
Tamron Co., Ltd.

- Disclosures Based on the TCFD Recommendations -

Governance

TAMRON recognizes climate change as a critical management issue that impacts our business operations and medium- to long-term corporate value.

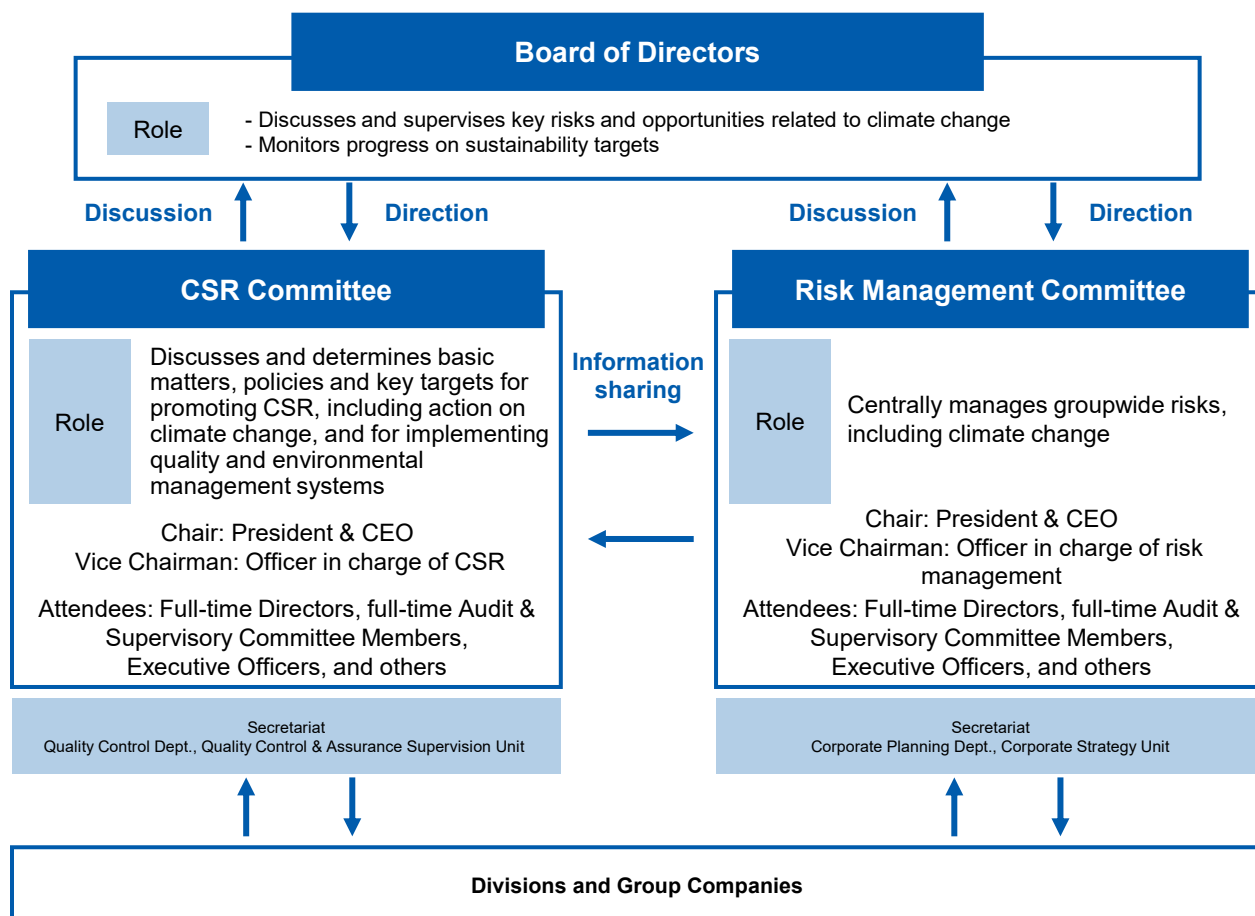
Policies, targets and important matters related to sustainability, including climate change, are deliberated and decided by the CSR Committee. The CSR Committee is chaired by the President & CEO, with the Director in charge of CSR acting as Vice Chairman. It is composed mainly of full-time Directors, full-time Audit & Supervisory Committee Members and Executive Officers. The Quality Control Department of the Quality Control & Assurance Supervision Unit serves as secretariat.

