressed in the SDGs. It will also make information disclosures in accordance with the TCFD recommendations and strive for further decarbonization in its business activities.

Governance

At the Okabe Group, the Decarbonization Promotion Department under the direct control of the President of the Company evaluates and manages climate-related risks and opportunities. The Company has established the Risk Management Committee chaired by the Representative Director, President and Chief Executive Officer. The committee consists mainly of members of management and formulates overall policies and plans for managing the Group’s risks, including climate-related risks, and promotes risk management. The Risk Management Committee assesses climate-related risks and other business risks. The committee primarily assesses risks qualitatively and also assesses them quantitatively. The committee chooses major risks based on its assessment and reports the status of risks quarterly. The committee also determines strategies necessary from a company-wide perspective and gives instructions about initiatives. The Risk Management Committee refers and reports its discussions to the Board of Directors. The Board of Directors functions as a supervisory authority.
When the Board of Directors formulates business strategies and makes management decisions, it holds comprehensive discussions and makes decisions, considering climate change issues as important factors. The Board of Directors holds one or more meetings monthly and supervises the Directors’ execution of operations. Two Directors of the Board of Directors are conversant with climate-related issues. One of the two Directors is an Outside Director who can, from an objective perspective, give advice about and supervise the formulation of SDGs strategies, particularly strategies on climate-related issues, which will enhance the Group’s corporate value and the Group’s business strategies and plans to enhance corporate value in the medium to long term.

Governance flow for handling climate-related issues of the Group



Risk Management

The Group has established the Risk Management Committee. The committee reports the status of risk management quarterly and determines strategies necessary from a company-wide perspective and gives instructions about initiatives.

To accurately identify risks that could have significant effects on the achievement of business objectives and business continuity and take appropriate action, the Group has established a risk management system. In risk assessment, the Group assesses business risks, including climate-related risks, based on “impact” and “incidence” and then also factors in qualitative assessment and assesses risk importance. In this way, the Group manages risk. The Group positions risks caused particularly by internal factors, such as risks caused by new strategies or initiatives, and risks caused by external factors, including large-scale natural disasters and climate change as major risks and takes steps to mitigate reduce these risks.

Strategy

(1) Identification of risks and opportunities

The Group has identified climate-related risks/opportunities that affect the Group’s business. The Group extracted transition risks/opportunities and physical risks/opportunities in business and assessed their financial impact. The impact was rated on a scale of three levels: large, medium, and minor. Risks and opportunities whose impact is large or medium are as described below.

Risks and Opportunities	Domain	Factors	Impact on Business Operations	Financial impact*
Transition risks	Regulations	Introduction of carbon pricing, tightening of GHG emissions regulations	Cost increases due to rises in carbon prices, which will result in rises in raw materials prices and upstream costs, which will in turn be passed on to costs	Large
			Cost increases due to rises in carbon prices at the Group’s own buildings and its plants	Large
	Regulations	Tightening of energy-saving laws and regulations	Increases in renewable energy procurement costs	Medium
			Increases in related costs, including costs for equipment replacement and investment	Medium
	Market	Changes in the prices of fossil resources	Rises in steel prices due to increases in energy prices and raw materials prices	Large
		Changes in logistics costs	Increases in transport and storage costs due to rises in fuel costs	Medium to large
			Increases in logistics costs due to rises in transport service prices resulting from decarbonization	Large
	Technology	Availability of alternative products	Decline in demand for the Group’s products due to launches of new low carbon products	Large
Transition opportunities	Market	Increasing demand for Net Zero Energy Buildings and net zero carbon emissions buildings	Increasing business opportunities and increasing opportunities to sell labor-saving methods/products and products related to wooden buildings	Large
	Regulations	Stronger GHG emissions restrictions	Increasing demand for decarbonized products and low-carbon products	Large
		Introduction of carbon pricing	Increasing opportunities to sell marine products	Large

