

# Climate Change-Related Disclosure in Accordance with the TCFD Recommendations

ROHM endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in September 2021. In order to achieve the goals of the “ROHM Group Environmental Vision 2050”, ROHM will promote efforts to reduce its environmental impact and focus on more transparent information disclosure, including the resilience of its strategies based on climate-related scenario analysis.

Disclosure Based on the TCFD Framework  
[https://www.rohm.com/sustainability/environment/climate\\_change\\_measures](https://www.rohm.com/sustainability/environment/climate_change_measures)

## Governance

In April 2021, we established the “ROHM Group Environmental Vision 2050”, which outlines the ideal state of ROHM in 2050, with the aim of realizing a sustainable society. The vision identifies climate change as an important issue affecting business sustainability, and sets a goal of reducing GHG emissions from business activities to virtually “zero” by the year 2050. In addition, the Medium-Term Management Plan “Moving Forward to 2025” announced in May 2021 also sets non-financial targets, including environmental themes, and identifies “addressing climate change” as one of the material issues that ROHM should address.

ROHM has established a system in which the President (Representative Director) has the highest responsibility and authority for climate change issues, and the EHSS General Committee\*, chaired by the director in charge of sustainability appointed by the President (Representative Director), deliberates and makes decisions with regard to addressing climate change issues. Under the EHSS General Committee, eight management systems have been established, one of which is the Environmental Preservation Committee, chaired by a business unit manager and which is in charge of the Environmental

## Strategy (Scenario Analysis)

Climate change is one of the most important social challenges facing global society. The Paris Agreement calls for efforts to keep the global average temperature increase well below 2°C above pre-industrial levels and to limit it to 1.5°C. At the same time, it is also an important theme for companies to achieve a balance between GHG emissions and absorption in the second half of this century to realize a decarbonized society.

Under these circumstances, ROHM is accelerating climate change countermeasures, such as improving the efficiency of semiconductor products and building an environmentally conscious business structure based on the “ROHM Group Environmental Vision 2050”. In order to do this, we have analyzed the impact of climate change on business activities in all sectors, including automotive, industrial equipment, and consumer equipment by referring to scenarios published by the International Energy Agency (IEA) and the UN Intergovernmental Panel on Climate Change (IPCC), among others. Specifically, we analyzed the impact of climate change in 2050 on the Group’s stakeholders (governments, financial institutions, investors, suppliers, customers, and new technologies) and the

Management System and proactively addressing climate change. The committee formulates our 2030 medium-term environmental targets and deliberates on the progress of environmental management toward achieving these targets, as well as issues related to measures to address climate change, including the introduction of renewable energy.

Directors who are members of the Audit and Supervisory Committee attend the EHSS General Committee and the monthly meetings of the Environmental Preservation Committee to continuously monitor and verify the execution status of overall environmental management, led by the President (Representative Director).

In addition, in order to further promote value sharing with our shareholders, we have adopted GHG emissions as one of the performance indicators in our performance-linked transfer-restricted stock-based remuneration system for directors.

Promotional system  
<https://www.rohm.com/sustainability/environment>

\* EHSS (Environment, Health and Safety, Sustainability) General Committee: A committee composed of executive officers in charge of eight subordinate management systems (environment, health and safety, labor, ethics, information, supply chain, quality, and risk management BCM) and responsible for ensuring that the PDCA cycle for each system is properly implemented.

value chain (corporate, R&D, procurement, manufacturing, and sales) related to its business activities. This analysis was conducted for the 1.5°C/2°C scenario, in which society as a whole succeeds in transformation toward decarbonization and controlling the global temperature rise, and for the 4°C scenario, in which economic development takes priority and the global temperature rises and its effects continue to worsen. (→P.63 Financial Impact of Risks and Opportunities)

Reference information for our scenario analysis is provided below.

