Climate-related information disclosure based on TCFD recommendations

1. Governance

Governance structure for climate-related risks and opportunities

Based on the SCREEN Group Code of Risk Management and related rules and regulations, the Group employs a structure under which it both identifies business risks and carries out initiatives toward their mitigation and the holding company (HD) ascertains the state of risk management Groupwide.

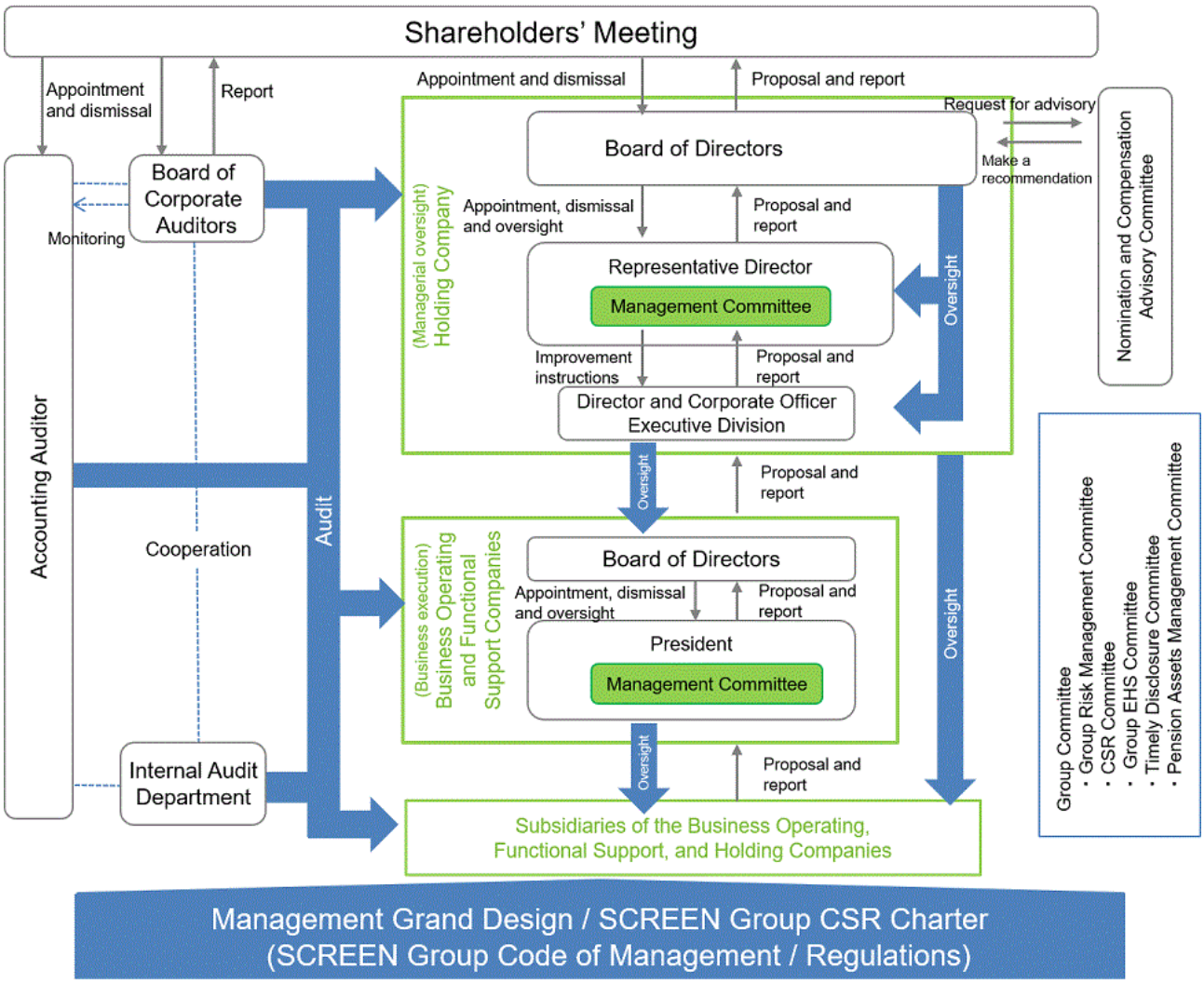
In order to mitigate risks that could have negative impacts on corporate value of the SCREEN Group, the Group Risk Management Committee, which is chaired by the President and CEO and is delegated authority under the oversight of the Board of Directors, reviews risks including climate-related risks, from a bird's-eye view across the entire SCREEN Group, identifies material risks, and decides on courses of action for risk management. In addition, the CSR Committee, also chaired by the President and CEO, discusses environmental and social issues including climate-related risks and opportunities, sets targets, and manages progress. Each committee meets at least once every half-year and reports its decisions to the Board of Directors as necessary.

