

Climate and Water Related Information

Yokogawa Electric Corporation

Material Environmental Risks Affecting the Organization

At Yokogawa, we identify and assess material environmental risks that may affect our business operations and long-term value creation. The following section outlines the key risks, their potential impacts, expected time horizons, and the measures implemented to manage and mitigate them.

Risk Type	Physical	Policy
Primary Environmental Risk Driver	Cyclone, hurricane, typhoon	Carbon pricing mechanisms
Value chain stage where the risk occurs	Direct operations	Direct operations
Organization-specific description of risk	We expect that climate change will cause our production functions to be disrupted and our sales to decline when hurricanes, torrential rains, floods, and other weather-related disasters occur. Our core business, the control business, accounts for approximately 90% of our sales. If the production plants (in Japan, China, and Singapore) for the main products of the control business were to be shut down due to a disaster, the sales of the control business would be greatly affected. The sales of the control business in FY2024 were 528 billion yen.	An increasing number of countries and regions are introducing carbon pricing, such as carbon taxes and emissions trading schemes, as a means of reducing greenhouse gas (GHG) emissions. Yokogawa operates globally, and the introduction of a carbon tax based on its GHG emissions will impact its operational costs. We are promoting Scope 1 and 2 reduction activities with the goal of achieving net zero emissions in FY2030.
Primary financial effect of the risk	Decreased revenues due to reduced production capacity	Increased indirect operating costs
Time horizon	Long-term	Medium-term
Anticipated Financial Impacts of Environmental Risks	According to a WMO report issued in 2024, the global annual average temperature for each year through 2028 is expected to be 1.1°C to 1.9°C higher than pre-industrial times. The scientific community believes that the risk of extreme weather events increases when temperature increases exceed 1.5°C. We assumed that our sales may be affected after 2030, when the probability of temperatures exceeding 1.5°C increases.	We assume that the introduction of laws and regulations in various countries and regions, such as the EU's Carbon Border Adjustment Mechanism (CBAM), which will become fully effective in 2026, may impact on our operating costs in the mid to late 2020s. We expect that the introduction of new laws and regulations in various countries and regions could impact on our operating costs in the mid to late 2020s.

Estimated Range of Long-Term Financial Impacts (JYP million)	Minimum	0	318
	Maximum	528,000	636
Methodology and Assumptions for Financial Impact Estimates		The financial impact was calculated by multiplying the risk impact by the likelihood of occurrence. The total sales of the control business in FY2024 were 528 billion yen, and we have assumed the full amount of the risk as the impact amount. The likelihood of risk occurrence is assumed to be a minimum of 0% to a maximum of 10%, and we believe that the likelihood of risk occurrence is low due to the further acceleration of climate change initiatives in each country toward achieving the 1.5C target and the implementation of our risk reduction measures.	The financial impact was calculated by multiplying the risk impact by the likelihood of occurrence. The full impact is calculated by converting 45924 t-CO2e of Scope 1,2 emissions in FY2023 into monetary value using an assumed future carbon price of 140 USD/t-CO2e and an exchange rate of 150 yen/USD, for a total impact (1.2 billion yen). The likelihood of risk is assumed to be a minimum of 33% to a maximum of 66%, in light of the external environment related to the carbon tax.
Primary response to risk		Policies and plans	Compliance, monitoring and targets Establish organization-wide targets
Cost of Risk Response Measures (JYP million)		33,100	500
Methodology and Assumptions for Cost Estimates		We have formulated a Business Continuity Plan (BCP) for our representative production sites to reduce risk, and we are updating and enhancing our facilities with the BCP also taking into consideration. In FY2024, we invested 33.1 billion yen in total capital investment including above investments.	In FY2023, we invested approximately 500 million yen by reducing energy consumption, concluding PPA contracts for large-scale solar power generation systems at our production plants, and procure electricity derived from renewable energy sources.
Actions to Address Identified Environmental Risks		We have formulated Business Continuity Plans (BCPs) for our representative production sites to reduce risk, and are updating and enhancing our facilities with BCPs also taken into consideration. This initiative will primarily contribute to achieving Goal 13 of the SDGs.	We are promoting Scope 1 and 2 reduction activities with the goal of achieving net zero in FY2030 to reduce our risks. In FY2023, we reduced energy consumption, concluded PPA contracts for large-scale solar power generation systems at our production plants, and procured electricity derived from

		renewable energy sources. As a result, Socpe1,2 was reduced by 14% year-on-year. This effort will primarily contribute to achieving Goals 7 and 13 of the SDGs.
--	--	---