The CSR Committee works with the Risk Management Committee, Information Management Committee and Compliance Committee to understand risks and opportunities related to sustainability issues, including climate change, and to strengthen our management systems.

Convened every quarter, the CSR Committee discusses and determines basic matters, policies and key targets for promoting CSR (sustainability), including action on climate change, and implementing quality and environmental management systems. It also continuously monitors progress on key CSR targets, including Environment Vision 2050, and gives feedback to management on proposed improvements and countermeasures where necessary.

The committee's findings and important matters are reported to the Board of Directors by the CSR Committee once a year, and Directors uses this report as a basis for discussing key risks and opportunities related to climate change and monitoring progress on sustainability targets, thereby fulfilling their responsibility to take action on climate change and exercising an appropriate supervisory function.

Ultimate responsibility for action on climate change rests with the President & CEO and the Director in charge of CSR, who drive action to understand and address risks and opportunities across the Group under the supervision of the Board of Directors and CSR Committee. Additionally, we strive for continuous improvement in our governance system and disclosures in light of dialogue with stakeholders and advice from outside experts and have included action on climate change in our ESG/sustainability strategy under the Medium-term Management Plan as we aim to increase our corporate value.



■ Strategy

Significance of climate change initiatives

The TAMRON Group recognizes the impact of climate change on its business activities as an important management issue, and we are making disclosures based on the TCFD recommendations. We recognize that accurately understanding climate-related risks and opportunities and developing a sustainable growth strategy will help us improve our corporate value and fulfil our social responsibility. As part of these efforts, we have conducted analyses using two scenarios: the 1.5°C scenario and 4°C scenario. Through this, we have assessed the impact of factors such as changes in government policies and regulations and extreme weather events on our value chain, and we are working to minimize risks and maximize opportunities.

Analysis process

The TAMRON Group may receive the impact or be affected by transition risks and physical risks associated with climate change on its business activities across different timeframes (short-term, medium-term and long-term). The TAMRON Group therefore identified and assessed climate change risks and opportunities in our business operations and value chain based on scenarios that are relevant to our business strategies.



Selection and analysis of climate change scenarios

When considering scenario analysis, the TAMRON Group referred mainly to the materials issued by the IEA and IPCC and established two scenarios. In recent years, the goal to limit warming to 1.5°C above pre-industrial levels has become the mainstream benchmark due to international guidelines and demands from stakeholders. In light of this, the TAMRON Group will also aim to continuously review our climate policy, including risks and opportunities and mitigation measures, every one or two years, to reflect changes in climate change-related parameters and the business environment.

	1.5°C scenario	4°C scenario
Envisaged society	A society where bold policies and technological innovation are promoted to limit warming to 1.5°C before the end of the century, and where social change and tighter legal regulation resulting from the transition to a decarbonized society may have a significant impact on business activities	Measures to address climate change will not go beyond the current level and the global average temperature will rise about 4°C above the pre-industrial level by around the end of this century. A society where risks from increasingly severe extreme weather events and rising sea levels, categorized under physical risks, will have a greater impact
Reference scenarios	- IEA: Net Zero Emissions by 2050 Scenario	- IPCC RCP8.5 - IPCC (AR6) SSP5-8.5