Physical risks	Chronic	Temperature rise	Decline in work efficiency in production processes and an increase in cost for taking measures	Medium to large
	Acute	Increase in extreme weather	Decline in earnings due to shutdowns of facilities of the Group because of extreme weather and due to facilities repair costs	Large
			Supply chain disruptions	Large
Physical opportunities	Chronic	Strengthening of the national resilience policy	Increasing demand for strengthening facilities and infrastructures in anticipation of intensifying disasters, increasing demand for civil engineering work (slope reinforcement work)	Large
		Temperature rise	Increasing opportunities to sell methods/products that will contribute to labor-saving	Large
	Acute	Changes in precipitation patterns	Increasing demand for civil engineering work (slope reinforcement work)	Large
		Increase in extreme weather	Increase in sales of products, etc. used for preventing landslide disasters	Large
		Relocation from disaster risk areas	Emergence of demand for relocation from low-lying areas	Large

* Impact Large: 100 million yen or more; medium: 10 million yen or more and less than 100 million yen; minor (small): less than 10 million yen

(2) Setting themes for scenario analyses

For climate-change related risks and opportunities that we identified and organized, we conducted scenario analysis on the following themes which were assessed as having a “high degree of importance for the Group,” taking into consideration factors such as impact on business, connection with business strategies, and level of stakeholder interest.

Transition risks

Business subject to analysis, analysis theme

Analysis theme
● Impact of changes in carbon prices related to the Group

Physical risks

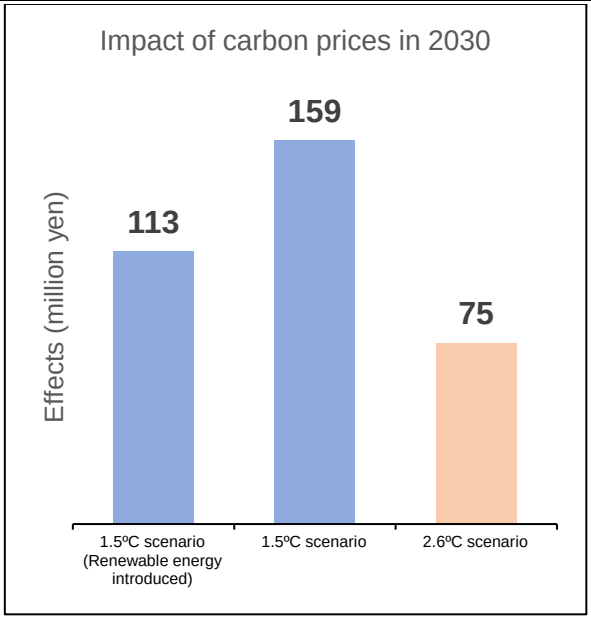
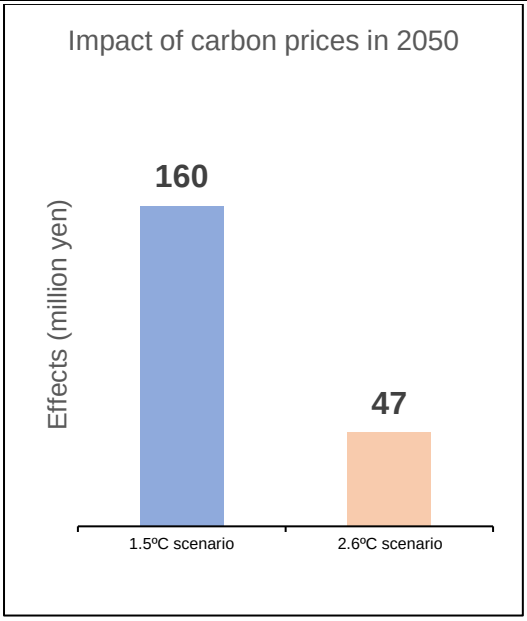
Business subject to analysis, analysis theme

Analysis theme
● Selection of business sites that will receive priority in examination of the impact of increase in frequency of meteorological disasters caused by climate change

