

## 6. Responding to Climate Change (Addressing the TCFD Recommendations)

Nissha Group publicly endorsed the recommendations made by the Task Force on Climate-related Financial Disclosures (TCFD) in January 2022.

The Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board (FSB) at the request of the G20 to examine climate-related disclosures and financial institutions' responses. The TCFD's final report, published in June 2017, recommends that companies take measures to understand and address climate change-related risks and opportunities as a management issue. The need for disclosure in line with the framework of the TCFD recommendations is clearly stated in the June 2021 revision of Japan's Corporate Governance Code and in the January 2023 revisions to the Cabinet Office Ordinance on the Disclosure of Corporate Affairs, and analysis of the financial impact of risks and opportunities related to climate change on business is becoming essential.

Using the framework of the TCFD recommendations, we have analyzed the financial impact of risks and opportunities related to climate change on our business. The details of our analysis are outlined below.



### 6-1 Governance

The Group has set out where it wants to be in terms of management by 2030 in the form of our Sustainability Vision (long-term vision). We are aiming to create social value by providing products and services that contribute to solving social issues, and to achieve a 30% reduction in total CO<sub>2</sub> emissions in 2030 (compared to 2020) with a view to carbon-neutral by 2050.

The Nissha Group manages its response to climate change by distinguishing between materiality (risks and opportunities related to the realization of our Sustainability Vision), which are material issues for the Group, and general risks (risks related to smooth business operations).

#### ■ Materialities (Key Issues) Management

Materialities (Key Issues) for the Group are risks and opportunities related to the realization of our Sustainability Vision. Materiality is identified through deliberation and resolution by the Board of Directors meetings and managed by the Sustainability Committee which is chaired by the Chairman of the Board, President and CEO and vice-chaired by the Director of the Board, Executive Vice President (Director of ESG Promotion).

The Sustainability Committee receives and confirms quarterly progress reports on targets (KPIs and action items) related to materialities, including responses to climate change, from business organizations, divisions and the ESG Task Force which handles particularly important material issues. Targets are reviewed annually and updated as necessary, and the set targets and their progress are reported at a Board of Directors meeting once a year.

The Board of Directors oversees the activities of the Sustainability Committee, which manages the targets (key performance indicators and action items) related to materialities, discusses reports from the Sustainability Committee, and gives improvement instructions as necessary.

In addition to reporting progress to the Sustainability Committee, the ESG Task Force discusses the company's response to climate change with the Chairman of the Board, President and CEO and the Director of the Board, Executive Vice President (Director of ESG Promotion) on a quarterly basis.

Important strategic and financial decisions concerning our response to climate change are made by the Chairman of the Board, President and CEO within the scope of his authority. In order to make decisions appropriately, the Chairman of the Board, President and CEO and the Director of the Board, Executive Vice President (Director of ESG Promotion) receive information on climate change through study sessions and training by outside experts.

