

**OUR APPROACH**

# Climate Change Responses

**Disclosure based on TCFD recommendations**

**Attitude**

For many years, the Meiden Group has been aware of the major problem of climate change, and has worked to solve this problem through business. With regard to TCFD\*, we endorsed the TCFD recommendations in June 2019, we began considering risks and opportunities according to the TCFD framework in 2020, and we are promoting the incorporation of this in our strategies.

As society places more emphasis on the issue of climate change, in Medium-term Management Plan 2024, which was released in FY2021, we pledged to “promote sustainability management,” and we aim to accelerate promotion of management and development of businesses to realize a carbon-free society.



\* TCFD: Task Force on Climate-related Financial Disclosure established by the Financial Stability Board (FSB)

**Governance/risk management**

**Governance**

The Sustainability Management Strategy Committee and the Sustainability Management Promotion Committee handle all general matters involving sustainability and these two committees explore potential strategies to enact for decarbonization. The manager in charge of promoting sustainability and the Sustainability Management Promotion Division both report on the content of these meetings twice annually to the Board of Directors and the Executive Officers' Meeting. Alongside these efforts and as a way of managing the promotion of environmental activities within the Group, the Meiden Group Environmental Committee, which is chaired by a production manager, meets quarterly to uncover issues within the Company, set environmental goals, devise action plans, and discuss emergency responses in order to promote and monitor the deployment of concrete policies for environmental management.

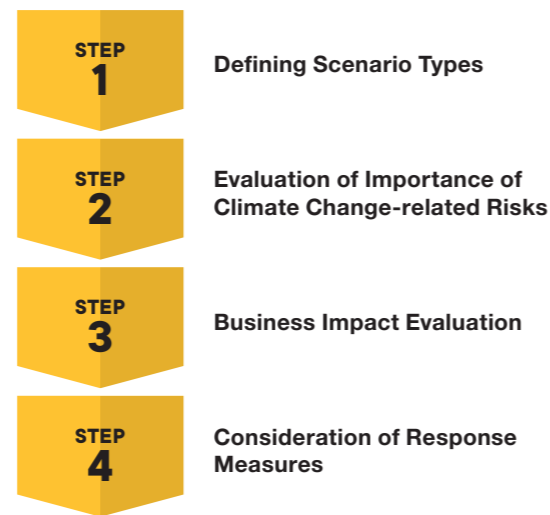
**Risk Management**

To manage sustainability-related risks, the Sustainability Management Promotion Division, which is charged with promoting sustainability management, operates centrally with relevant departments to extract risks. The details of those risks are incorporated into all the risks managed by the Governance Headquarters, which simultaneously manages a variety of risks, including those related to climate change.

**Strategy**

**Analysis of Climate Change Scenarios**

The Sustainability Management Promotion Division analyzes climate change scenarios in conjunction with relevant departments. The scenario analysis examination process is divided into four parts, with analysis and evaluations conducted annually. At the same time, major factors that could impact business are identified, and identified risks, opportunities, and evaluations are reflected in our business strategy.



