Fuji Electric
Innovating Energy Technology

Strategy

Overview of Strategy

■ Core Approach

- **Integrated Evaluation**: We view climate change (TCFD) and natural capital (TNFD) as mutually influencing, "interlinked risks and opportunities," and evaluate them in an integrated manner.
- **Identifying Priorities**: Based on scenario analysis (TCFD) and the LEAP approach (TNFD), we identify priority issues that directly impact corporate management.

■ Strategy Formulation Process

1. Identification of Risks and Opportunities (P14–22)

- **Climate Change**: Evaluate impacts under 1.5°C and 4°C scenarios.
- **Natural Capital**: Use the LEAP approach to evaluate dependencies and impacts on natural capital regarding "our own business sites" and the "upstream value chain (mineral extraction)".

2. Materiality Assessment and Visualization of Financial Impacts (P23–27)

- **Integrated Risk Matrix**: Organize and synthesize risks and opportunities related to climate change and natural capital framework as a cohesive whole.
- **Actionable Solutions**: Present "concrete response measures" bundled alongside each identified issue.
- **Quantifying Financial Impacts**: For risks deemed highly material, quantify the future financial impacts, including projected investment amounts and expenses.

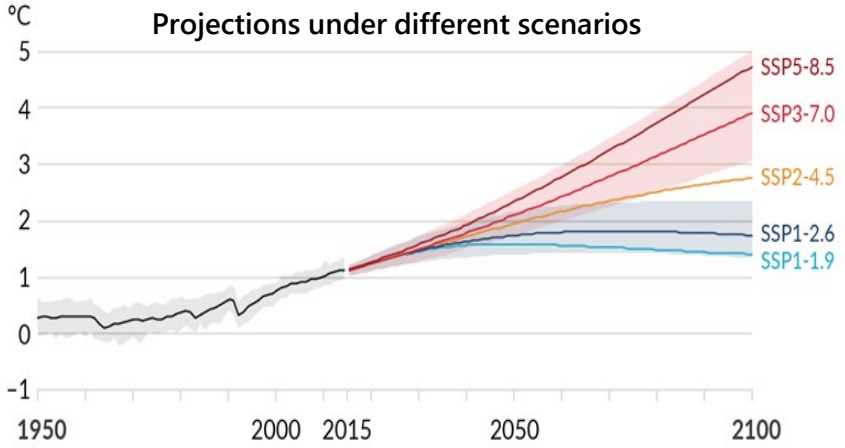
Evaluation Process (Scenario Analysis)

Regarding climate change, we conducted impact assessments targeting the years 2030 and 2050 based on two types of scenarios.

Scenarios Adopted	Overview	Sources / References
4℃ Scenario	• A world where global decarbonization fails and global warming progresses under a business-as-usual trajectory . • A scenario where transition risks from new regulations are limited, but physical risks*1 from increasingly severe natural disasters are maximized.	• IPCC Fifth Assessment Report (AR5) • IPCC Sixth Assessment Report (AR6)
1.5℃ Scenario	• A world racing toward decarbonization at an intense pace . • A scenario where transition risks*2 associated with rapid social transformation materialize, while physical risks are suppressed.	• IEA Net Zero Emissions by 2050 Scenario (NZE) • IPCC Special Report on Global Warming of 1.5°C

*1 Physical Risks: Direct damage to business sites and supply chains caused by natural disasters such as typhoons and floods.
*2 Transition Risks: Impacts such as tighter regulations and increased costs associated with the shift toward a decarbonized society.

Projections under different scenarios



Source: IPCC AR6 SPM.1.1, SPM.4

4℃ Scenario
SSP5-8.5：A high GHG emissions scenario where CO_2 emissions approximately double from current levels by 2050.

1.5℃ Scenario
SSP1-2.6：A low GHG emissions scenario where net CO_2 emissions reach net-zero after 2050 and become net-negative by 2100.

IEA: International Energy Agency
IPCC: Intergovernmental Panel on Climate Change

Impacts on Fuji Electric by Risk Category

We evaluated the changes in the external environment, as well as the resulting risks and opportunities for Fuji Electric, under each climate scenario.