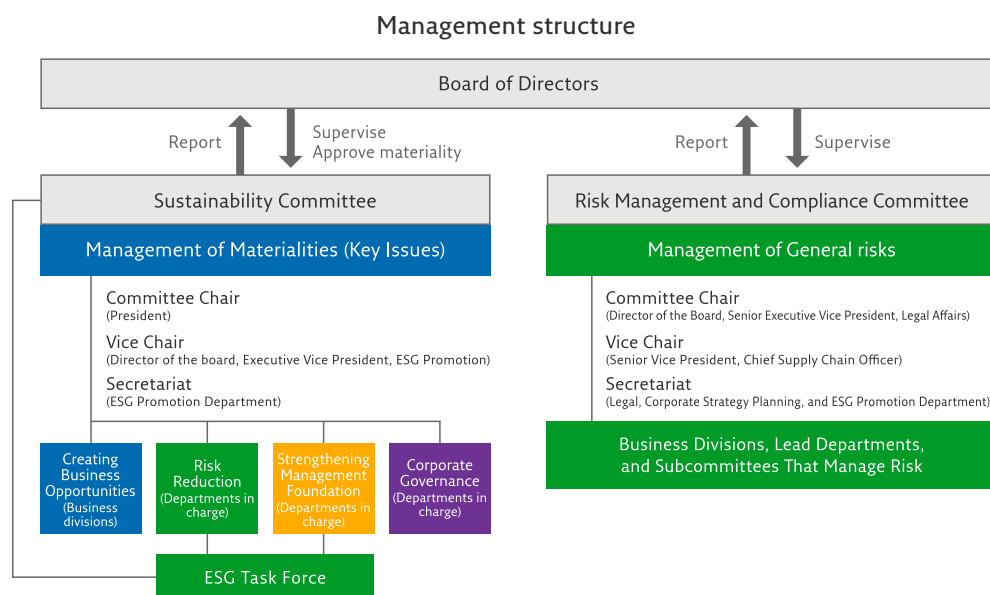
#### ■ General Risks Management

General risks related to smooth business operations are managed by the Risk Management and Compliance Committee, which is chaired by the Director of the Board, Senior Executive Vice President (in charge of legal affairs) and whose members include the Chairman of the Board, President and CEO.

The Risk Management and Compliance Committee manages key risks that are identified, evaluated, and selected from a company-wide perspective. The Committee receives and confirms progress reports from the subcommittees and divisions that manage such risks on a quarterly basis, and reports on its activities to the Board of Directors once a year.

The Board of Directors oversees the activities of the Risk Management and Compliance Committee, discusses reports from the Risk Management and Compliance Committee, and gives improvement instructions as necessary.

The company has selected Business Continuity (natural disasters such as earthquakes, typhoons, and floods) as one of our key risks and includes climate change risk in this category. The Business Continuity Management Subcommittee, which manages such risks, formulates and updates emergency preparedness based on the most recent potential natural disasters and response plans for when a disaster occurs, and reports its activities to the Risk Management and Compliance Committee. The Chairman of the Board, President and CEO and the Director of the Board, Senior Executive Vice President in charge of legal affairs monitor the content of such reports and give instructions as necessary.



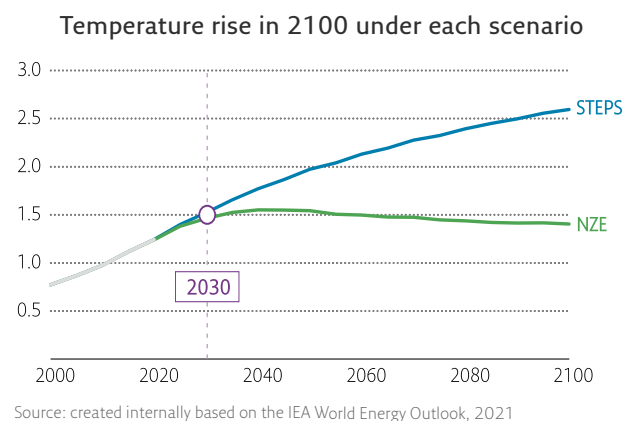
## 6-2 Strategy

We have conducted a scenario analysis of the impact of future climate change on our business operations, using a range of scenarios of projected environmental change, based on the framework recommended by the TCFD.

For this analysis, of the three main businesses we operate, we have added the Industrial Materials business to the Devices business, which was the target of the previous analysis. We also analyzed the impact of future climate change on our business on a time horizon of 1 to 2 years in the short term, 3 to 5 years in the medium term, and 6 to 10 years in the long term, including the Sustainability Vision, and we considered measures to respond to these impacts.

### (1) Scenario analysis assumptions

- Scenario analysis target business: Industrial Materials business and Devices business
- Scenario analysis time horizon: Study transition risks and physical risks and opportunities in the short term (1-2 years), medium term (3-5 years), and long term (6-10 years)
- Assumed scenario: See IEA's Net Zero Emissions by 2050 (NZE)\*<sup>1</sup>, Stated Policies Scenario (STEPS)\*<sup>2</sup>, IPCC's RCP4.5\*<sup>3</sup> and RCP8.5\*<sup>4</sup>, etc. scenarios



\*1 NZE: a scenario in which the world decarbonizes and achieves virtually zero CO<sub>2</sub> emissions in 2050. It is called the "1.5° C scenario" because the average temperature increase as of 2100, compared to pre-industrial times, will be between 1.3 and 1.5° C.

