

Climate-related Risks/Opportunities and Main Initiatives

*4 Periods: Short term: FY2028 (final year of the new Mid-Term Management Plan), Medium term: FY2030 (climate change mid-term target year), Long term: FY2033 (final year of the next Mid-Term Management Plan [assumed])
 *5 Financial impacts: Small: Under 1.0 billion yen, Medium: More than 1.0 billion yen, Large: More than 4.0 billion yen
 *6 FEMS: Factory Energy Management System

Classification		Climate Change Risks/Opportunities	Impact on Business	Period of Impact* ⁴	Financial Impact* ⁵	Response Policies and Countermeasures
Transition risks (less than 2°C)	Policies & legal restrictions	Rise in carbon tax due to introduction of carbon pricing	<ul style="list-style-type: none"> ● Increased production costs 	Short to long term	Small	<ul style="list-style-type: none"> ● Energy conservation in manufacturing (improving yield and productivity) ● Improving energy productivity ● Introduction of FEMS*⁶ ● Use of renewable energy and shift to low-carbon fuels ● Improving logistics efficiency through digital transformation ● Collaboration with material suppliers to reduce GHG emissions
		Tightening of regulations on reduction of greenhouse gas (GHG) emissions	<ul style="list-style-type: none"> ● Increased costs for energy conservation and shift to renewable energy ● Increased unit prices due to rising demand for raw materials related to decarbonization 	Short to long term	Medium	
	Technologies	Technological progress toward a decarbonized, circular society	<ul style="list-style-type: none"> ● Loss of opportunities due to delayed actions for low-carbon/decarbonization technologies and resource recycling 	Short to long term	Small–Medium	<ul style="list-style-type: none"> ● Collecting and responding to information on low-carbon/ decarbonization-related technologies ● Collecting information on biomaterials and recycled materials through communication with the upper streams of the supply chain ● Introduction in packaging materials and products
		Changes in consumer thinking and customer policies	<ul style="list-style-type: none"> ● Potential loss of customers and stakeholders, directly impacting sales and market share, due to inadequate climate change measures 			<ul style="list-style-type: none"> ● Visualization of GHG emissions (Scope 1, 2, 3, and product carbon footprint), transition plan disclosure
Transition opportunities (less than 2°C)	Reputation Policies & legal restrictions	Tightening of regulations on reduction of GHG emissions	<ul style="list-style-type: none"> ● Improving environmental added value through activities to reduce power consumption in manufacturing processes ● Increasing demand for products and services that reduce environmental impacts 	Short to long term	Small	<ul style="list-style-type: none"> ● In consideration of CO₂ emissions impacts and financial effects, set priorities and continue energy conservation activities in a planned manner
			Small–Large		<ul style="list-style-type: none"> ● Expanding sales of EVs and products that support their increased production ● Expanding sales of photonics products to meet power-saving needs in data centers 	
	Technologies Acute	Technological progress toward a decarbonized, circular society	<ul style="list-style-type: none"> ● Developing and commercializing technologies that contribute to decarbonization ● Enhancing added value by switching to environmentally friendly packaging materials 	Short to long term	Small–Medium	<ul style="list-style-type: none"> ● Participating in the Japan Technological Research Association of Artificial Photosynthetic Chemical Process (ARPCem) contributing to the realization of carbon neutrality ● Promoting environmentally friendly packaging materials
Physical changes (4°C)		Increasing severity of climate disasters	<ul style="list-style-type: none"> ● Supply chain disruptions, suspension of operations due to interruption of raw material supplies, etc. 	Short to long term	Small	<ul style="list-style-type: none"> ● Strengthening business continuity plan (BCP)
	Chronic	Rise in average temperatures due to global warming	<ul style="list-style-type: none"> ● Increase in costs associated with responses to rising temperatures 	Short to long term	Small	<ul style="list-style-type: none"> ● Considering air-conditioning cost reductions