Risks Opportunities

Scenario	Category	External environmental changes	Risks/Opportunities
4℃ Scenario	Acute Risk	Increased frequency and severity of extreme weather events	Business suspension at our own sites and key suppliers due to natural disasters (flooding), causing supply chain disruptions.
			Increased demand for comprehensive disaster prevention solutions.
	Chronic Risk	Changes in precipitation patterns / Long-term temperature rise	Difficulty in procuring water resources at manufacturing sites due to ecosystem degradation and droughts.
1.5℃ Scenario	Policy and Legal	Tighter carbon pricing (e.g., carbon taxes) / Stricter GHG emission regulations	Increased energy costs and the passthrough of raw material procurement costs by suppliers due to carbon taxes and stricter emission regulations.
	Technology	Proliferation of CO_2 storage and utilization technologies / Advances in resource recycling technologies	Market share expansion for circular economy-compliant products driven by advances in resource recycling technologies.
	Market and Reputation	Stronger customer demands for decarbonization and higher renewable energy ratios	Lower reputation and increased loss of orders due to delayed response to decarbonization.
		Increased demand for products contributing to decarbonization	Increased GHG emissions from power consumption aligned with production growth.
			Expanded adoption of energy-saving and renewable energy-related products by customers.
		Proliferation of decentralized power, self-generation, and EVs / Progress in electrification of transport	Tight supply of decarbonization-related raw materials such as copper and rare earths.
			Accelerated shift toward next-generation infrastructure.

Evaluation Process (LEAP Analysis)

Regarding natural capital, we are advancing analysis based on the "LEAP approach" recommended by the TNFD to systematically understand our risks and opportunities. In Fiscal 2025, we designated our own factories across our four core businesses and the upstream value chain as priority areas, identifying the dependencies and impacts that our business activities pose to nature.

Evaluation Process Aligned with the LEAP Approach

	Own Manufacturing	Upstream Value Chain
Locate Interfaces with nature	Map the location information of all 44 manufacturing sites globally and evaluate the surrounding environmental conditions (protected areas, water risks, ecosystem integrity, etc.).	Evaluate the environmental conditions surrounding the extraction sites of iron and copper, which represent critical raw materials with large procurement volumes.
Evaluate Dependencies and impacts	Identify and assess the scale of nature-related dependencies and impacts within our four core businesses.	Assess the scale of nature-related dependencies and impacts targeting the extraction and manufacturing processes of these critical materials.
Assess Risks and opportunities	Integrate the results of our climate change scenario analysis with the nature-related dependencies and impacts identified across both our own manufacturing and the value chain. Through this, we identify risks and opportunities spanning the entire natural environment—including climate-related aspects—and evaluate them in terms of potential financial impacts and likelihood of materialization.	
Prepare Response and actions	Formulate and execute concrete response measures against the identified material risks and opportunities.	

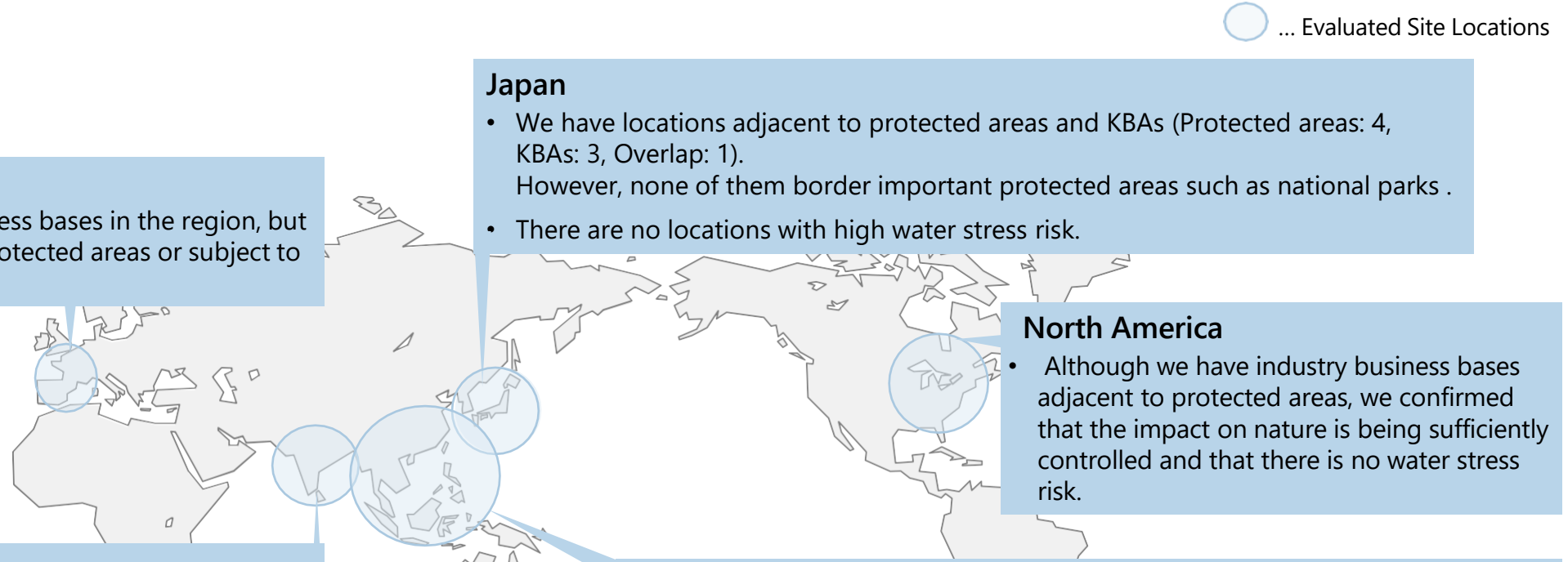
Locate (Interfaces with nature)