(3) Results of scenario analysis

Transition risks: Impact of changes in carbon prices related to the Group

<table>
<tr><td>Description of analysis</td><td>To project the impact of changes in carbon prices on future operating cost, the Group projected future changes in the Group's GHG emissions (Scope1 and Scope 2*) under scenarios where the temperature rise is less than 2ºC and other scenarios and analyzed financial impacts of carbon prices assumed under each scenario.
* Emissions at the Company and its consolidated subsidiaries are calculated (excluding US-based OCM Manufacturing LLC, which became a consolidated subsidiary in October 2021).</td></tr>
<tr><td>Assumptions in analysis</td><td>In the analysis, the Group has determined the amounts of activities (GHG emissions, the volume of renewable energy procured) at the Group in 2030 and 2050 based on the Group's business plans. The Group has estimated the impact of carbon prices, assuming that the carbon price per ton of GHG emissions is 18,340 yen in 2030 and 32,750 yen in 2050 in advanced countries and is 11,790 yen in 2030 and 26,200 yen in 2050 in emerging economies and developing countries that have declared net zero emissions (declared that emissions of CO_2 and other greenhouse gases will become zero). To evaluate the strength of the strategy, the Group has also examined to what extent it can reduce the financial impact by procuring renewable energy power compared with the case where the Group will not take steps to reduce GHG emissions and energy use.
The Group has determined carbon prices and the emission factor for electricity by reference to the IEA's World Energy Outlook 2022 (Net Zero Emissions by 2050 Scenario, Stated Policies Scenario).
External information that is referred to in the analysis:
<table>
<tr><td></td><td>1.5ºC scenario</td><td>2.6ºC scenario</td></tr>
<tr><td>Key reference scenarios*</td><td>IEA WEO 2022 NZE</td><td>IEA WEO 2022 STEPS</td></tr>
<tr><td>Worldview</td><td>● The world where emissions will be reduced in stages for the rise in global average temperature from the pre-industrial level to be 1.5ºC or less.</td><td>● The world where the rise in global average temperature from the pre-industrial level will be around 2.6ºC in 2100 based on the emission pathways according to plans announced by countries.</td></tr>
</table>
* IEA: International Energy Agency
WEO: World Energy Outlook
NZE: Net Zero Emissions by 2050 Scenario
STEPS: Stated Policies Scenario</td></tr>
<tr><td>Analysis results</td><td>The Group has estimated the financial impact of the introduction of carbon prices on operating costs.
The Group has found that if GHG emissions are not reduced as of 2030, the financial impact will be 84 million yen larger under the 1.5ºC scenario than under the 2.6ºC scenario. However, the Group will be able to reduce the financial impact by 46 million yen by reducing GHG emissions chiefly with the use of renewable energy. In this case, the impact of carbon prices will be limited.
The Group has found that if GHG emissions are not reduced as of 2050, the financial impact will be 113 million yen larger under the 1.5ºC scenario than under the 2.6ºC scenario.</td></tr>
</table>

	  (Note) Under the 1.5ºC scenario, the Group assumes that the emission factor for electricity procured at the business sites of the Company will be zero (or less) as of 2050 and the introduction of renewable energy will have no GHG emissions reduction effect.
Strategy	The Group has set a GHG emissions target of "reducing GHG emissions (Scopes 1 and 2 market-based emissions) 50% from the 2022 level by 2030*" and is actively taking steps to reduce emissions, for instance by promoting the introduction of renewable energy. The Group assumes that in the 1.5ºC scenario, the cost for introducing renewable energy will be less than carbon prices for GHG emissions to be reduced due to the introduction of renewable energy. The Group thus expects that if renewable energy is introduced as planned as of 2030, the financial impact will be less than that in the case that renewable energy is not introduced. * In the Medium-Term Management Plan, NEXT 100 - PHASE2.1, the Group set a target of reducing GHG emissions (Scopes 1 and 2 market-based emissions) 50% from the 2020 level by 2030. The target has been changed in 2023, after US-based OCM Manufacturing LLC became a consolidated subsidiary in October 2021.