**STEP 1 Defining Scenario Types**

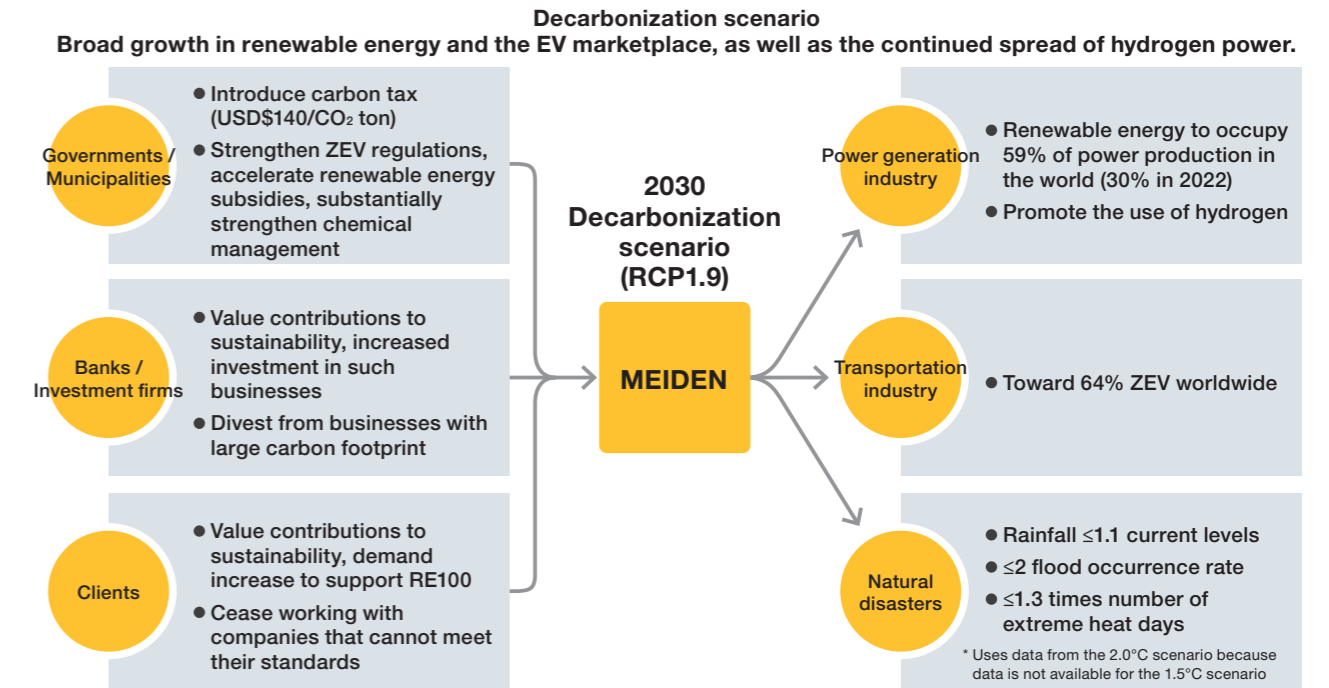
As recommended by TCFD, we identified scenarios at multiple levels of warming, including a scenario of less than 2°C, and conducted analysis accordingly. Based on the two scenarios of decarbonization (RCP1.9) and global warming (RCP4.5 and RCP8.5), we have compiled and evaluated global outlooks for 2030 to accommodate each scenario using management frameworks such as five forces analysis, based on international published data from the IEA, IPCC, etc., as well as numerical data published by Japanese government institutions, etc.

	Temperature range	Relevant scenario	Provider
Decarbonization scenario	Less than 1.5°C	NZE2050	IEA
		RCP1.9	IPCC
Global warming scenario	2.5 to 4.0°C	STEPS	IEA
		RCP4.5	IPCC
		RCP8.5	IPCC

For more information on the Global Warming Scenario, see "Disclosure based on TCFD recommendations" on our website. <https://meidensha.disclosure.site/en/themes/139>

**Analysis of Climate Change Scenarios**

Of the selected scenarios, the following is the outlook under the Decarbonization Scenario.



**STEP 2 Evaluation of Importance of Climate Change-related Risks**

We have set out factors for climate change risks and opportunities according to the outlook of each scenario, giving reference to the risks and opportunities in the TCFD recommendations.

