

Risk/opportunity category			Major risks/opportunities				Businesses domains		Scenarios				Responses
							Water Environment	Industrial	1.5-2°C		4°C		
									2030	2050	2030	2050	
Risks	Migration risks	Policies and regulations	Increased cost of raw materials, transport, and energy, and decreased profitability due to carbon taxes				■	■	M	H	L	L	<ul style="list-style-type: none"> Promoting energy conservation and use of renewable energy in Company business activities Encouraging stakeholders to seek out low carbon materials Promoting energy conservation by reducing electricity consumption and labor requirements (via automation) in production equipment and shifting to use of electricity from renewables and non-fossil fuels Advances in Company environmental technologies and enhancements in engineering capabilities Considering the adoption of CO2 management technologies (e.g., CCUS) by enhancing alliances with other companies and other measures Deployment of environmental technologies to other fields, including technologies related to the manufacture of particulates Advances in Company environmental technologies, including the secondary battery equipment business, and enhancements in engineering capabilities Deployment of new products and services based on technologies related to clean energy and chemical recycling Enhancements in aftersales service businesses Accelerating the development of environmental technologies; overall facility optimization using AI and IoT technologies and facilities automation using advanced control technologies Enhancing responses based on BCPs; implementing business continuity management (BCM) Risk hedging through insurance, contracts, and other means Labor-saving and automation initiatives at facilities via digital transformation (DX) technologies
			Increased capital investment costs due to more rigorous energy conservation regulations					■	M	H	L	L	
		Policies and regulations/technology	Increased cost of technological development in response to energy conservation regulations; lower sales due to reduced demand for existing Company technologies				■	■	M	H	L	L	
		Technology	Loss of sales opportunities and lower sales due to inability to develop competitive low carbon facilities					■	H	H	M	M	
		Markets	Lower sales due to reduced demand for chemical equipment and plants due to shift away from plastics					■	H	H	M	M	
	Reputation	Lower sales and higher fundraising costs due to increased losses on orders, difficulty raising funds, and difficulty securing human resources due to worsening reputation among stakeholders				■	■	L	M	L	L		
	Physical risks	Acute	Lower sales and profits due to construction delays resulting from natural disasters such as typhoons and flooding; increased cost of recovery from and responding to damage to facilities (PFI: Private Finance Initiative, DBO: Design Build Operate); rising cost of developing business continuity plans (BCP)				■	■	L	M	M	H	
		Chronic	Lower sales and profits due to construction delays resulting from lower employee productivity caused by rising average temperatures and other factors; higher cost of developing manufacturing structures to respond to risks				■	■	L	M	M	H	
Opportunities	Resource efficiency		Increased profits due to shorter design and construction lead times and more efficient operations management, driven by an acceleration in labor savings and automation based on AI and ICT technologies				■	■	M	M	L	L	<ul style="list-style-type: none"> Labor-saving and automation initiatives at facilities via (DX) technologies Enhanced production of biogas using sludge and businesses related to conversion to carbon-neutral fuel Development of energy-creating low carbon incineration systems Enhanced PFI, DBO, and other life cycle businesses Development of technologies for creating and making effective use of sewage sludge (e.g., concentration, dehydration, thermal use) Advances in our environmental technologies Growth in energy-creating dewatering incineration systems Development of technologies for treatment and effective use of sewage sludge (e.g., concentration, dehydration, thermal use) Use of crystallization, filtration, separation, and drying technologies in equipment for producing secondary batteries Growth in new community power and biomass power generation businesses, etc. based on use of sewage treatment plants as energy facilities Use of crystallization, filtration, separation, and drying technologies in equipment for producing secondary batteries Entering new business domains and creating new business opportunities, including O&M and aftersales service opportunities, through enhanced alliances with other companies Labor-saving and automation initiatives at facilities via (DX) technologies Supplying equipment and plants for water purification and sewage treatment facilities Enhancement of PFI, DBO, and other life cycle businesses Promoting (DX) in the operations management business to make the water infrastructure more resilient Accelerating the development of environmental technologies; communicating and disclosing information on our initiatives through the Integrated Report, social media, etc.
			Growth in sales and corporate value driven by expanding use of recycled materials				■	■	H	H	M	M	
	Energy sources		Increased sales of renewable energy and energy creation businesses and energy-saving equipment driven by government energy mix polices and growing orientation toward renewable energy				■	■	H	H	M	M	
			Increased sales attributable to the growing reputation of our technological capabilities, as our energy business customers become more competitive amid a climate of incentive polices (such as subsidies)				■	■	H	H	M	M	
	Products and services		Increased sales of renewable energy and energy creation equipment and in fields related to secondary batteries due to growing demand for renewable energy and energy creation technologies				■	■	H	H	M	M	
			Expanding business opportunities in the new community power and biomass power generation businesses based on effective use of wastes and exhaust gases and progress in urban development using sewage treatment plants as energy facilities				■	■	H	H	M	M	
			Stronger sales and increased corporate value due to growth in markets such as secondary batteries, biofuels, and plastic recycling, and development of new businesses models					■	H	H	M	M	
	Markets		Growth in orders and sales due to rising demand for IoT devices and operations management services as automation advances in response to growing incidence of heatstroke and reduced efficiency among on-site workers due to rising temperatures				■	■	H	H	M	M	
			Resilience		Sales growth due to higher demand for enhanced resilience of water and sewage infrastructures, aged facilities renewal, and improved water quality in response to the growing severity of natural disasters				■	■	H	H	
	Reputation				Securing human resources and increasing corporate value by building a stronger reputation among stakeholders				■	■	H	H	