	Scenario	Reference
Transition risks Opportunities	1.5°C/2°C scenario	Sustainable Development Scenario (SDS)*1 Net Zero Emissions by 2050 Scenario (NZE)*1
	4°C scenario	Stated Policies Scenario (STEPS)*1
Physical risks	1.5°C/2°C/4°C scenario	Representative Concentration Pathways (RCP)*2 Shared Socioeconomic Pathways (SSP1/5)*2

\*1. Source: IEA “World Energy Outlook (WEO) 2021”  
 \*2. Source: IPCC “Fifth Assessment Report”

## Financial Impact of Risks and Opportunities

Financial impact on business activities

Classification	Event	Severity*1	Occurrence*2	Impact item	1.5/2°C impact*3	4°C impact*3	
Transition risks	Policy and regulations	Increase in costs due to introduction of carbon pricing	High	Mid- to long-term	Costs	Med	Med
		Increase in costs due to energy conservation and GHG emissions reduction initiatives	High	Short- to mid-term	Costs	Low	—
	Technologies	Increase in R&D costs to maintain and improve market competitiveness	Low	Short- to mid-term	Costs	Med	—
		Increase in capital investment costs due to increase in production volume and transition of production facilities	Low	Short- to mid-term	Costs	Low	—
	Markets	Decrease in sales due to changes in customer demand	Med	Short- to mid-term	Sales	Med	—
		Decrease in demand due to social changes associated with climate change	Low	Short- to mid-term	Sales	—	—
Increase in electricity costs due to higher electricity demand in society as a whole		Med	Short- to mid-term	Costs	Med	—	
Reputation	Increase in material procurement costs due to a shortage of resources including rare metals	Med	Short- to mid-term	Costs	Med	Low	
	Loss of customer reputation due to inadequate response to climate change	Low	Short- to mid-term	Costs	—	—	
Physical risks	Acute	Damage to production facilities or production stagnation due to severe wind and flood damage	Med	Mid- to long-term	Sales	Low	Med
		Stagnation of raw material procurement due to supply chain damage	Med	Short- to mid-term	Sales	Med	Med
		Increase in costs to strengthen measures against natural disasters	Low	Short- to mid-term	Costs	—	Med
Chronic	Increase in energy costs due to rising temperatures	Low	Mid- to long-term	Costs	Low	Low	
Opportunities	Products and services	Increase in demand for products that help customers save energy and reduce GHG emissions	High	Short- to mid-term	Sales	High	—
		Increase in revenues from entering new markets	Med	Mid- to long-term	Sales	—	—
	Markets	Increase in demand for products due to extreme weather and other environmental changes	Med	Mid- to long-term	Sales	—	Low
		Increase in revenues from gaining reputation among customers and investors	High	Short- to mid-term	Costs	—	—
	Resource efficiency	Decrease in costs by promoting energy conservation	High	Short- to mid-term	Costs	—	—
	Energy sources	Save costs by achieving GHG emission reductions and earning profits from the sale of carbon credits	Low	Mid- to long-term	Sales	—	—
Robustness	Maintain and increase sales volume by strengthening resilience	Low	Mid- to long-term	Sales	—	Med	

## Future measures

Classification	Event	to 2025	to 2030	to 2050	
Transition risks	Policy and regulations	Increase in costs due to introduction of carbon pricing	Energy saving/higher efficiency of plant ancillary facilities	Energy saving/higher efficiency of plant ancillary facilities (plan to continue these initiatives)	
		Increase in costs due to energy conservation and GHG emissions reduction initiatives			
	Technologies	Increase in R&D costs to maintain and improve market competitiveness	Install PFC abatement equipment (completed 100% installation in existing facilities)		Install PFC abatement equipment (new facilities)
		Increase in capital investment costs due to increase in production volume and transition of production facilities			
	Markets	Decrease in sales due to changes in customer demand	Promote electrification at production sites		
		Decrease in demand due to social changes associated with climate change	Convert electricity used at domestic and overseas production sites to renewable energy (Targets: FY2030 65%; FY2050 100%)		
Increase in electricity costs due to higher electricity demand in society as a whole		Consider making annual contracts as a countermeasure to rising prices of minerals			
Reputation	Increase in material procurement costs due to a shortage of resources including rare metals				
	Loss of customer reputation due to inadequate response to climate change	Continue updating and upgrading of disclosure content through dialogues with shareholders and responding to CDP			
Physical risks	Acute	Damage to production facilities or production stagnation due to severe wind and flood damage	Establish alternative production network for substrates (8 sites)	Consider production outsourcing for automotive products	
		Stagnation of raw material procurement due to supply chain damage	Create database of primary suppliers	Expand database coverage to secondary suppliers	
		Increase in costs to strengthen measures against natural disasters	Multiple purchasing of auxiliary materials		
Chronic	Increase in energy costs due to rising temperatures		Make agreements with suppliers on procurement guidelines in case of emergency		
Opportunities	Products and services	Increase in demand for products that help customers save energy and reduce GHG emissions		Appeal energy saving and miniaturization of products to customers	
		Increase in revenues from entering new markets			
	Markets	Increase in demand for products due to extreme weather and other environmental changes		Continue updating and upgrading of disclosure content through dialogues with shareholders and responding to CDP	
		Increase in revenues from gaining reputation among customers and investors			
	Resource efficiency	Decrease in costs by promoting energy conservation		Secure human resources with expertise in semiconductors	
Energy sources	Save costs by achieving GHG emission reductions and earning profits from the sale of carbon credits		Utilize LCA and other scientific methods and various calculation tools		
Robustness	Maintain and increase sales volume by strengthening resilience				