In the fiscal year ending March 31, 2022, we launched a TCFD Compliance Project with the support of outside experts and implemented scenario analysis and reevaluation of risks and opportunities regarding the semiconductor production equipment (SPE) business. The results of this project's activities were reported to the Board of Directors.

Roles in the climate-related governance structure

The Group strives to enhance corporate governance for the Group as a whole under the management of five Group committees. Each committee conducts monitoring and discussions according to the purpose, and reports to designated organizations such as the Board of Directors as appropriate. Climate-related matters reported to the Management Committee and the Board of Directors in the fiscal year ending March 31, 2022 included the TCFD Compliance Project, support for TCFD Recommendations, participation in the TCFD Consortium, and introduction of renewable electricity at the head office, Hikone Plant, and Taga Plant.

Corporate governance structure



2. Strategy

Climate-related risks and opportunities

In the fiscal year ending March 31, 2022, we assessed climate-related transition and physical risks for the semiconductor production equipment (SPE) business, identified material risks, and conducted scenario analysis. We also identified climate-related business opportunities. We plan to broaden the subjects of evaluation to include other businesses as well in the future.

Climate-related risks and opportunities that is material

Material risks and opportunities			Impacts expected
Transition Risks	Policy and Legal	Orders and regulations on existing products and services	Costs arising from restructuring supply chains including revising procurement of raw materials and from revising product design and manufacturing processes
	Technology	Investment in new technologies (Impact on technological development)	Inability to develop new technologies to reduce energy consumption or extremely high costs of transitioning to new technologies to increase energy efficiency
	Market	Changes in customer behavior (Product needs)	Reduction in orders received and loss of opportunities due to inability to develop semiconductor production equipment with reduced energy consumption and GHG emissions in response to demand for lower-carbon products
		Changes in customer behavior (Requests for supply-chain emissions reduction)	Costs arising in connecting with revisions to raw materials due to the need to reduce GHG emissions from raw materials used in addition to reducing emissions at our own manufacturing facilities
	Reputation	Changes in reputation from customers	Risk of reductions in orders received due to failure to satisfy the levels that customer require from suppliers and a worsening reputation among stakeholders, as a result of delays in reducing our own GHG emissions
		Securing outstanding human resources	Difficulty in hiring human resources in research and development and other fields due to delays in responding to climate change
Opportunities	Products and Services	Development of new products and services through R&D and technological innovation (Contributing to energy conservation to customers' manufacturing processes)	Greater need for manufacturing equipment with lower energy consumption, and growth in sales in response to such needs Increased opportunities to receive orders by offering products with lower power consumption, able to contribute better than the competition to reducing customers' Scope 2 emissions
		Responding to customer requests for ESG compliance	Growth in sales of semiconductor production equipment as a result of an improved brand image based on responding to climate change
		Increasing severity and frequency of extreme weather events (The impact of changes in water availability on customers)	Growth in sales due to increased sales opportunities for semiconductor-production equipment that uses less water and chemicals and semiconductor-production equipment equipped with water-recycling systems

	Market	Development of new products and services through R&D and technological innovation (Growth in demand due to higher-performance semiconductors and lower power consumption. Data centers, 5G mobile communications, AI applications)	Growth in sales of semiconductor-production equipment capable of use in manufacturing state-of-the-art semiconductors to contribute to acceleration of energy conservation through development of miniaturization and other technologies
		Manufacture and sale of products and services (Growth in demand for power semiconductors to contribute to energy conservation)	Growth in sales of semiconductor-production equipment used in manufacturing power semiconductors

Scenario analysis assumptions

We assessed the financial impact of 2030 using 3°C and 1.5°C scenarios for material climate-related risks and opportunities identified for the semiconductor production equipment (SPE) business, which is the Group's main business.