\*2. STEPS: a scenario in which countries implement their stated current specific policies on decarbonization and no additional decarbonization-related policies are introduced. It is called the "3° C scenario" because the average temperature increase as of 2100, compared to pre-industrial times, will be between 2.4 and 2.8° C.

\*3. RCP4.5: a scenario in which CO<sub>2</sub> emissions peak in 2040 and stable economic development is achieved.

\*4. RCP8.5: a scenario in which CO<sub>2</sub> emissions continuously increase and uneven economic development is achieved.

Under the two scenarios referenced from the IEA, we believe that we can visualize many climate change-related risks and opportunities by using the 1.5° C scenario in which regulations are tightened and zero CO<sub>2</sub> emissions are achieved by 2050, and the 3° C scenario in which no additional policies are introduced and climate change measures do not progress.

## (2) Scenario analysis process

Scenario analysis was conducted using the following process:

- (i) Consider significant climate-related risks and opportunities for the Industrial Materials business and the Devices business
- (ii) Consider and create scenarios as preconditions for evaluation
- (iii) Assess risks and opportunities based on the scenarios  
(Risks and opportunities are assessed by calculating and evaluating the "financial impact" as of 2030 using the parameters in each scenario, and the results are described below as "magnitude of risk" and "magnitude of the opportunity.")
- (iv) Consider countermeasures

## (3) Results of risk analysis

Our transition and physical risks related to climate change, and the magnitude of the risks in each scenario, as well as our response to these risks are analyzed and considered as shown in the table below for the set time horizon.

Based on this analysis, we have concluded that there are no significant and difficult-to-address risks related to climate change in our Industrial Materials and Devices businesses at this time. The following climate change risks are applicable to both businesses and will have a relatively large impact on our business.

### [Transition risks]

- (i) Increase in production and countermeasure costs due to carbon taxation on CO<sub>2</sub> emissions (1.5° C scenario)
- (ii) Increase in the cost of procuring raw materials needed to produce products due to the carbon taxes (1.5° C scenario)

As a measure to address (i), we are promoting the switch to renewable energy sources at our production bases. At our production bases in Japan, the switch to only using renewable energy for electricity

was completed in January 2022 at the Nitec Industries, Inc. Koka Factory, which is the production base for the Industrial Materials business, while Nitec Precision and Technologies, Inc. plans to switch to only using renewable energy source by the end of the fiscal year ending December 2023 for electricity at its Kaga and Himeji factories, which are the production bases for the Devices business. At overseas bases, since 2018, Nissha (Kunshan) Precision IMD Mold Co., Ltd. (China), a production base for the Industrial Materials business, has continued to generate solar power, and Nissha Metallizing Solutions (Belgium) has replaced part of its electricity with solar and wind power at its production bases. Other measures include reducing power consumption by streamlining production and saving energy in production and infrastructure facilities. We will continue to promote measures while verifying the cost and effectiveness of such measures.

As a measure to address (ii), in the Industrial Materials business, we are investigating technological trends, examining the use of biomass PET and other biomass plastics and recycled plastics, and developing products to reduce the use of virgin plastics.

### [Physical risks]

No physical risks have been identified at this stage.

We have taken measures to address risks in the Industrial Materials and Devices businesses that have a relatively large impact with respect to climate change and we believe that the businesses are resilient to climate change.

We will continue to monitor trends in the business environment under the 1.5° C and 3° C scenarios and develop our business strategically.