\*1 Severity: The degree of “high,” “medium,” or “low” is evaluated by considering the “likelihood of occurrence” and “degree of impact” of climate-related risks and opportunities.

\*2 Occurrence: “Short-term” is expected to occur between 2022 and 2025, “Medium-term” between 2026 and 2030, and “Long-term” between 2031 and 2050.

\*3 Impact: “Small” indicates a financial impact of 1 billion yen or less, “medium” indicates a financial impact of more than 1 billion yen but less than 10 billion yen, and “large” indicates a financial impact of more than 10 billion yen. The impact of risks and opportunities that are difficult to estimate are qualitatively evaluated and shown as “-”.

\* Explained in the Glossary

## Climate Change-Related Disclosure in Accordance with the TCFD Recommendations

ROHM will take various measures to strengthen its management in light of the identified risks and opportunities and their impacts. Specifically, in order to mitigate risks, ROHM will continue its efforts to reduce GHG emissions throughout the entire value chain, including suppliers, and will also

strengthen its BCP measures. Additionally, in order to maximize the opportunities identified, we will strengthen R&D and sales of products that contribute to decarbonization, such as components for electric vehicles, and air-conditioning products.

### Risk Management

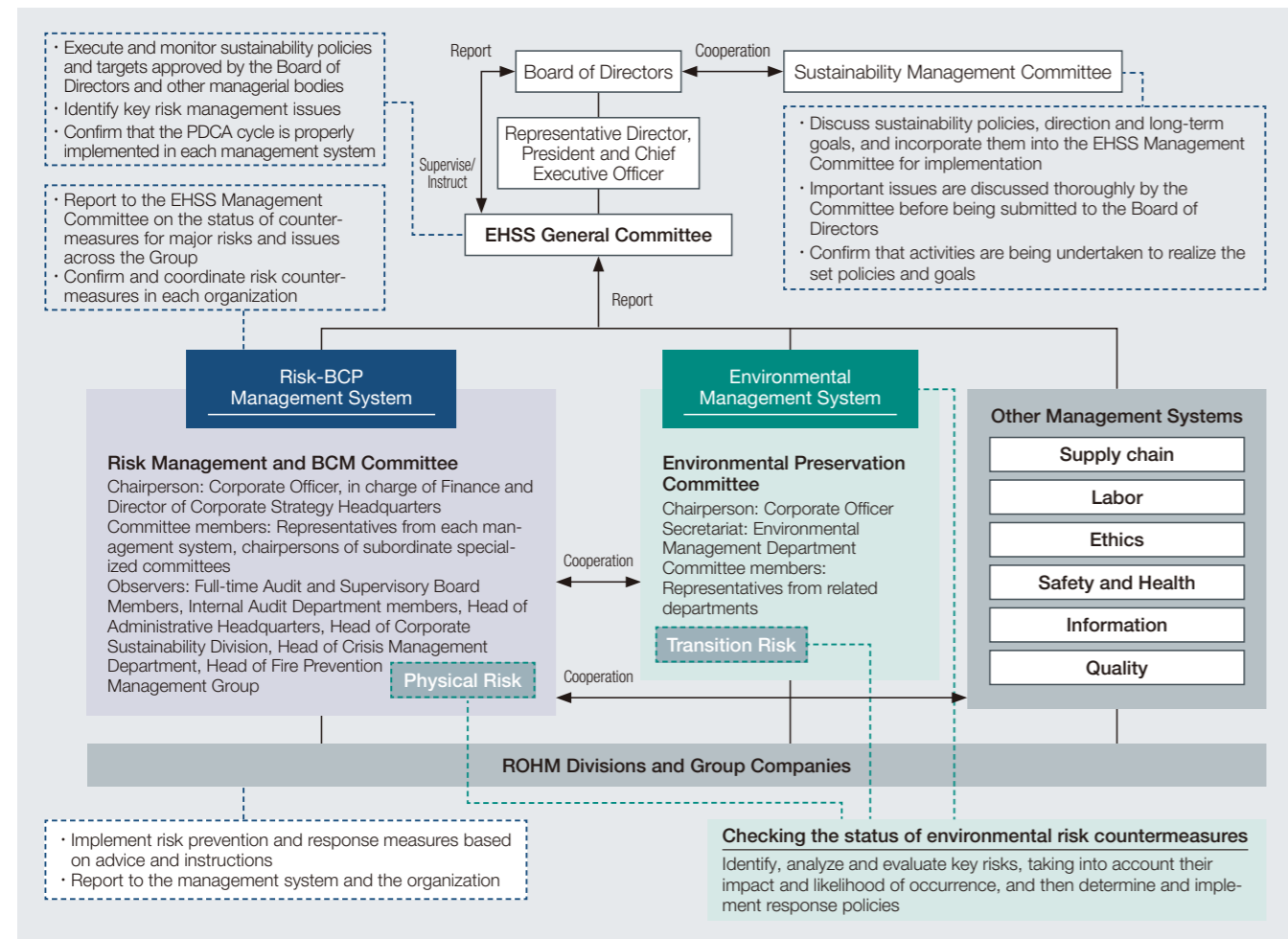
ROHM oversees and manages all significant risks related to business continuity in the Risk Management and BCM Management System under the umbrella of the EHSS General Committee, which is chaired by the director in charge of administration. In addition, the Environmental Management System identifies all risks related to the environment, including those with a long-term perspective.

Among these risks, "climate change" was identified as a significant risk, and in FY2021, we launched a project involving the entirety of ROHM Co., Ltd., and the Group to identify and analyze risks in multiple scenarios in accordance with the TCFD framework. In our risk management structure, the risk of "climate change" is broken down into physical and transition risks. Physical risks are governed by the Risk Management and BCM