In consideration of efforts to keep the increase in global average temperature aimed at by the Paris Agreement, which is an international framework for measures against global warming from 2020 onwards, to well below 2°C above pre-industrial levels and pursuing efforts to 1.5°C, the Group has chosen a 3°C scenario (STEPS: Stated Policies Scenario) under which current conditions are maintained with no progress on countering climate change and a 1.5°C scenario (NZE: Net Zero Emissions by 2050 Scenario) under which progress is made on countering climate change.

Scenario analysis process

Scenario analysis was conducted through the following steps by a project team consisting of the persons responsible in the semiconductor production equipment (SPE) business and the holding company (HD), with the participation of outside experts. In doing so, explanations were provided to SPE and HD management and courses of actions were confirmed repeatedly.

1. Assessments of the materiality of climate-related risks and opportunities in the semiconductor production equipment (SPE) business
2. Consideration and creation of scenarios
3. Assessments of risks and opportunities and financial impact, based on the scenarios
4. Consideration of countermeasures

In consideration and preparation of scenarios, in addition to multiple existing scenarios published by the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC), we envisioned the situation in 2030 with reference to many sources of information including “Japan’s Climate at the End of the 21st Century” and the “2018 Integrated Report on Climate Change Observation, Forecasting, and Impact Assessment: Climate Change in Japan and its Impact” from the Ministry of the Environment and the Japan Meteorological Agency and the Ministry of Economy, Trade and Industry’s “Semiconductors Strategy” (June 2021).

Scenario overview

Scenario overview (2030 scenarios)

	3°C scenario	1.5°C scenario
Policy and Legal	- Introduction of carbon pricing (carbon tax, emissions trading) remains partial. - Assumed carbon price: $60	- Carbon pricing (carbon tax, emissions trading) is introduced. Measures to reduce use of plastics expand. - Assumed carbon price: $130
Technology	- Little progress on development of semiconductor-production equipment with lower energy consumption and GHG emissions.	- Development of semiconductor production equipment with lower energy consumption and GHG emissions advances.
Market	- Semiconductor market grows to twice its 2020 size. - Little progress on reduction of emissions associated with use of energy in the semiconductors industry.	- The semiconductor market grows to twice its 2020 size and demand for power semiconductors also grows. - The number of electric vehicles sold is double the number under the 3°C scenario. - Demand for renewable energy grows and prices of renewable energy increase.
Reputation	- Evaluation of climate-change initiatives not considered especially important. - Interest in sustainability among outstanding human resources in the labor market not particularly high.	- Evaluation of climate-change initiatives strengthens. - Workers increasingly want to work at companies that contribute to solutions to social issues including climate change.
Physical risks	- Abnormal weather grows more intense and more frequent. Typhoons strengthen. - Precipitation increases across Japan, and the risk of flooding increases at Hikone Plant and some supplier facilities. - Drought risk may increase in Taiwan or other areas.	

Scenario analysis results

Scenario analysis results and financial impacts

Types of risks and opportunities		Details of risks and opportunities	Financial impact	3°C scenario	1.5°C scenario
Transition Risks	Policy and Legal	Orders and regulations on existing products and services	Increased manufacturing costs	Low	Medium
	Technology	Investment in new technologies (Impact on technological development)	Increased development costs	Medium	Medium
	Market	Changes in customer behavior (Product needs)	Decreased sales	Medium	High
		Changes in customer behavior (Requests for supply-chain emissions)	Increased manufacturing costs	Medium	Medium
	Reputation	Changes in reputation from customers	Decreased sales	Low	Medium
		Securing outstanding human resources	Increased management costs	Low	Medium
Opportunities	Products and Services	Development of new products and services through R&D and technological innovation (Contributing to energy conservation to customers' manufacturing processes)	Increased sales	Medium	High
		Responding to customer requests for ESG compliance	Increased sales	Low	Medium
		Increasing severity and frequency of extreme weather events (The impact of changes in water availability on customers)	Increased sales	Medium	Medium
		Development of new products and services through R&D and technological innovation (Growth in demand due to higher-performance semiconductors and lower power consumption. Data centers, mobile communications, AI applications)	Increased sales	High	High
		Manufacture and sale of products and services (Growth in demand for power semiconductors to contribute to energy conservation)	Increased sales	Medium	Medium