Monetary Incentives for Environmental Performance and Target Achievement

At Yokogawa, environmental objectives are integrated into performance evaluation and compensation systems to strengthen accountability and support the achievement of our sustainability commitments and targets.

Position	Chief Executive Officer (CEO)	Corporate executive team	Chief Procurement Officer (CPO)
Incentives	Shares/ Profit share	Shares/ Profit share	Bonus - % of salary
Environmental Performance Targets	☒ Progress towards environmental targets ☒ Achievement of environmental targets ☒ Achievement of climate transition plan ☒ Increased proportion of revenue from low environmental impact products or services ☒ Implementation of an emissions reduction initiative ☒ Reduction in absolute emissions	☒ Progress towards environmental targets	☒ Increased engagement with suppliers on environmental issues
Incentive plan	Both Short-Term and Long-Term Incentive Plan, or equivalent	Both Short-Term and Long-Term Incentive Plan, or equivalent	Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)
Details	Compensation for CEO consists of basic compensation, which is a fixed component, and a performance-linked component (annual incentive and medium-to long-term incentive). Annual incentives are linked to performance against climate-related targets, which are broken down from the medium-term business plan into single years. For medium- and long-term incentives, the achievement of medium- and long-term climate targets set in the medium-term management plan 'Growth for Sustainability	Compensation for executive officers consists of basic compensation, which is a fixed component, and a performance-linked component (annual incentive and medium-to long-term incentive). Annual incentives are linked to performance against climate-related targets, which are broken down from the medium-term business plan into single years. For medium- and long-term incentives, the achievement of medium- and long-term climate targets set in the medium-term management plan 'Growth for	Success of supply chain engagement affects the monetary reward at evaluation of annual bonus.

	2028' is integrated into the incentives and linked to medium- and long-term performance.	Sustainability 2028' is integrated into the incentives and linked to medium- and long-term performance.	
Contribution of Incentives to Environmental Objectives	The CEO has responsibility to the execution of our mid-term business plan for FY 2028, Growth for Sustainability 2028, in alignment with the sustainability targets which contain order intakes of emissions reduction business such as creating more value propositions for renewable energy market, supporting utilization of clean energy (hydrogen, ammonia) and supporting adoption and improvement of efficiency of renewable energy and electric vehicles, and progress of them is one of the Key Performance Indicators (KPI) of him. So, performance fee, which is related to the progress of KPI, is added to a performance-linked component as monetary incentive. Yokogawa has formulated the sustainability goals "Three goals" for the society we want to see by 2050. Three goals include Net-zero Emissions and we have set "Achieving carbon neutrality (GHG emissions 100% reduction)" in 2030 as a sustainability indicator to achieve this goal. Sustainability indicators are tied to his KPIs, and achieving them will achieve Net-Zero emissions.	Corporate executive team for environmental issues governs the Yokogawa Group environmental activities. Reduction target of GHG emissions is one of the Key Performance Indicators(KPI) of it, so performance fee, which is related to the reduction ratio of the GHG emissions, is added to a performance-linked component as monetary incentive. Yokogawa has formulated the sustainability goals "Three goals" for the society we want to see by 2050. "Three goals" include Net-zero emissions and Three goals include Net-zero Emissions and we have set "Achieving carbon neutrality (GHG emissions 100% reduction)" in 2030 as a sustainability indicator to achieve this goal. Sustainability indicators are tied to his KPIs, and achieving them will achieve Net-Zero emissions.	The Chief Procurement Officer has responsibility for the sustainable procurement and progress of supply chain engagement on climate change issues, which are most important element of sustainability, and their execution is one of the important duties of him. We contribute to Net-zero Emissions through sustainable procurement.