Committee, which comprises cross-divisional organizations with participation of all company divisions, including business units and oversees risk management and the business continuity management system. Transition risks are governed by the Environmental Preservation Committee, which oversees the Environmental Management System. Both committees identify critical risks by considering their impact and likelihood of occurrence and based on analysis and assessment of each risk, they determine and implement response policies.

In addition, both committees oversee the risk management system and report to the EHSS General Committee, which is composed of those responsible for each management system. These committees also formulate BCPs to handle potential risk emergence and ensure that all Group companies are aware of the plans.

Risk Management Structure



### Indicators and Targets

ROHM is promoting environmental management in Japan and overseas based on the "ROHM Group Environmental Vision 2050" formulated in April 2021, aiming to achieve net zero GHG emissions and zero emissions by FY2050 to reduce its environmental impact. As one of the specific measures, we announced our Medium-Term Management Plan "Moving Forward to 2025," in May 2021 and we presented a plan which calls for 100% of electricity used in all business activities in Japan and overseas to be derived from renewable energy sources (hydroelectric, geothermal, solar power) by FY2050. Based on this Medium-Term Management Plan, we are now gradually increasing the amount of renewable energy we use, and in FY2021, we were using 100% renewable energy for our main domestic offices (Kyoto Station Building and Shin-Yokohama Station Building) and for our main SiC wafer manufacturing processes (Germany Plant and new SiC building at Chikugo Plant in Fukuoka, Japan). In addition, from FY2022, we have been using 100% renewable energy sources outside Japan, including the Thailand Plant, our main manufacturing site overseas, from FY2022. The Philippines Plant has also been powered using 100% renewable energy from FY2023.