Financial impacts (estimated for 2030): Low; less than 2%, Medium; 2% or more but less than 10%, High; 10-30%

Financial impact assessment

As awareness of climate change increases, the environmental impacts of products are attracting increasing attention. Many customers prefer products that have lower carbon footprints. We anticipate that there will be increasing demand for semiconductor products that consume less power and emit less CO_2 as a result of the operation of our products at the sites where they are sold. It is expected that decreases in orders received and opportunity losses due to an inability to develop products with lower energy consumption and GHG emissions in response to these market trends could have the impact of reducing sales under the 1.5°C scenario.

On the other hand, the ability to contribute to energy conservation at customer business facilities through introduction of new products and services through R&D and technological innovation could be expected to lead to increased sales.

In addition, growing need for investment in a digital and green society under the 1.5°C scenario is a major opportunity for increased sales of semiconductor-production equipment capable of producing state-of-the-art semiconductors and semiconductor-production equipment used in producing power semiconductors. Manifestation of these opportunities can be expected to result in further sales growth.

Climate-change initiatives and responses

To enable it to offer environmental performance that satisfies customers' demands, the Group is striving to reduce GHG emissions during product use in addition to reducing GHG emissions at business sites. Specifically, it is striving to reduce GHG emissions including those in the supply chain under the reduction targets for 2030 of reducing CO_2 emissions from business activities (Scope 1 + Scope 2) and reducing CO_2 emissions from the use of sold products (Scope 3, Category 11), as certified Science Based Targets (SBT).

As opportunities, we expect increasing needs for investment in a digital and green society in addition to increasing needs for semiconductor production equipment with lower levels of energy, water, and chemicals consumption. Considering maintenance and expansion of the market share of the semiconductor production equipment (SPE) business's main products of cleaning systems to be important to manifestation of these opportunities, we are striving to enhance the competitive strengths of cleaning systems.

While the impact of physical risks is expected to be low as of 2030, we are making progress on deployment of an effective Business Continuity Plan (BCP) reflecting our view that it is vital to have in place a structure for swift recovery in order to fulfill our responsibilities to supply customers with products and services in response to risks that could impede business continuity, including those of increasingly severe natural disasters such as earthquakes, typhoons, and flooding, infectious-disease pandemics, and accidents at plants.

3. Risk management

Climate-related risk management process

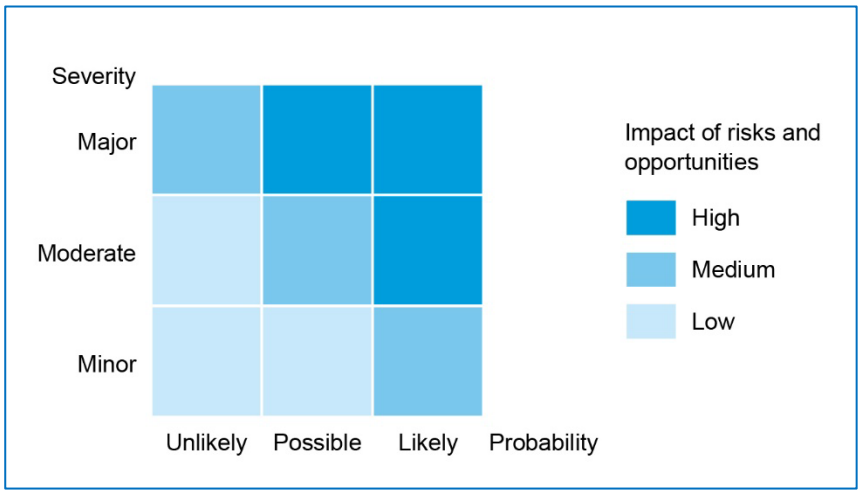
The Group Risk Management Committee reviews risks including climate-related risks, from a bird's-eye view across the entire SCREEN Group, identifies material risks, and decides on courses of action for risk management in the Group.