Physical risks: Selection of business sites that will receive priority in an examination of the impact of increasing meteorological disasters caused by climate change

<table>
<tr><td>Description of analysis</td><td>To project the impact that increasing meteorological disasters caused by climate change will have on the Group's business, the Group has examined the possibility of being affected at its 12 business sites (7 sites in Japan and 5 sites overseas) to select business sites that it will give priority to in examination of the impact of physical risks.</td></tr>
<tr><td>Assumptions in analysis</td><td>In the analysis, the Group assessed inundation hazards caused by river flooding and storm surges and drought hazards under the RCP 2.6 and RCP 8.5 climate change scenarios by reference to public documents and documents provided by experts, etc. and assigned grades for the period leading up to the middle of the 21st century.</td></tr>
<tr><td>Analysis results</td><td>With regard to flooding risk, of domestic business sites, four sites are graded as requiring monitoring (Grade B or above). Of the four sites, one site is graded as having a large hazard (Grade A). There are no changes in grade due to climate change in the period leading up to the middle of the 21st century. As for storm surge risk and drought risk, no business sites are graded as requiring monitoring (Grade B or above).
Of overseas business sites, there are no sites graded as flooding risk requiring monitoring (Grade B or above), and there are no changes in grade due to climate change in the future. As for storm surge risk, all business sites are graded as having a very low inundation hazard potential due to storm surges (Grade E). There are no changes in grade due to climate change in the future. With regard to drought risk, of five business sites, two sites were graded as risk requiring monitoring (Grade B or above) as of 2015. No business sites were graded as having a large hazard (Grade A). At Water Gremlin Aquila Company S.p.A in Italy, the Group has identified a trend toward drought in the future under the RCP 8.5 scenario.
Results of physical risk assessments (12 domestic and overseas business sites)
Grade B or above: Risk requires monitoring. It is desirable to conduct a more detailed risk assessment.
<table>
<tr><td rowspan="3">Flood risk</td><td colspan="3">Number of business sites that are graded as risk requiring monitoring (Grade B or above)</td></tr>
<tr><td>Present</td><td colspan="2">Middle of 21st century</td></tr>
<tr><td>-</td><td>RCP2.6</td><td>RCP8.5</td></tr>
<tr><td>Domestic business sites (Of 7 sites)</td><td>4</td><td>4</td><td>4</td></tr>
<tr><td>Overseas business sites (Of 5 sites)</td><td>0</td><td>0</td><td>0</td></tr>
</table>
<table>
<tr><td rowspan="3">Storm surge risk</td><td colspan="3">Number of business sites that are graded as risk requiring monitoring (Grade B or above)</td></tr>
<tr><td>Present</td><td colspan="2">Middle of 21st century</td></tr>
<tr><td>-</td><td>RCP2.6</td><td>RCP8.5</td></tr>
<tr><td>Domestic business sites (Of 7 sites)</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Overseas business sites (Of 5 sites)</td><td>0</td><td>0</td><td>0</td></tr>
</table>
<table>
<tr><td rowspan="3">Drought risk</td><td colspan="3">Number of business sites that are graded as risk requiring monitoring (Grade B or above)</td></tr>
<tr><td>Present</td><td colspan="2">Middle of 21st century</td></tr>
<tr><td>-</td><td>RCP2.6</td><td>RCP8.5</td></tr>
<tr><td>Domestic business sites (Of 7 sites)</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Overseas business sites (Of 5 sites)</td><td>2</td><td>2</td><td>2</td></tr>
</table>
</td></tr>
</table>

Strategy	The Group is planning to conduct risk assessments at the business sites graded as flooding risk requiring monitoring at the scenario analysis and will take inundation countermeasures and develop BCPs according to the results of risk assessments. The Group will monitor drought risk at Water Gremlin Aquila Company S.p.A in Italy and consider taking appropriate action.

Metrics and Targets

■ GHG emissions targets

The Group has set a GHG emissions target of "reducing GHG emissions (Scopes 1 and 2 market-based emissions) 50% from the 2022 level by 2030*." The Group is committed to achieving a GHG emissions reduction target (SBT) that is scientifically consistent with the target set out in the Paris Agreement—limiting the global temperature increase to 1.5ºC above pre-industrial levels—and will take steps to reduce also Scope 3 emissions.