Details of Scenarios Used in Scenario Analysis

At Yokogawa, we use internationally recognized environmental and climate-related scenarios to assess potential risks and opportunities under a range of future conditions. Scenario analysis is conducted on an organization-wide basis using both qualitative and quantitative approaches.

The following section outlines the scenarios applied, the assumptions and constraints considered, and the rationale for their selection.

Scenario	Climate transition scenarios IEA SDS	Climate transition scenarios IEA NZE 2050	Physical climate scenarios RCP 2.6	Physical climate scenarios RCP 8.5
Types of Risks	☒ Policy ☒ Market ☒ Liability ☒ Reputation ☒ Technology ☒ Acute physical ☒ Chronic physical	☒ Policy ☒ Market ☒ Liability ☒ Reputation ☒ Technology ☒ Acute physical ☒ Chronic physical	☒ Policy ☒ Market ☒ Liability ☒ Reputation ☒ Technology ☒ Acute physical ☒ Chronic physical	☒ Policy ☒ Market ☒ Liability ☒ Reputation ☒ Technology ☒ Acute physical ☒ Chronic physical
Temperature alignment	1.6°C - 1.9°C	1.5°C or lower	1.6°C - 1.9°C	4.0°C and above
Reference year	2019	2019	2019	2019
Timeframes covered	2030	2030 2050	2030 2050	2030
Driving forces in scenario	☒ Climate change (one of five drivers of nature change) ☒ Impact of nature footprint on reputation ☒ Global regulation ☒ Methodologies and expectations for science-based targets ☒ Perception of efficacy of	☒ Climate change (one of five drivers of nature change) ☒ Impact of nature footprint on reputation ☒ Global regulation ☒ Methodologies and expectations for science-based targets ☒ Perception of efficacy of	☒ Climate change (one of five drivers of nature change) ☒ Impact of nature footprint on reputation ☒ Global regulation ☒ Methodologies and expectations for science-based targets ☒ Perception of efficacy of	☒ Climate change (one of five drivers of nature change) ☒ Impact of nature footprint on reputation ☒ Global regulation ☒ Methodologies and expectations for science-based targets ☒ Perception of efficacy of climate regime

	climate regime ☒ Globalizing markets	climate regime ☒ Globalizing markets	climate regime ☒ Globalizing markets	☒ Globalizing markets
Scenario Assumptions and Uncertainties	To break down net-zero emissions, which is our sustainability goals for the year 2050, into our sustainability targets for 2030, we identified our business focus area which contribute to net-zero emissions largely as renewable and low-carbon energy.	Details on how the selected scenario was identified For setting our sustainability goals for the year 2050, we seek a scenario which enables to make the world a better place for future generations from three aspects of environment, society, economy.	For setting our sustainability goals for the year 2050, we seek a scenario which enables to make the world a better place for future generations from three aspects of environment, society, economy.	In order to evaluate risks and opportunities and planned measures to address them when developing the long-term business framework and the mid-term business plan, we seek a scenario which enables to make the world a better place for future generations from three aspects of environment, society, economy.
Rationale for Scenario Selection	We adopted IEA Sustainable development scenario because it is the most suitable to analyze the transition scenario to renewable energy and low carbon energy, currently available.	In case of environment, we set the goal "Net-zero emissions" for fiscal year 2050. In order to achieve this goal, we are considering the form that society should take on by 2030, the 1.5°C scenario where even stricter reductions in greenhouse gas emissions than the 2°C scenario and other efforts will be required. We have therefore adopted the IEA NZE 2050 scenario, in which the world achieves net zero greenhouse gas emissions by 2050.	In case of environment, climate change is the most important issue and we adopted target to net-zero emissions which do not cause serious damage to humanity, which needs RCP 2.6 scenario of IPCC AR5.	In case of environment, climate change is the most important issue, we also assume physical risk on 4°C scenario in which temperature rise cannot be suppressed. To address the uncertainty surrounding the effects of climate change, we are considering the form that society should take on by 2030, including our response in the 4°C scenario with severe, pervasive, and irreversible global impacts. To examine this scenario, we have adopted the IPCC AR5 RCP8.5 scenario, which corresponds to the maximum GHG emissions in 2100.

