

The Kurita Group's Initiatives Addressing Climate Change

The Kurita Group views climate change as an urgent issue that needs to be addressed globally, and based on the TCFD Recommendations, we will continuously reduce greenhouse gases generated by our business activities and contribute to reducing greenhouse gas emissions for our customers through our business.

1. Governance

The Kurita Group sets the Sustainability Committee, chaired by Executive General Manager of Sustainability Division and Executive Officer of Kurita Water Industries, which oversees and promotes initiatives addressing climate change. The Board of Directors supervises the initiatives, receives reports from the Executive Committee twice a year in principle. The Executive Committee receives reports from the Sustainability Committee on the status of efforts to address climate change issues, deliberates on the details, and determines necessary measures.



companies of Kurita Water Industries

addressing climate change issues

Deliberation on initiatives addressing climate change issues and decision of new measures

Management of initiatives addressing climate change issues and formulation of new measures

Implementation of measures

2. Strategy

Based on the two scenarios $(1.5^{\circ} \text{ and } 4^{\circ} \text{ c})^{*1}$ described in IPCC SR1.5 and IPCC RCP8.5, etc. the Kurita Group has evaluated the risks and opportunities by two axes of "probability" and "impact" for shortterm, medium-term and long-term^{*2}, and has formulated the measures of the Kurita Group as well as evaluating the financial impacts on our business for some of them.

Туре		Risks and Opportunities	Time horizon	Financial Impact/Measures		
Policy	Risk	Introduction or	Med to	<financial (as="" fy2051)="" impact=""></financial>		
and Legal		increase of carbon tax.	long	•1.5°C : 2.2 billion yen ^{*3} .		
			term	·4℃ : None.		
				<measures></measures>		
				•Scope1+2 : By FY2031, an estimated		
				cost of approximately 1.1 billion yen		
				will be invested, and 100% reduction		
				will be achieved through the		
				introduction of electric vehicles and		
				the adoption of renewable energy.		
				•Scope3 : Reduce emissions by 30%		
				compared to the base year by FY2031		
				by promoting the CSV business ^{*4} and		
				procuring low-carbon raw materials.		



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	Risk	Regulations for products	Med to	<measures></measures>			
		and services with high	long	 Low carbonization of products and 			
		GHG emissions.	term	services by utilizing digital technology			
	Opportunity	Dissemination of	Med to	and reviewing design, etc.			
		supportive policy	long	•Reduction of Scope 1 and 2 emissions			
		incentives to the	term	by switching to alternative fuels and			
		conversion to energy		renewable energies			
		with low GHG emissions.		•Development and expansion of CSV			
Technology	Risk /	Substitution of existing	Short to	businesses that contribute to GHG			
	Opportunity	products and services	long	reduction, such as biomass power			
		with lower emissions	term	generation, energy recovery, resource			
		options.		recovery, exhaust gas treatment, CO_2			
				recovery, and battery-related			
				businesses.			
Market	Risk	Decreased demand from	Med to	<measures></measures>			
		fossil fuel-related sector.	long	 Low carbonization of products and 			
			term	services by utilizing digital technology			
				and reviewing design, etc. and business			
				transition through the development and			
				expansion of CSV businesses that			
				contribute to GHG reduction, such as			
				biomass power generation, energy			
				recovery, resource recovery, exhaust			
				gas treatment, CO_2 recovery, and			
				battery-related businesses.			
	Risk Soaring costs of Med to		<measures></measures>				
		material and energy.	long	 Low carbonization of products and 			
			term	services by utilizing digital technology			
	Opportunity	Increased demand in	Med to	and reviewing design, etc.			
		the electronic industry	long	•Reduction of Scope 1 and 2 emissions			
		due to the acceleration	term	by switching to alternative fuels and			
		of DX.		renewable energies			
				•Development and expansion of CSV			
				businesses that contribute to GHG			
				reduction, such as biomass power			
				generation, energy recovery, resource			
				recovery, exhaust gas treatment, CO ₂			
				recovery, and battery-related			
				businesses.			