Environmental targets for FY2030 have been established for each of the three priority issues of "Climate Change," "Resource Recycling," and "Coexistence with Nature," as

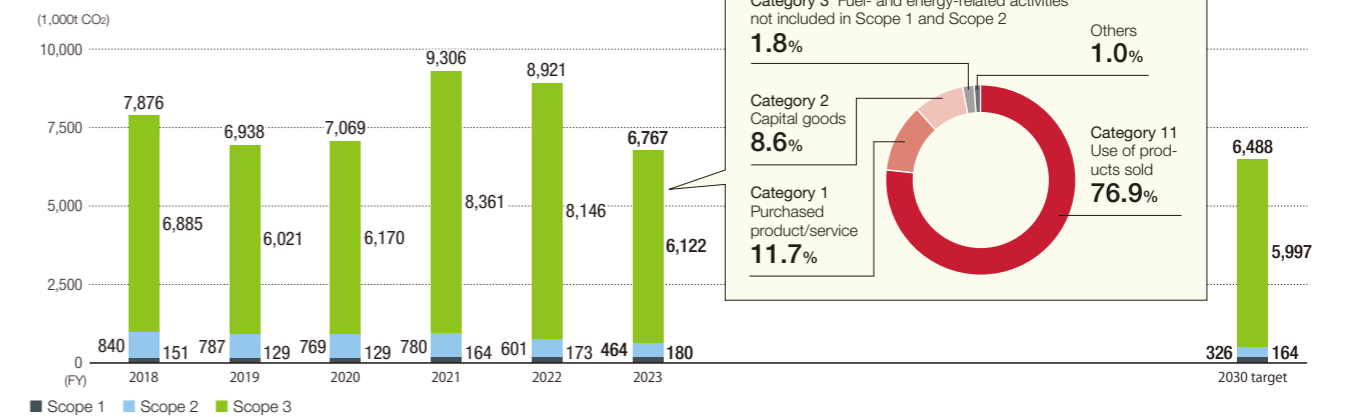
stated in the "ROHM Group Environmental Vision 2050". For climate change, we have set the following targets: reducing GHG emissions from business activities (Scope 1 and 2) by at least 50.5% in FY2030 compared to FY2018, reducing GHG emissions per unit of production (Scope 1 and 2) by at least 45%, and reducing emissions from the use of products sold (Scope 3, Category 11) by at least 15% in FY2030 compared to FY2018. These targets were recognized as having a scientific basis (1.5°C level) for achieving the 2°C target of the Paris Agreement, and in February 2022, ROHM received certification from the Science Based Targets Initiative (SBTI).

In addition, ROHM's renewable energy introduction plan aims to achieve a renewable energy introduction ratio of 65% in FY2030 and 100% in FY2050 for the electricity used in its business activities. In April 2022, we joined RE100 (100% Renewable Electricity), an international corporate initiative that aims for 100% renewable energy for electricity used in business operations.

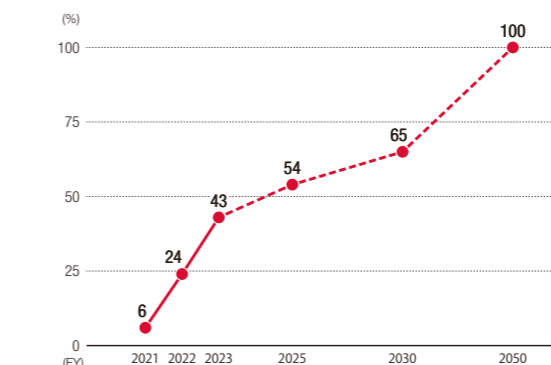
In addition to climate change, we are also working to promote resource recycling by improving our water recovery rate and setting targets related to waste emissions per unit of production.



GHG Emissions



Approach to 100% Renewable Energy



Achievements and Plans for Renewable Energy Installations

- FY2024 to FY2026**  
ROHM Apollo Co., Ltd. Hirokawa Plant  
LAPIS Semiconductor Co., Ltd. Miyazaki Plant
- FY2026 to FY2030**  
Plan to gradually introduce the system at the remaining sites overseas and in Japan