In the fiscal year ending March 31, 2022, climate-related risks and opportunities were identified comprehensively for each of the value-chain activity items of product planning, raw-materials procurement, purchasing logistics, manufacturing, shipping logistics, sales and marketing, after-sales service, use of products by customers, and product waste disposal and recycling and each of the support activities of technological development and general administration (accounting, human resource management, general affairs, information management, etc.) under TCFD Compliance Project activities.

Then, to identify which of the climate-related risks and opportunities identified above constitute material risks and opportunities to the Company, each risk and opportunity was assessed in a 3 x 3 matrix based on its severity and probability.

1. Identification of climate-related risks and opportunities for each activity item in the value chain
2. Evaluation of the probability of occurrence of climate-related risks and opportunities and the severity of impacts
3. Identification of material climate-related risks and opportunities (those of High in impact)

Climate-related risk and opportunity evaluation standards



Climate-related risk-management implementation structure

The Group reflects and responds to climate-related risks and opportunities identified as material through the above process in Group strategies as corporate risks, through a structure based on risk management in the Group Risk Management Committee and oversight by the Board of Directors.

4. Metrics and targets

Climate-change related metrics and targets

Considering reducing GHG emissions based on the framework of the Science Based Targets Initiative (SBTi) and contributing to realizing a zero-carbon society through our businesses to lead to reduced risks and increased opportunities, the Group strives to reduce GHG emissions with the targets of reducing CO_2 emissions from business activities (Scope 1 + Scope 2) and reducing CO_2 emissions from the use of sold products (Scope 3, Cat.11), as certified Science Based Targets (SBT).

Metrics and targets

Metrics	Target year	Targets
Reduce CO_2 emissions from business activities (Scope 1 + Scope 2)	2030	30% reduction (vs. FY2019) 35.4 thousand metric tons CO_2e
Reduce CO_2 emissions from the use of sold products (Scope 3 Cat.11)	2030	20% reduction (vs. FY2019) 2,082 thousand metric tons CO_2e

We also have interim targets for the fiscal year ending March 31, 2024 in Sustainable Value 2023.

Sustainable Value 2023 targets

Metrics	Target year	Targets
Reduce CO_2 emissions from business activities (Scope 1+Scope 2)	FY2024	10% reduction (vs. FY2019) 45.5 thousand metric tons CO_2e
Reduce CO_2 emissions from the use of sold products (Scope 3 Cat.11)	FY2024	8% reduction (vs. FY2019) 2,395 thousand metric tons CO_2e

Linkage of responses to climate change to executive remuneration

Indicators used to measure the amounts of performance-linked remuneration include indicators related to the environment and safety, as indicators of increasing social value, in addition to operating profit margin and ROE. The degree of achievement of each indicator is scored for use in deciding on amounts of performance-linked remuneration. Targets regarding responding to climate change are established in accordance with Sustainable Value 2023.

GHG emissions performance

GHG emissions are calculated in accordance with the GHG Protocol. In the fiscal year ending March 31, 2022, Scope 1 + Scope 2 emissions were reduced by 11% compared to the base year. Scope 3 Cat.11, on the other hand, saw only a slight reduction in emissions from the base year due to a significant increase in product shipments.

Scope 1 and Scope 2 performance (metric tons CO_2e)

Fiscal year end	March 2019 (SBT base year)	March 2020	March 2021	March 2022
Scope 1	11,617	12,594	10,614	11,023
Scope 2	38,949	42,198	40,056	33,638
Scope 1 + Scope 2	50,566	54,792	50,670	44,661

Note: Scope 2 is market-based.

Scope 3 performance (thousand metric tons CO_2e)

Fiscal year end	March 2019 (SBT base year)	March 2020	March 2021	March 2022
Scope 3	3,194	2,597	2,633	3,160
Use of sold products (Scope 3 Cat.11)	2,603	2,149	2,218	2,586