Factors for Risks and Opportunities	Societal Scenario	Opportunities and Risks for Meiden	Relevant Businesses
● Opportunities to reduce GHG emissions ● Increased government subsidies	Decarbonization of the transport industry	Expanded EV-related business	EV business/Battery storage-related
● Increased government subsidies ● Accelerated technological developments ● Transition to a decentralized society	Increased ratio of renewable energy	Expanded renewable energy business	Wind/Hydroelectric/Photovoltaic storage/Solar generation/Battery storage-related /Hydrogen-related
● Increased regulations to reduce GHG emissions ● Electric companies shift toward decarbonization	Restrictions on chemical substances such as SF <sub>6</sub>	Expanded Power T&D Business	Zero SF <sub>6</sub> products/Environmentally friendly products
● Changing stakeholder mindset	Increased customer demand for being carbon-free	Increased demand for environmentally friendly products and services	Environmentally friendly products and services (including green products)
● Opportunities to reduce GHG emissions ● Tightening of legal restrictions	Introduction of a carbon tax	Increased procurement and manufacturing costs	All companies
● Opportunities to reduce GHG emissions	Rising prices from growing demand for EV and renewable energy components	Increased procurement and manufacturing costs	EV business/Renewable energy business
● Increased frequency of extreme weather events	More water-related disasters	Suspension of operation/Collapse of supply chain Increased costs to respond to water-related disasters	Production sites
● Opportunities to reduce GHG emissions ● Changing stakeholder mindset	Increased pressure on environmentally burdensome businesses	Reduced sales in relevant businesses	Diesel/Gas engine generators Ceramic membrane business
● Rising average temperatures	Worsening working environments	Increased personnel expenses at sites	Manufacturing/Maintenance/Construction service business units
● Increased proportion of renewable energy	Increased cost of industrial electricity	Increased power procurement costs	All companies

OUR APPROACH

STEP 3

Business Impact Evaluation

We are evaluating business impact through discussions with relevant parties within the Company, such as the Corporate Policy Planning Group, the Accounting & Financing Group, the Corporate Governance Management Group, and business units, based on the scenarios and outlooks set out in Step 1 and the opportunities and risks set out in Step 2.

In the course of this, we screened matters that have a particularly large impact on businesses by focusing on the two axes of "impact on operating income" and "likelihood of occurrence in an event" in FY2030, and conducted detailed analysis of these matters. We assessed pre-countermeasure outcomes based on the rate of market growth in each scenario for each large-impact item. These

were quantitatively calculated using partial assumptions, and items with unachievable results were organized qualitatively.

Evaluation axes for selection of risks and opportunities (2030)

Impact on operating income (estimate)	Very large	±10 billion yen or more	Medium	±0.1 – 1 billion yen
	Large	±1 billion yen or more	Small	±less than 0.1 billion yen
likelihood of occurrence in an event in 2030	Large	High probability of occurrence		
	Medium	Occurrence is possible, but cannot be predicted with confidence		
	Small	Only occur in the scenarios		

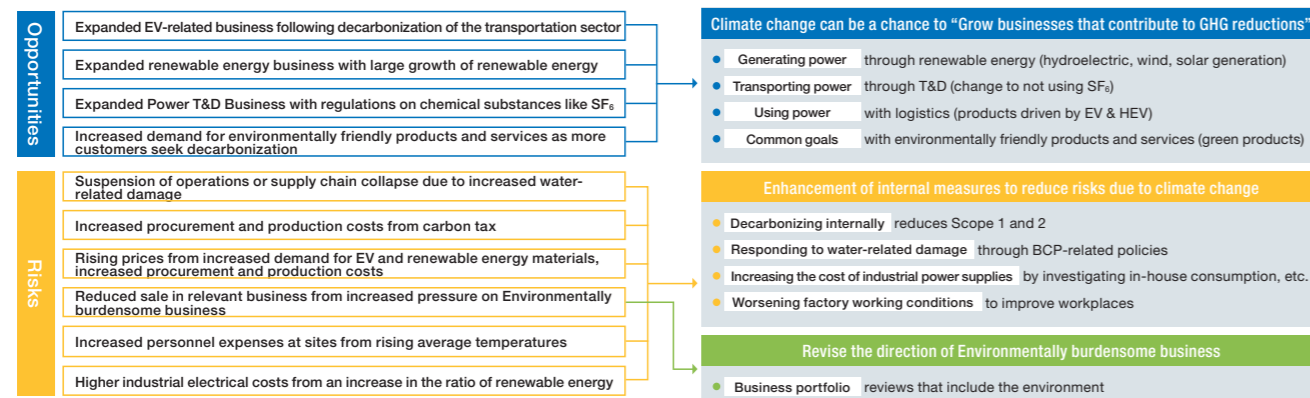
\* The following values were calculated with a focus on the market growth rate and do not represent a designated target value for the Company.