## Results of risk analysis

Type	Changes in the external environment	Target business	Time horizon	Risks to Nissha	Risk magnitude <sup>*1,2</sup>		Countermeasures
					3°C	1.5°C	
Transition risk	Policies/laws and regulations	Industrial Materials business Devices business	Medium to long-term	Increase in production and countermeasure costs due to carbon taxation on CO <sub>2</sub> emissions	-	Medium	- Switch to renewable energy sources at production sites - Introduce energy-saving production equipment
				Increase in the cost of procuring raw materials needed to produce products due to the carbon taxes	-	Medium	- Study the use of biomass plastic and recycled plastic as low-carbon materials, research technological trends and develop products
		Industrial Materials business Devices business	Medium to long-term	Increase in electricity procurement costs due to switch to renewable energy sources for electricity and soaring levies, etc.	Small	Small	- Introduce energy-saving production equipment - Reduce electricity consumption
				Cost of reducing CO <sub>2</sub> emissions in logistics (procurement and shipping) increases	-	Small	- Study trends in the logistics industry and consider shifting to transportation methods that emit less CO <sub>2</sub>
		Industrial Materials business	Medium to long-term	Increase in the cost of procuring raw materials needed to produce products due to the progression of plastics-related regulations	-	Small	- Study the use of biomass plastic and recycled plastic as low-carbon materials, research technological trends and develop products - Further promote the development of the ecosense molding brand of sustainable molded products oriented toward the elimination and reduction of plastic, and increase the sales ratio of sustainable materials
	Introduction of CFC regulations	Devices business	Medium to long-term	Restrictions on use of specified CFCs and their substitutes used at production bases increase capital investment costs	Small	Medium	- Research technology trends to enable compliance with CFC regulations
	Industries and Markets	Industrial Materials business	Medium to long-term	Increase in petrochemical material costs due to changes in crude oil demand	Medium	-	- Study the use of biomass plastic and recycled plastic as low-carbon materials, research technological trends and develop products - Further promote the development of the ecosense molding brand of sustainable molded products oriented toward the elimination and reduction of plastic, and increase the sales ratio of sustainable materials
				Increase in raw material costs due to increased use of reprocessed plastic	-	Small	
		Industrial Materials business	Short to long-term	Decrease in sales opportunities for EV-related products due to changes in market structure	Small	-	- Promote product development and enhance production facilities in response to market trends for next-generation vehicles other than Evs
	Changes in customer behavior (increase in requests from customers to reduce CO <sub>2</sub> emissions)	Devices business	Short to medium-term	Net sales decline due to lost business opportunities caused by insufficient responses to customer requests	Small	Medium	- Conserve energy through improved productivity and reduce CO <sub>2</sub> emissions through switch to renewable energy
	Technologies	Devices business	Medium-term	Costs increase due to replacing product packaging materials	Small	-	- Investigate alternative materials that can reduce costs while maintaining the quality of packaging materials
				Net sales fall due to substituting our products for low-carbon products made by other companies	Medium	Medium	- Develop low-carbon products with lower environmental impact
				Net sales decline due to lost business opportunities resulting from delays in the development of low-carbon technologies	Medium	Medium	- Promote the development of low-carbon technologies
Physical risks	Acute	Industrial Materials business Devices business	Short to long-term	ESG assessment declines due to delays in addressing climate-related issues, and we are not chosen as a supplier resulting in a decline in net sales	-	Small	- Enhance climate change initiatives and disclose information appropriately
				- Decline in net sales due to production delays or suspensions resulting from damage to production bases, and incidence of repair costs due to damage to company assets such as buildings, facilities, and inventory - Decline in the company's net sales due to the impact of the suspension of the supply of raw materials and parts due to disasters at suppliers	Small	Small	- Improve and strengthen BCP, and establish a system to support affected sites - Build a supply chain for stable procurement, including multi-company purchasing and outsourced production of raw materials at multiple factories and lines

\*1. Risk magnitude evaluation horizon: Annual decrease in net sales large: 20 billion yen or more, medium: 5 to 20 billion yen, small: less than 5 billion yen, annual decrease in profit: large: 3 billion yen or more, medium: 1 to 3 billion yen, small: less than 1 billion yen

\*2. Scenarios in which no risks are incurred are indicated with a "-"

\*3. Physical risks are evaluated by considering the degree of financial impact and frequency of occurrence

#### (4) Results of opportunity analysis

Based on our awareness that solving social issues related to climate change will create our business opportunities, we have analyzed and examined the magnitude of the opportunities in each scenario and our response to these opportunities in the time horizon we have set, as shown in the table below.

The following climate change opportunities are applicable to the Industrial Materials business or the Devices business and will have a relatively large impact on our business.

- (i) Increase in demand for products that contribute to reductions in GHG emissions (both 1.5° C and 3° C scenarios)
- (ii) Increase in sales opportunities for EV-related products due to changes in market structure (1.5° C scenario)

As a measure to address (i), the Industrial Materials business aims to expand sales of existing decorative films and molded products for mobility and consumer electrical appliances. The Nissha Group's decorative films and molded products contribute to the reduction and control of GHG emissions by adding patterns and functions at the same time they are molded to eliminate the need for secondary decoration processes after molding, as well as by building an optimal supply chain for customers from seven molding bases located around the world. We also aim to create products with even lower

environmental impact by undertaking recyclability studies and conducting Life Cycle Assessments (LCA) for each product to quantitatively evaluate the environmental impact.