In accordance with the five criteria recommended by the TNFD—including physical water risk, conservation importance, and ecosystem integrity—we evaluated our 44 manufacturing sites globally using data obtained from external tools and other sources.

Criteria	Evaluation Results	External Tools & Processes Used
Physical Water Risk	Overseas locations in areas with high water stress and drought risk were identified. However, the water withdrawal at these bases is not high.	Evaluated using **Aqueduct** data provided by the World Resources Institute (WRI).
Conservation Importance & Ecosystem Integrity, etc.	• The number of bases in areas of high conservation priority or ecosystem integrity is small. • However, as some bases were confirmed to be adjacent to protected areas or KBAs established by the relevant country or region, we will make efforts to reduce the impact on nature in those regions. • In addition, there are no bases in close proximity to areas managed by Indigenous peoples and local communities.	• **Conservation Priority:** Assessed proximity to high-priority areas (protected areas and KBAs) using **IBAT**. • **Ecosystem Integrity:** Evaluated using the **Biodiversity Intactness Index**. • **Rapid Degradation of Ecosystem Integrity:** Assessed via "Pressures on Biodiversity" (an index showing impact on nature) using the **WWF Biodiversity Risk Filter**. • **Importance of Ecosystem Services:** Assessed proximity to indigenous peoples and local communities using **Global Forest Watch**.

Evaluation Results: Own Manufacturing Sites

We evaluated "Physical Water Risk" and "Conservation Importance" based on the location information of each site.



Japan

- We have locations adjacent to protected areas and KBAs (Protected areas: 4, KBAs: 3, Overlap: 1).
  However, none of them border important protected areas such as national parks .
- There are no locations with high water stress risk.

Europe

- We have industry business bases in the region, but none are adjacent to protected areas or subject to water stress risk.

North America

- Although we have industry business bases adjacent to protected areas, we confirmed that the impact on nature is being sufficiently controlled and that there is no water stress risk.

South Asia

- We have industry business bases in regions with high water stress risk. However, the water withdrawal is not high.

Southeast Asia & East Asia

- We have energy and food distribution business bases in regions with high water stress risk (China, Thailand).
  However, the water withdrawal is not high.
- Our semiconductor business bases, which have high water withdrawal, are all located in areas with low water stress risk (certain regions in Malaysia, the Philippines, etc.).

Australia

- We have energy business bases in regions with high water stress risk. However, the water withdrawal is not high.

Tools Used: IBAT (Proximity to Protected Areas), Aqueduct (Water Stress)

Evaluate (Dependencies and impacts)

We identified and assessed the scale of nature-related dependencies and impacts in our "Electrical Equipment Manufacturing" business. Evaluations were conducted using the TNFD-recommended tool "ENCORE," and the results were organized into a heatmap. Based on these findings, we conducted further assessments reflecting our specific business characteristics.