Coverage of Water Measurement and Monitoring Activities

Yokogawa recognizes water resource management, pollution prevention, and the provision of clean water and sanitary conditions as important environmental and occupational health considerations. Water-related data are managed through a Group-wide environmental data reporting system covering all operations. Most sites collect water-related information monthly or bimonthly, depending on data availability and collection methods, while Group-level data are aggregated and monitored quarterly and annually. Water quality and wastewater quality parameters are monitored at applicable facilities, and any abnormalities are reported immediately.

Water Aspect		Coverage	Monitoring Frequency	Data Collection Frequency	Method of measurement
Water withdrawals	total volumes	100% of operations	Quarterly and annually	once a month or every two months	Direct metering (primarily for groundwater) and water supplier/building management reports. Where measured data is unavailable, water withdrawals are estimated using site-specific indicators.
	volumes by source	100% of operations	Quarterly and annually	once a month or every two months	Direct metering and water supply records, categorized by source (e.g., groundwater and surface water). Where measured data is unavailable, volumes are estimated using site-specific indicators.
	quality	Relevant sites	Continuous monitoring; abnormalities reported immediately	once every six months	Water quality testing conducted by accredited laboratories using chemical analyses and monitoring instruments, depending on the parameter assessed.
Water discharges	total volumes	100% of operations	Quarterly and annually	once a month or every two months	Facilities with wastewater treatment systems directly measure wastewater discharge volumes. Facilities without such systems generally do not measure wastewater discharges directly; therefore, discharge volumes are estimated as water withdrawals minus water consumption.

	volumes by destination	100% of operations	Quarterly and annually	once a month or every two months	Facilities with wastewater treatment systems directly measure wastewater discharge volumes. Facilities without such systems generally do not measure wastewater discharges directly; therefore, discharge volumes are estimated as water withdrawals minus water consumption and categorized by discharge destination (e.g., surface water bodies and sewer systems).
	volumes by treatment method	100% of operations	Quarterly and annually	once a month or every two months	Facilities with wastewater treatment systems directly measure wastewater discharge volumes by treatment method. Facilities without such systems generally do not measure wastewater discharges directly; therefore, discharge volumes are estimated as water withdrawals minus water consumption and categorized by wastewater treatment status (treated or untreated).
	by standard effluent parameters	Relevant sites	Continuous or parameter-specific	Continuous or parameter-specific	Monitoring using instruments installed according to wastewater treatment conditions to measure standard effluent parameters.

	emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Relevant sites	Continuous or parameter-specific	Continuous or parameter-specific	Monitoring using instruments installed according to wastewater treatment conditions to measure priority substances in discharged water.
Other	Water consumption total volume	100% of operations	Quarterly and annually	once a month or every two months	Water consumption is assessed based on water incorporated into products, water supplied to external parties, and water contained in waste streams. Product specifications, site reporting, and waste reporting are used to identify and quantify water consumption where applicable. Water contained in waste is included only when a significant volume is present.
	Water recycled/reused	Not currently monitored	Not currently monitored	Not currently monitored	Under assessment. Monitoring will be implemented once water recycling/reuse practices are established.
	The provision of fully-functioning, safely managed WASH services to all workers	100% of operations	Annually, abnormalities reported immediately	once every six months	Water quality parameters are monitored through laboratory testing using chemical analyses and measuring instruments. Inspections are conducted by qualified organizations to ensure the provision of clean water and sanitary conditions for all workers.