Actual GHG emissions in 2022 are as stated below. The Group will take steps steadily to reduce GHG emissions and achieve the target chiefly by promoting use of renewable energy.

* In the Medium-Term Management Plan, NEXT 100 - PHASE2.1, the Group set a target of reducing GHG emissions (Scopes 1 and 2 market-based emissions) 50% from the 2020 level by 2030. The target has been changed in 2023, after US-based OCM Manufacturing LLC became a consolidated subsidiary in October 2021.

GHG emissions results and targets

Metric	2022 results	2030 target
GHG emissions* (Total scopes 1 and 2 market-based emissions)	20,204 Scope 1: 6,661 Scope 2: 13,543	50% reduction compared to 2022

* Emissions at the Company and its consolidated subsidiaries are calculated.

■ Actual GHG emissions (in detail)

GHG emissions	Result [t-CO2e]
Scope 1 (2022)	
Scope 1 emissions	6,661
Scope 2 (2022)	
Scope 2 location-based emissions	13,280
Scope 2 market-based emissions	13,543
Scope 3 (2021) (Note) Emissions in 2022 are being calculated.	
Category 1: Purchased products and services	255,215
Category 2: Capital goods	6,210
Category 3: Energy-related activities	2,804
Category 4: Transportation and distribution (upstream)	20,949
Category 5: Waste generated in operation	658
Category 6: Employee business trips	322
Category 7: Employee commuting	504
Category 8: Leased assets (upstream)	—
Category 9: Transportation and distribution (downstream)	3,362
Category 10: Processing of sold products	—
Category 11: Use of sold products	13
Category 12: End-of-life treatment of sold products	10,336
Category 13: Leased assets (downstream)	—
Category 14: Franchises	—
Category 15: Investments	—

* Emissions are calculated based on GHG Protocol, international calculation and disclosure standards.
* Emissions at the Company and its consolidated subsidiaries are calculated. (Scope 3 emissions do not include emissions at US-based OCM Manufacturing LLC, which become a consolidated subsidiary in October 2021.)
* Scope 1 emissions are calculated using emission factors of the list of calculation methods and emission factors in the GHG calculation, reporting, disclosure systems under the Enforcement Order of the Act on Promotion of Global Warming Countermeasures, US EPA, “Emission Factors for Greenhouse Gas Inventories (Last Modified: 1 April 2022),” and The Greenhouse Gas Protocol Initiative, “GHG emissions from stationary combustion Ver.4.1.”
* Scope 2 location-based emissions at domestic business sites are calculated using the “Alternative value” of “Emission factor by electric utility operator (for Calculating Greenhouse Gas Emissions of Specified Emitters)” in the Mandatory Greenhouse Gas Accounting and Reporting System based on the Act on Promotion of Global Warming Countermeasures. Scope 2 location-based emissions at business sites in the US are calculated using emission factors in subregions in “US EPA, eGRID2021 (created Jan 2023)” and those at the other overseas sites are calculated based on figures of each country in “International Energy Agency, “Emission Factors 2022” (Sep 2022)”.
* Scope 2 market-based emissions at domestic business sites are calculated using adjusted emission factors of individual electric utilities, and Scope 2 market-based emissions at overseas business sites are calculated using data of electric power companies supplying electricity to the business sites, if they are available, and location-based data if data from electric power companies are not available.
* Scope 3 emissions are calculated using published databases, including the Database of Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc. by Organizations Throughout the Supply Chain (Ver. 3.2) of the Ministry of the Environment, the IDEA database v2 of the National Institute of Advanced Industrial Science and Technology, and the emission factors of individual electric utilities (for calculation of GHG emissions of specified emitters) under the Enforcement Order of the Act on Promotion of Global Warming Countermeasures.
* Scope 3 categories 8, 10, 13, 14, and 15 are not included because the Group does not conduct any applicable activities.