VH ... Very High
H ..... High
M ..... Medium
☐ ..... Low / Very Low / No Data / NA

		Dependencies														Impacts											
		Supply services		Adjustment and maintenance services												Land use			Resource extraction			Climate change	Pollution			Disturbance	
	Industrial Processes defined by TNFD	Biomass resources	Water resource supply	Global climate regulation	Precipitation regulation	Air purification	Soil quality	Soil & sediment retention	Solid waste breakdown	Water purification	Water flow regulation	Flood mitigation	Storm mitigation	Noise attenuation	Habitat conservation	Land realm	Freshwater realm	Ocean realm	Water use	Other biological resource	Other non-biological resources	GHG emissions	Air pollution	Harmful substances	Solid waste	Invasive species	Disturbance
Our Business Areas	Manufacture of power-related electrical equipment		M		M					M	M	M	M											H			M
	Manufacture of industrial electrical equipment		M		M				M	M	M	M	M						M			M	H	H			M
	Manufacture of electronic components and semiconductors		M							M	M	M	M											H			M
	Manufacture of food-related electrical equipment		M							M	M	M	M						M					M	M			M
Key Findings in Our Business Areas		**High Dependency:** High level of dependency on **water resource supply/water purification**, as well as **flood and storm mitigation**.														**High Impact:** High impact on **pollution** (air pollution and harmful substances), **water use**, and **GHG emissions**.											

Assessments Reflecting Our Business Characteristics

- **Water Resource Supply & Water Purification:**

Although semiconductor manufacturing sites and other facilities require large water withdrawals and have a high dependency on water resources, the local water stress in these areas is low. Therefore, we evaluate the environmental risk regarding supply as "limited."

- **Flood & Storm Mitigation:**

Following risk assessments conducted by an external organization across all 44 manufacturing sites globally, six sites (3 in Japan, 3 overseas) were identified as having flood risks. In response, we have completed physical engineered measures—such as installing flood barrier panels at these target sites and other necessary locations—to minimize potential damage.

- **Pollution, Water Use, & GHG Emissions:**

We have established a rigorous management framework, including installing chemical wastewater treatment facilities and regularly conducting emergency response drills; thus, our impact on aquatic environments is "limited" (no spill accidents exceeding regulatory standards have occurred). Furthermore, in fiscal 2025, we made steady progress in reducing our impacts on air and water quality: VOC emissions decreased by 56% and PRTR-listed substances by 62% compared to fiscal 2019 levels, achieving significant reductions. GHG emissions are also decreasing steadily toward achieving our Fiscal 2030 Goals set under the Environmental Vision 2050.

Locate（Discover the interface with nature）

Regarding the upstream value chain, we examined our dependencies and impacts on natural capital associated with the mineral resources we utilize. The results revealed concerns regarding the impacts of land-use change, water use, and soil pollution across most mineral resources. Therefore, among the raw materials procured by Fuji Electric, we decided to evaluate the risks and opportunities during the extraction and manufacturing phases of iron and copper, which represent materials with large procurement volumes by weight.

Procurement Volumes of Major Materials (FY 2025)

	Purchase Volume (kt)	Percentage (%)
Iron	51	75%
Copper	11	16%
Other Non-ferrous Metals	6	9%
Total	68	100%