Identified climate change risks and opportunities

Scenario	Category	Factors	Impact on business	Time of occurrence	Extent of impact	Countermeasures	
1.5°C Scenario	Transition risks	Laws and regulations and government policies	Rising cost of GHG emissions	Increase in cost of energy used in manufacturing due to the introduction and strengthening of carbon taxes and emissions trading systems	Medium term	Large	- Promotion of energy savings through improvement in the efficiency of production processes - Reduction in energy load through upgrading to energy-saving equipment - Power stabilization through an increase in the percentage of renewable energy procurement
				Higher costs incurred under cap & trade system when emissions exceed cap limit and when credits are purchased to offset emissions	Medium term	Medium	- Maximization of reduction effect through tighter emissions management - Optimization of costs through reduction measures and optimal allocation of credits - Promotion of reduction in emissions through investment prioritizing key sites
			Regulation, etc., of existing products and services	Higher costs due to ban on use of specified chemicals and materials as a result of tighter environmental regulations, necessitating procurement of alternative materials	Medium term	Large	- Mitigation of risks through verification of supplier compliance with regulatory requirements - Reduction of environmental impact through technology research into alternative materials
		Market	Changes in customers' behaviors	Loss of sales opportunities due to decline in competitiveness of existing products and existing production technologies as a result of customer sustainability requirements and tighter market norms	Medium term	Large	- Achievement of competitiveness through the development of sustainability specifications that meet customer requirements - Enhancement of market competitiveness through the development of products with a low environmental impact - Improved productivity through the utilization of technologies that conserve resources and increase efficiency
			Uncertainty of market signals	Increase in cost of capital due to overinvestment as a result of difficulty predicting changes in climate-related policies and market trends	Medium term	Medium	- Refinement of investment decisions through assessment of investment returns by scenario - Mitigation of risks through gradual/installment investment
		Technology	Replacement of existing products and services with low-emission options	Higher costs due to the review of product development and manufacturing processes and raw materials in connection with the replacement of existing technologies with low-emission technologies	Medium term	Medium	- Improvement of development efficiency through cost reduction at the prototype stage - Increase in manufacturing efficiency through process improvements
		Reputation	Change in consumer preferences	Damage to reputation among stakeholders as a result of inadequate lineup of environmentally-friendly products	Medium term	Medium	- Improvement in strategic alignment through review of competition and market requirements - Strengthening of strategy through integration of environmental considerations into roadmap - Establishment of basis for evaluation through development of environmental performance indicators
			Rising concerns of stakeholders	Damage to corporate value and brand image due to inability to meet increasingly sophisticated requirements of ESG rating agencies, investors, customers and employees	Short term	Medium	- Strengthening of governance through development of ESG policies - Increase in transparency through improvement in accuracy of non-financial disclosures - Building of trust through increased dialogue with stakeholders
4°C Scenario	Physical risks	Acute	Impact of extreme weather events such as typhoons and floods	Suspension of production/delivery delays as a result of suspension of operations/damage to equipment caused by the flooding/inundation of our production sites, as well as increased expenditure for recovery	Medium term	Large	- Mitigation of flood risk through BCP and optimization of equipment layout - Limitation of damage through relocation of important equipment to higher elevations and flood prevention measures
				Suspension of production/delivery delays as a result of suspension of operations/damage to equipment caused by the flooding/inundation of supplier production sites, as well as increased expenditure for recovery	Medium term	Medium	- Stabilization of procurement through verification of supplier BCPs - Strengthening supply resilience by securing safety stock of key materials - Mitigation of supply risk through diversification of suppliers
		Chronic	Rising average temperature	Rising energy costs associated with increased air conditioning loads at plants	Medium to long term	Medium	- Improvement in air-conditioning efficiency through heat-shielding measures and zoning - Alleviation of air conditioning loads through enhancement of plant insulation and introduction of high-efficiency HVAC systems - Improvement in resilience to climate impacts through equipment upgrades
1.5°C scenario	Opportunities	Resources Efficiency	Use of more efficient production and distribution processes	Reduction of energy costs through introduction of energy-saving equipment and optimization of production processes	Short term to medium term	Medium	- Introduction of energy management systems to give visibility over energy consumption and promote improvement - Reduction of electricity usage through optimization of production lines - Reduction of energy load through upgrading to high-efficiency production equipment
		Energy sources	Use of energy sources with lower emissions	Stabilization of electricity costs and avoidance of future carbon taxes through the introduction of renewable energy	Medium term to long term	Large	- Stabilization of electricity costs and avoidance of carbon taxes through an increase in the percentage of procurement of renewable energy - Reduction of costs in the long term through the introduction of solar power
		Products and services	Change in consumer preferences	Growing demand for environmentally-friendly products as a result of an increase in environmentally-conscious consumers	Medium term	Medium	- Improvement in added value through the conservation of resources - Capture of market share through enhancement of environmentally-friendly product lineup - Increase in marketing stressing environmental performance
			Development of risk solutions for climate adaptation	Expansion in sales of weather-sealed/high durability surveillance cameras and lenses in response to growing demand for flood and disaster monitoring as a result of climate change	Medium term	Medium	- Enhancement of lineup of weather-sealed, high-durability products - Promotion of product development for disaster monitoring and disaster management applications
		Resilience	Enhancement of response to information disclosure requirements	Establishment of relationships of trust with investors and customers and achievement of advantage in capital markets through active disclosure of climate change-related information	Short term	Medium	- Sophistication of climate information disclosures based on TCFD recommendations - Strategic strengthening of sustainability messaging - Increase in investor engagement through improvement in transparency of non-financial information
			Substitution/diversification of resources	Stable procurement and establishment of resilient supply chain through reduction of dependence on specific suppliers	Medium term	Medium	- Design of procurement strategy to build a resilient supply chain - Establishment of stable supply system through optimization of inventory management for key materials - Diversification of supply risk through diversification of suppliers