	Opportunities and risks for our Company	Relevant Businesses	Calculation formula	Impact on FY2030 operating income	
				Decarbonization scenario (RCP1.9)	Global warming scenario (RCP4.5, 8.5)
Decarbonization of the transport industry	Expanded EV-related business	EV business/Buttery storage-related	Recent average sales × ZEV stock growth ratio	Large	Medium
Increased ratio of renewable energy	Expanded renewable energy business	Wind/Hydroelectric/Photovoltaic storage/Solar generation/Battery storage-related/Hydrogen-related	Recent sales × growth rate of domestic renewable energy	Small	Small
Restrictions on chemical substances such as SF <sub>6</sub>	Expanded Power T&D business	Zero SF <sub>6</sub> products/Environmentally friendly products	Recent sales of relevant products × VCB market growth rate	Medium	Medium
Increased customer demand for being carbon-free	Increased demand for environmentally friendly products and services	Environmentally friendly products and services (including green products)	* Cannot calculate at this time because green product standards are being revised	-	-
Introduction of a carbon tax	Increased procurement and manufacturing costs	All companies	2030 Scope 1, 2 emissions × carbon tax 2030 Scope 3 Category 1 emissions × carbon tax	9.6 billion	N/A
Rising prices from growing demand for EV and renewable energy components	Increased procurement and manufacturing costs	EV business/Renewable energy business	Cost of transitioning relevant business × rate of cost increases	Medium	Small
More water-related disasters	Suspension of operation/ Collapse of supply chain Increased costs to respond to water-related disasters	Production sites	Assumed cost of each incident in 2030 using Ministry tools × occurrence rate in each scenario, etc.	Large	Large
Increased pressure on environmentally burdensome businesses	Reduced sales in relevant businesses	Diesel/Gas engine generators Ceramic membrane business	2030 business sales × state of each scenario	Medium	N/A
Worsening working environments	Increased personnel expenses at sites	Manufacturing/Maintenance/ Construction service business units	Number of site personnel in 2030 × medical and health-care costs	Small	Small
Increased cost of industrial electricity	Increased power procurement costs	All companies	Power usage in 2030 × rising cost of industrial power	Medium	Small

STEP 4

Consideration of Response Measures

We considered development of strategies to grasp opportunities and measures to mitigate risks according to the situation of the Company, based on the outcomes calculated in Step 3.



Metrics and Targets

We see changes due to climate change as business opportunities, and are implementing strategies to mitigate risks.

From a business perspective, we will particularly contribute to the creation of a carbon-free society through further expansion of the EV and Renewable Energy businesses. We also released the Second Meiden

Environmental Vision as our environmental goals in FY2021, and we have disclosed 2030 GHG reduction targets for scopes 1, 2, and 3 in order to reduce internal risks. These goals have received SBT recognition. We will work with our suppliers to achieve our targets. In addition, we pledged to reach RE100 by 2040 and carbon neutrality by 2050, in November 2021, as our medium- to long-term targets.

Second Meiden Environmental Vision Targets (Targets and results compared to FY2019 levels)

		FY2023		FY2024	FY2030
		Plan	Actual	Plan	Plan
Emissions from business activities (Scope 1+2)	Japan	8% reduction	17% reduction	10% reduction	-
	Overseas	3% reduction	8% increase	4% reduction	-
	Total	5% reduction	11% reduction	6% reduction	30% reduction
Emissions from product use (Scope 3, Category 11)		-	7% reduction	6% reduction	15% reduction

\* Second Meiden Environmental Vision including FY2030 targets has received SBT (science based targets) certification.