Major Impacts of Mineral Resources

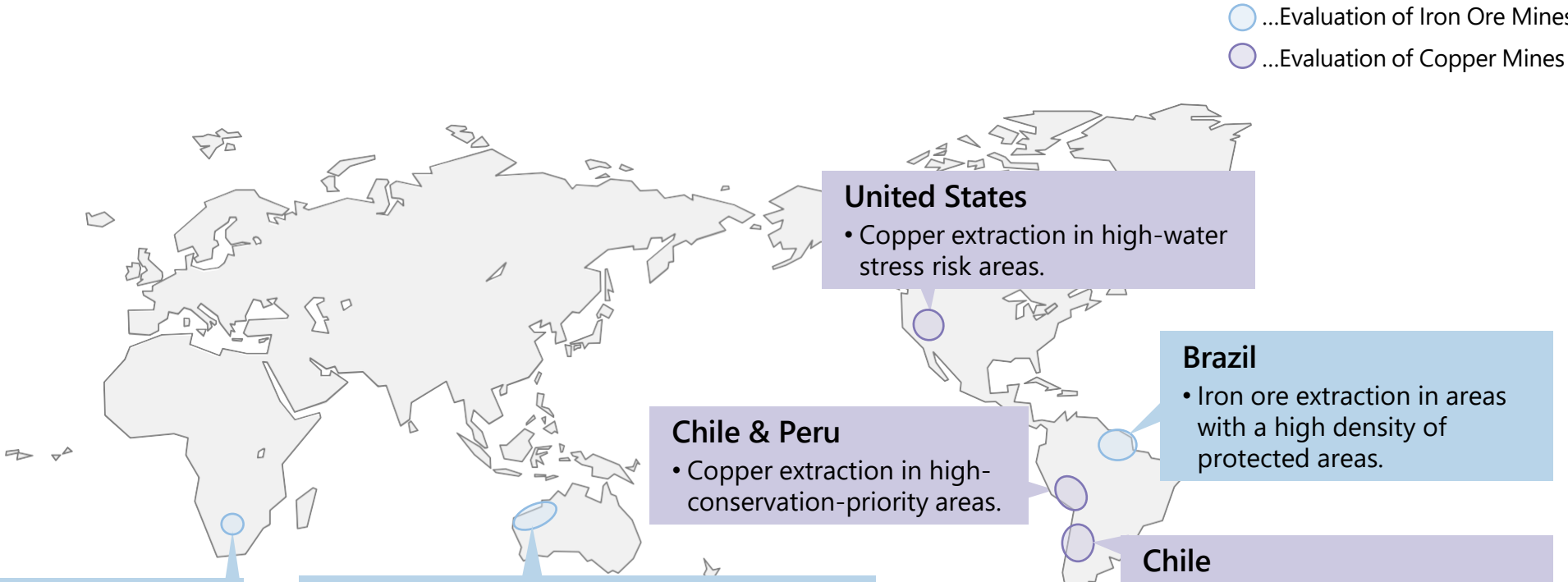
■ Major impacts

Mineral Resources	Land-use change	Water use	Other resource use	Climate change	Soil pollution	Solid waste	Water pollution	Freshwater pollution	Air pollution	Marine pollution
Coal	■	■	■	■	■			■		
Iron ore	■	■	■	■		■				
Copper	■	■	■	■	■					
Bauxite Aluminum	■	■	■	■	■	■	■			
Lead	■				■		■			
Nickel	■									
Silver	■	■	■	■	■					
Gold	■	■	■	■	■					
Zinc	■							■		
Lithium	■	■	■		■		■		■	
Manganese	■				■			■		

Source: SBTN “High Impact Commodity List” https://sciencebasedtargetsnetwork.org/resources/

Evaluation Results: Extraction Sites

We evaluated "Physical Water Risk" and "Conservation Importance" for iron ore and copper mines based on their location information.



Tools Used: IBAT (Proximity to Protected Areas), Aqueduct (Water Stress)

Evaluate (Diagnose dependencies and impacts)

We identified and assessed the scale of nature-related dependencies and impacts during the manufacturing and extraction phases of iron and copper (non-ferrous metals). Like our own manufacturing sites, evaluations were conducted using the TNFD-recommended tool "ENCORE," and the results were organized into a heatmap.

VH ... Very High
H ..... High
M ..... Medium
☐ ..... Low / Very Low / No Data / NA

Industrial Processes defined by TNFD	Dependencies														Impacts										
	Supply services		Adjustment and maintenance services												Land use			Resource extraction			Climate change	Pollution			Disturbance	
	Biomass resources	Water resource supply	Global climate regulation	Precipitation regulation	Air purification	Soil quality	Soil & sediment retention	Solid waste breakdown	Water purification	Water flow regulation	Flood mitigation	Storm mitigation	Noise attenuation	Habitat conservation	Land realm	Freshwater realm	Ocean realm	Water use	Other biological resource	Other non-biological resources	GHG emissions	Air pollution	Harmful substances	Solid waste	Invasive species	Disturbance
Manufacture of iron		H		M					M	H	M	M						M			H	H	VH	M		VH
Extraction of iron ore		H	H	VH			M		VH	H	H	M		M	M	H	H			H	M	M	H	VH		H
Manufacture of non-ferrous metals		M		M	M				M	M	M	M									M	H	VH	M		VH
Extraction of non-ferrous metals		H	H	VH			M		VH	H	H	M		M	M	VH	VH	M		H	M	H	VH	H		VH
Key Findings	• At iron ore and copper extraction sites (mainly in Australia, North America, and South America), there is a high dependency on **water resource supply** via rainfall and natural processes, as well as **water purification**.														• As a commonality for both iron and copper, impacts related to **harmful substances**, **pollution**, and **resources** are significant. Copper extraction was evaluated to have a very high impact on **freshwater** and **ocean** environments. • **GHG emissions** from the iron manufacturing process were evaluated to have a high level of impact.												