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Physical	Risk	Increased factory	Short to	<financial (after="" fy2021)="" impact=""></financial>		
Risks		shutdowns and long		·1.5℃ and 4℃ : About 15.7 billion		
		construction delays due	term	yen/year at domestic production		
		to extreme weather		bases where risks are identified.		
		events such as cyclones		<measures></measures>		
		and floods.		•About 14 million yen has been invested		
				to install waterstops at one site.		
				•Continuous strengthening of business		
				continuity in preparation for natural		
				disasters such as flood control.		
	Opportunity	Increased operating rate	Short to	<measures></measures>		
		of cooling equipment.	long	 Low carbonization of products and 		
			term	services by utilizing digital technology		
Resource	Opportunity	Dissemination of	Short to	and reviewing design, etc.		
Efficiency		efficient production and	long	•Development and expansion of CSV		
		distribution processes.	term	businesses that contribute to GHG		
	Opportunity	Reduction of water	Short to	reduction, such as biomass power		
		usage.	long	generation, energy recovery, resource		
			term	recovery, exhaust gas treatment, CO ₂		
Energy	Opportunity	Dissemination of energy	Short to	recovery, and battery-related		
Source		with low GHG emissions.	long	businesses.		
			term			
	Opportunity	Conversion to	Short to			
		distributed energy	long			
		resources.	term			
Products	Opportunity	Increased demand for	Short to	<financial after="" fy2028)="" impact=""></financial>		
and		products and services	long	•1.5℃:About 350 billion yen/year ^{*5} .		
Services		with low GHG emissions.	term	∙4℃ : None.		
	Opportunity	Increasing diverse	Short to	<measures></measures>		
		technical needs for	long	•Low carbonization of products and		
		reducing GHG	term	services by utilizing digital technology		
		emissions.		and reviewing design, etc.		
				Reduction of Scope 1 and 2 emissions		
				by switching to alternative fuels and		
				renewable energies		
				•Development and expansion of CSV		
				businesses that contribute to GHG		
				reduction, such as biomass power		
				generation, energy recovery, resource		
				recovery, exhaust gas treatment, CO ₂		
				recovery, and battery-related		
				businesses.		
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Resilience	Risk /	Substitution and	Short to	<measures></measures>
	Opportunity	diversification of fuel	long	 Low carbonization of products and
		and water resources.	term	services by utilizing digital technology
				and reviewing design, etc.
				 Reduction of Scope 1 and 2 emissions
				by switching to alternative fuels and
				renewable energies
				•Development and expansion of CSV
				businesses that contribute to GHG
				reduction, such as biomass power
				generation, energy recovery, resource
				recovery, exhaust gas treatment, CO_2
				recovery, and battery-related
				businesses.

*1 The scenario in which the temperature rise from the pre-industrial level is 1.5°C and the scenario with the highest temperature rise predicted by the Intergovernmental Panel on Climate Change.

*2 Short-term (1-3 years), medium-term (3-5 years) and long-term (5-20 years).

*3 (Scope 1 and 2 + Scope 3 category 1 in the business operation area) x (Carbon price in the business operation area) estimated based on the FY2051 forecast.

*4 Products, technologies, and business models that contribute to saving water, reducing GHG emissions, recycling waste into resources and reducing resource inputs more greatly than conventional ones.

*5 Trial calculation of SAM (Serviceable Available Market) for new CSV business that contributes to GHG reduction.

3. Risk Management

The Executive General Manager of Corporate Control and Administration Division is responsible for monitoring risks and implementing risk management in the Kurita Group. The Executive General Manager of Corporate Control and Administration Division regularly analyzes and evaluates the Kurita Group's risks and conducts ongoing monitoring based on the Group-wide risk map, as well as takes steps to prevent risks from occurring. Risks related to climate change are integrated into the Group-wide risk map, and the chairperson of the Sustainability Committee is promoting risk reduction based on the Group-wide risk management system.

4. Metrics and Targets

To promote sustainability initiatives, the Kurita Group has identified eight new themes to intensively work on from FY 2024 as the "Kurita Group Materiality." In Theme 2, which is an initiative to tackle climate change issue, in order to make efforts in line with the Paris Agreement, we have set new long-term targets aligned with "Net-Zero target" indicated by SBTi^{*6}, starting from FY 2020 as the baseline year, and are working to reduce Scope 1, 2 and Scope 3 emissions.

In addition, we have set a new medium-term target for the amount of avoided GHG emissions through CSV business and we will realize a decarbonized society throughout the entire supply chain by developing and providing low-carbon solutions that contribute to reduction of GHG emissions in industry and society.

The Kurita Group's CO2 emissions in FY 2020, the base year for the metrics, were approximately 2% for Scope 1 and 2 and 98% for Scope 3. Scope 1 and 2 are mostly derived from Scope 2 electricity. We will therefore promote the switch to electricity derived from renewable energy and gradually switch from gasoline cars to electric cars. In Scope 3, about 70% of the emissions are from Category 11, "Use of sold products (mainly rotating machinery such as pumps used to pump water)." To maintain a balance with increasing our competitive strength, the Kurita Group will use its CSV business structure to provide low carbon solutions to our customers.

In FY 2022, Scope 1+2 emissions increased slightly year-on-year due to an increase in the operation of production bases because of recovery in demand. On the other hand, Scope 3 emissions decreased year-on-year due to a decline in procurement of pumps, which are the main source of emissions. In FY 2023, Scope 1+2 is expected to decrease year-on-year due to the implementation of the above measures, while Scope 3 is expected to increase because the increase due to orders increase will exceed the reduction by the above measures.

Materiality	Metrics	Medium- and long-term targets ^{*7}			Achievement ^{*7}		
		FY2028	FY2031	FY2051	FY2020	FY2021	FY2022
	Scope1+2	73%	100%	Net-Zero	– (44 thousand t-CO ₂)	7% (41 thousand t-CO ₂)	5% (42 thousand t-CO ₂)
2. Contribution to the realization of a	Scope3	22%	30%	Net-Zero	(2,584 thousand t-CO ₂)	6% (2,440 thousand t-CO ₂)	22% (2,027 thousand t-CO ₂)
decarbonized society	Avoided GHG emissions through CSV business	1,500 thousand t-CO ₂	-	-	279 thousand t-CO ₂	294 thousand t-CO ₂	367 thousand t-CO ₂

*6 An initiative that encourages companies to set greenhouse gas emission reduction targets in line with scientific knowledge, with the goal of limiting global average temperature rises due to climate change to 1.5℃ compared to pre-industrial levels.

*7 Scope 1+2 and 3 are reduction rates from FY2020 (base year).