\* SBT Initiative: An international initiative by the United Nations Global Compact (UNGC), the Worldwide Fund for Nature (WWF), the CDP, and the World Resources Institute (WRI).

Future Path

Although we have identified the growth opportunities and risks facing the Meiden Group through analysis of scenarios based on the TCFD recommendations, in most instances, calculation of impact is merely a rough estimate, and further precision is needed. Furthermore, we are promoting response to climate-related metric categories across multiple industries in the TCFD

recommendations, which require new disclosure. Along with this, we are considering establishing ESG (environment, social, and governance) metrics, incorporating them in our standards for calculating officers' remuneration, and further strengthening governance, in order to increase the effectiveness of sustainability management promotion.

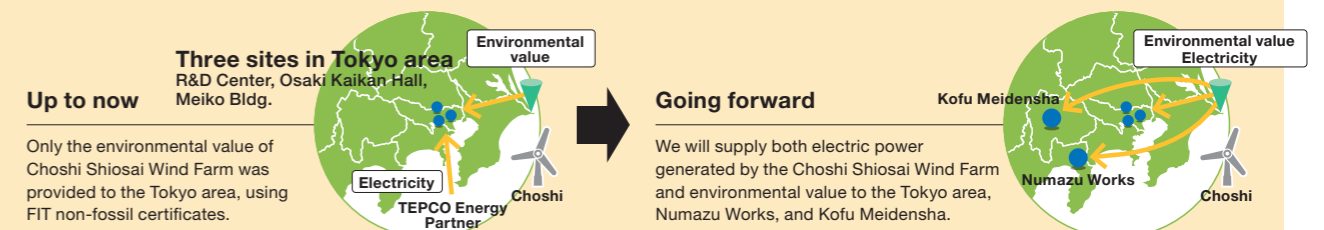
TOPICS

Offsite Physical Corporate PPA Signed, Using Wind Farm Operated by Meiden Group

On April 1, 2024, Meidensha, M WINDS CO., LTD., and TEPCO Energy Partner, Incorporated ("TEPCO EP") entered into an offsite physical corporate PPA ("the PPA"). This arrangement uses electric power from renewable energy ("the renewable power") from Choshi Shiosai Wind Farm ("the power plant") owned and operated by M WINDS, a wholly owned subsidiary of Meidensha.

Concerning the renewable power generated with the plant, the previous arrangement used FIT non-fossil certificates\*2 with tracking information by TEPCO EP to provide only environmental value to three Tokyo area sites of the Meiden Group (R&D Center, Osaki Kaikan Hall, and Meiko Bldg.) using the Green Basic Plan.\*3

Now that the PPA has been concluded, both the power generated at the plant and the environmental value will be provided, in addition to the Green Basic Plan that TEPCO EP was already offering. With the addition of Meidensha's Numazu Works and KOFU MEIDENSHA ELECTRIC MFG. CO., LTD., a total of five locations will be supplied. Part of the power used at the five Meiden Group locations will be the renewable power from this power plant.



\*1 Renewable power refers to electricity generated from renewable energy sources combined with non-fossil certificates derived from renewable energy sources. Therefore, the electricity used by the consumer can be regarded as renewable energy.  
 \*2 The Ministry of Economy, Trade and Industry issues certificates that certify the environmental value of power such as renewable energy generated without emitting CO<sub>2</sub>. Tracking information (information indicating the type of power source and location) for the power plant can be added to the certificate.  
 \*3 The Green Basic Plan is effectively a renewable power option offered by TEPCO EP. It combines the average power from all power sources with FIT non-fossil certificates (with tracking information) and non-FIT non-fossil certificates with renewable energy designation (with power source attribute information).