Assessments Reflecting Our Business Characteristics	■ **Water Resource Supply & Water Purification** The progression of water stress (drought) and water quality degradation at iron ore and copper extraction sites directly leads to decreased material extraction volumes and operational suspensions. This presents a risk that could cause "procurement stagnation" and "price spikes" for materials indispensable to our products, severely impacting our production plans and profitability.	■ **Harmful Substances, Pollution, & Resources** If regulations concerning pollutant emissions and waste management are tightened, we anticipate an increase in procurement prices passed through by our suppliers. ■ **Resources & GHG Emissions** The use of virgin iron significantly impacts the GHG emissions (Scope 3, Category 1) within our supply chain.

Assess/Prepare (Risk assessment and Response and actions)

Fuji Electric views climate change and natural capital as "interdependent and integrated management issues ." For instance, extreme weather events caused by global warming accelerate the degradation of natural capital, which in turn can trigger a "vicious cycle" that exacerbates future flood damage. Against this background, we synthesized the analysis results from both TCFD (climate) and TNFD (nature) using a common set of evaluation axes (financial impact, likelihood, and timing) to identify environmental risks and opportunities in an integrated manner. This approach has allowed us to clarify high-priority key initiatives and formulate highly effective response measures.

		Risks/Opportunities		Impacts
		TCFD（P15)	TNFD（P19･22)	
Risks	Acute	• Operational suspension due to extreme weather events		• Loss of business opportunities from prolonged operational suspension
	Chronic	• Difficulty in procuring water resources	• Reduction in available water resources	• Increased water resource costs
	Policy and Legal	• Introduction of carbon taxes • Decarbonization requirements in the supply chain	• Stricter regulations on water use and pollution • Stricter regulations on eco-friendly product design	• Surging energy costs • Increased regulatory compliance costs
	Technology Market and Reputation	• Delayed decarbonization at manufacturing sites • Tight supply of decarbonization-related materials	• Adverse impacts on ecosystems from water use and pollution • Delayed development of technologies contributing to resource circulation	• Loss of market trust and reputational damage • Increased material procurement costs • Decline in market competitiveness
Opportunities		• Accelerated development of eco-friendly products • Increased demand and market expansion for environmental contribution products • Increased demand for environmental and disaster-prevention products • Accelerated shift toward next-generation infrastructure	• Promoting recycled material use and transition to eco-friendly products • Expanding products and services for pollutant emission control and disaster mitigation	• Expansion and creation of business opportunities

Risk Assessment and Response Identification

The identified risks integrated across both "climate change" and "natural capital," along with their corresponding "financial impact," "likelihood," "time horizon," and "response measures," are outlined below.