<Legend>

Time frame Short term: Within 1-3 years, Medium term: Up to 2030, Long term: Up to 2050
Extent of impact Major: Business is suspended or significantly reduced
Moderate: Business is partially impacted
Minor: Hardly any impact

Business impact assessment

(1) Transition risks

We estimated the impact (additional cost) of the introduction of carbon taxes on the Group's greenhouse gas emissions, based on information provided by the International Energy Agency (IEA). Under the 1.5°C warming scenario, the cost burden is expected to be the greatest. If we multiple the difference between Scope 1 and 2 emissions assuming achievement of our FY2030 reduction target and the increased emissions under the status quo by the carbon tax price per ton under the 1.5°C warming scenario, the impact is around 340 million yen.

Risks	Scenario	Financial impact (million yen)		
		Status-quo outcome	Achievement of reduction target	Financial Impact
Introduction of carbon tax	1.5°C	1,033	689	343

■ Calculation Method

(Scope 1 and 2 emissions under the status quo - Scope 1 and 2 emissions assuming achievement of reduction target) × Carbon tax price as of 2030 (price per ton indicated in IEA World Energy Outlook 2024)

(2) Physical risks

We used the projections of future climate provided by the Intergovernmental Panel on Climate Change (IPCC) to estimate the reduction in sales and damage to assets in the event that sites in locations highlighted in current flooding and high tide hazard maps were flooded or inundated due to high tide. Sites included in the calculation were production sites where the impact of river flooding or high tide flooding is likely to have a major financial impact and we estimated financial impact assuming occurrence in 2030.

Risks	Scenario	Financial impact (million yen)		
		Current status	4°C scenario	Financial Impact
Impact of flooding/inundation at production sites	4°C	243	487	244

■ Calculation Method

We estimated damage to products manufactured at production plants due to climate change with reference to the Manual for assessing physical risks based on TCFD recommendations —Assessing inundation risk due to flooding in light of climate change—.

■ Risk Management

The TAMRON Group positions the various risks and opportunities stemming from climate change as important elements of its management strategy. Climate change risks are identified, assessed and managed mainly by the Risk Management Committee, which is chaired by the President & CEO. Based on the groupwide risk management policy, the Risk Management Committee identifies and assesses business risks extracted by each division, and assesses the degree of impact and likelihood of occurrence using a 5-level scale to determine the severity of risks and countermeasures for material risks. Priority action themes and policies for addressing risks are reported to the Board of Directors by the Risk Management Committee, and following discussion by the Board of Directors, the committee or each division assumes responsibility for considering and implementing countermeasures depending on their contents.

Risks that affect the entire TAMRON Group are shared and reviewed once a year by the Risk Management Committee, and material business risks that affect the Group at a global level are centrally managed as groupwide risks.

The Board of Directors receives reports from the Risk Management Committee, and periodically supervises the management status of material business risks, including climate change risks. Through such processes, we continuously assess the potential impact of climate change on our business activities and corporate value and implement appropriate countermeasures to strengthen the management foundations.

■ Indicators and Targets

TAMRON has set CO₂ emissions—which account for approximately 98% of our greenhouse gas emissions—as one of our key climate change indicators, and manage targets related to CO₂ emissions. We have set out Environmental Vision 2050, and aim to achieve zero CO₂ emissions in our business activities by 2050, and have also set the interim target of reducing CO₂ emissions by 30% compared with 2015 levels by 2030.

We have also continued to calculate indirect emissions (Scope 3, hereafter). Category 1 (emissions produced from all products purchased or acquired) account for a large percentage of Scope 3 emissions, roughly 70% of the total. Going forward, we will consider reductions with a view to setting targets for Scope 3 emissions.

Targets and Results

Key CSR Issues	FY2025 Results	Targets
Reducing CO ₂ emissions	CO ₂ emissions (Scope 1 and 2) - 21.9% reduction (2015 comparison) (Target: 15%)	CO ₂ emissions (Scope 1 and 2) 2025: 15% reduction compared with FY2015 levels 2026: 18% reduction compared with FY2015 levels 2030: 30% reduction compared with FY2015 levels 2050: 100% reduction compared with FY2015 levels