Category		Driver	TCFD	TNFD	Potential Risks to Fuji Electric	Financial impact	Likelihood	Time horizon	Response Measures
Physical risks	Acute	Floods/ Storms	●	●	• Operational suspension and supply chain disruptions due to extreme weather events	H	L	MT-LT	• Implement floodproofing measures and BCPs at domestic and overseas manufacturing sites →**P.30** • Strengthen supply chain resilience through multi-sourcing for critical suppliers →**P.32**
	Chronic	Water resource depletion and water quality degradation	●	●	• Delays in material extraction and production processes driven by difficulties in water procurement and ecosystem degradation	M-H	L	LT	• Improve water recycling rates at semiconductor manufacturing sites to prepare for future drought risks →**P.33** • Formulate design standards for utilizing recycled materials to reduce dependency on natural resources
Transition risks	Policy and Legal	GHG emissions	●		• Increased costs due to the introduction of carbon taxes	H	M	MT	• Promote the shift to non-fossil energy for fuels used in production processes • Request suppliers to set CO_2 reduction targets and enhance support for their reduction initiatives
		Water use, pollution, and resource circulation	●	●	• Increased costs driven by stricter regulations on emissions, water use, and natural resource consumption	M-H	M-H	MT-LT	• Minimize water withdrawal and VOC emissions anticipating future regulatory tightening • Maintain profitability and reduce costs through eco-friendly designs compliant with the EU Eco-design Regulation and the adoption of disassembly technologies
	Market	GHG emissions	●		• Loss of market trust due to delayed response to decarbonization	H	H	ST-MT	• Promote solar power installation, equipment upgrades, and renewable electricity procurement based on SBTi-validated targets →**P.34**
		Resource circulation	●	●	• Tight supply of decarbonization-related materials such as copper and rare earths	H	M	LT	• Secure strategic procurement routes and enhance natural resource traceability
	Reputation	Water use, pollution		●	• Occurrence of adverse impacts on ecosystems from business activities	L-M	L	LT	• Thoroughly monitor water quality and recover chemical substances / Build trust with local communities through dialogue →**P.35**
	Technology	GHG emissions Resource circulation	●	●	• Delayed development of technologies contributing to decarbonization and resource circulation	H	M	MT	• Drive initiatives through the "GX Product Strategy Team" aiming for environmental contribution through our products

*Financial impact — H: Material financial impact; M/L: Moderate to minor impact
*Time Horizon — ST: Materialized; MT: Projected by 2030; LT: Projected by 2050

*Likelihood — H: Already materialized; M/L: Moderate to low probability by 2030

Note: Specific case studies are featured on the indicated page numbers.

Opportunity Assessment and Response Identification

The identified opportunities integrated across both "climate change" and "natural capital," along with their corresponding "financial impact," "likelihood," "time horizon," and "response measures," are outlined below.

Impact / Likelihood: H (High), M (Medium), L (Low) | Time Horizon: ST (Short-term), MT (Medium-term), LT (Long-term)

Category		Driver	TCFD	TNFD	Opportunities for Fuji Electric to Capture and Contribute to	Financial impact	Likelihood	Time horizon	Response Measures
Opportunities	Products & Services	Decarbonization	●	●	• Increased demand and market expansion for environmental contribution products (capturing new needs and rising demand for products related to fuel switching, the electrification of thermal processes, the expansion of renewable energy, the electrification of mobility, and energy saving)	H	H	ST-MT	• Strengthening the development of Environmental Contribution Products that contribute to hydrogen production, electrification, grid stabilization, the electrification of mobility, and energy saving →P.36
		Resource circulation	●	●	• Capturing new needs through recycled material use and transition to eco-friendly products	M	M	MT	• Accelerate early transition to products compliant with the EU Eco-design Regulation and develop technologies for utilizing recycled materials
		Other Social Solutions	●	●	• Addressing needs for pollutant emission control and disaster prevention/mitigation	M	M	ST-MT	• Advance technological development for ammonia as a decarbonized fuel, and contribute to disaster prevention/mitigation through high-sensitivity measurement and leak-detection technologies
	Biodiversity Conservation	Protecting the Natural Environment		●	• Enhancing corporate value and reputation through the restoration of ecosystem services	L	H	ST-LT	• Contribute to local ecosystem restoration through conservation activities for forests, rivers, and coastlines →P.37

*Impact — H: Material financial impact; M/L: Moderate to minor impact
*Time Horizon — ST: Materialized; MT: Projected by 2030; LT: Projected by 2050

*Likelihood — H: Already materialized; M/L: Moderate to low probability by 2030

As a result of this series of evaluations, no material risks that would impede our business continuity have been recognized at this stage, and it was reaffirmed that we view contributions to environmental issues as definitive opportunities. Under both the 1.5°C and 4°C scenarios, we believe that Fuji Electric possesses high resilience in the medium- to long-term transition toward a decarbonized society and a society in harmony with nature, by steadily advancing concrete countermeasures against the identified risks and flexibly adapting to market trends.

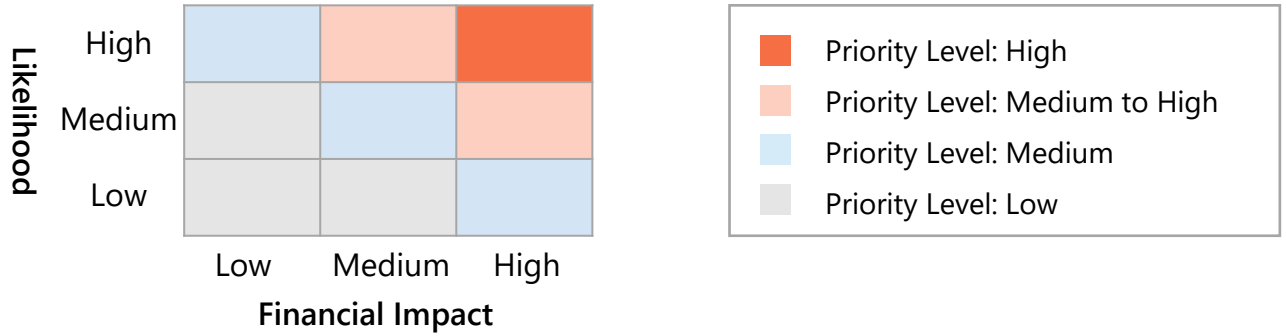
Note: Specific case studies are featured on the indicated page numbers.

Assessment and Identification of "High“ Priority Risks and Opportunities

We evaluated the priority levels of the assessed risks and opportunities based on qualitative criteria, identifying those categorized as 'High' (the highest priority) requiring immediate action.

■ Evaluation Criteria

(Common to Risks and Opportunities)



■ Risks and Opportunities Categorized as "High“ priority

1. Risks

- **Loss of market trust due to delayed response to decarbonization**

2. Opportunities

- **Increased demand and market expansion for environmental contribution products**
  (Capturing new needs driven by fuel switching, renewable energy expansion, and electrification of thermal processes)

"High" Priority Risks and Opportunities

We identified the financial impacts of the risks determined to be of "High" priority.

■ Loss of market trust due to delayed response to decarbonization

We are implementing the following three response measures:

i. **[Investment] Install solar power equipment at our own factories**
ii. **[Investment] Upgrade equipment (production facilities, HVAC, lighting, etc.)** *1
iii. **[Expense] Procure electricity derived from renewable energy** *2

We have estimated the capital investments and expenses required for the above initiatives up to fiscal 2030 *3, starting our calculations from fiscal 2023 and reviewing them annually.

*1: "Upgrade equipment" refers to the total capital investment (CAPEX) for equipment upgrades that provide energy-saving effects and the electrification of fuel-consuming equipment.
*2: Expenses for renewable electricity refer to the cost of purchasing "environmental value" (zero-CO_2 emissions).
*3: The target year established in the Environmental Vision 2050.

In June 2026, we revised the costs associated with our decarbonization response (i + ii + iii) as follows:

FY2023–2030 (Cumulative)

Total: Approx. ¥25.0 billion

+Approx. ¥1.0 billion

compared to the previous year's estimation

We are advancing our responses to the opportunities identified as having "High" priority.

■ Increased demand and market expansion for environmental contribution products

Toward the transition to a decarbonized society, an increase in demand is expected in the short term in sectors such as the expansion of renewable energy adoption, the electrification of mobility, and energy conservation. Furthermore, over a medium-term span looking toward 2030, market expansion is forecasted in fields like fuel switching to hydrogen and ammonia, as well as the electrification of thermal processes. Viewing these as further growth opportunities for Fuji Electric, we are strengthening our initiatives toward creating products that deliver environmental value to our customers (environmental contribution products).

In FY2025, the majority of our R&D expenditures of 39.7 billion yen is allocated to the development and research of environmental contribution products.

▪ Examples of Environmental Contribution Products
(Including those under development)

- Products Meeting Current Demand Growth

Expansion of Renewable Energy


String-type PCS


Storage battery PCS

Electrification of Mobility


Automotive motor driving inverters


Water-cooled motors for ships

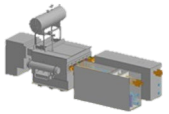
Energy Saving


Power semiconductor modules


Low-Voltage Inverters

- Products Anticipating Market Expansion Beyond 2030

Fuel Switching


DC power supply for hydrogen production


Stationary hydrogen fuel cells

Electrification of Thermal Processes


150˚C steam-generation heat pump for factories


Ejector cooling systems for data centers