In the Devices business, we are aiming to expand sales of gas sensor modules that can detect next-generation refrigerants produced by Nissha FIS. Although the next-generation refrigerants used in air conditioning and refrigeration units today have low ozone depletion potential, leak detection is necessary as they are mildly flammable and have an extremely high greenhouse effect. We believe that our Group's gas sensors can contribute to both safety and the prevention of global warming, and we aim to increase our net sales by expanding our sales region to include North America and other overseas markets.

As a measure to address (ii), we have identified the expansion of products targeting the mobility market as one of the priority markets for achieving our Sustainability Vision, and we are working to enhance EV-related products as a measure to address climate change.

The Industrial Materials business aims to expand sales of exterior decorative and functional products. For EVs that do not require engine cooling, there is a growing need to decorate the front as a vehicle face design to replace the front grille, as well as a need to add functions to ensure the proper operation of automatic driving radars in this area.

#### Results of opportunity analysis

Type	Changes into the external environment	Target business	Time horizon	Opportunities to Nissha	Opportunity magnitude <sup>*1,2</sup>		Countermeasures
					3°C	1.5°C	
Policies/laws and regulations	Carbon price Changes in national carbon emission targets and policies	Industrial Materials business Devices business	Medium to long-term	Expansion of demand for products that contribute to GHG emission reductions	Medium	Medium	- Develop and expand sales of products that contribute to GHG emission reductions (highly recyclable decorative film moldings, gas sensor modules for refrigerant detection, etc.)
		Industrial Materials business	Medium to long-term	Increase in sales opportunities for plant-derived sustainable molded products due to the progression of plastics-related regulations	-	Small	- Further promote the development of the ecosense molding brand of sustainable molded products oriented toward the elimination and reduction of plastic, and increase the sales ratio of sustainable materials
Industries and Markets	Increase in EV sales	Industrial Materials business Devices business	Short to long-term	Increase in sales opportunities for gas sensor modules for refrigerant detection <sup>*3</sup> that contribute to reducing GHG emissions	Small	Small	- Develop and expand the sale of new products for EVs (decorative film molded products and functional products for exteriors, touch sensors, etc.)
	Fluctuations in raw material prices	Industrial Materials business	Medium to long-term	Increase in sales opportunities due to increased demand for sustainable molded products as a result of the lower costs of plant-derived plastics	-	Small	- Further promote the development of the ecosense molding brand of sustainable molded products oriented toward the elimination and reduction of plastic, and increase the sales ratio of sustainable materials
	Arrival of a hydrogen-based society	Devices business	Medium-term	Demand for Fuel Cell Vehicles (FCVs) expands	Small	Small	- Develop and expand sales of products for the mobility market (such as hydrogen detectors) that contribute to reducing our environmental impact

\*1. Opportunity magnitude evaluation horizon: Annual increase in net sales large: 20 billion yen or more, medium: 5 to 20 billion yen, small: less than 5 billion yen, annual increase in profit: large: 3 billion yen or more, medium: 1 to 3 billion yen, small: less than 1 billion yen

\*2. Scenarios in which no opportunities are incurred are indicated with a "-"

The Devices business aims to expand sales of touch sensors for curved surfaces and large displays. Our touch sensors are made from film-based material which provides high visibility and a narrow frame while being thin, light, unbreakable, and bendable. In line with the growing demand for designs for next-generation vehicles, a variety of touch sensors that leverage these features are required for EVs.

We aim to expand net sales by developing new products that meet these EV needs to expand our product lineup.

We intend to reflect our scenario analysis results in our business strategy, such as the growing demand for products that contribute to reducing GHG emissions and the expanding EV market.







## 6-3 Risk Management

The Nissha Group manages its climate change risks by distinguishing between materialities (risks and opportunities related to the realization of the Group's sustainability vision), which are key issues for the Group, and general risks (risks related to smooth business operations) and by the Sustainability Committee and the Risk Management and Compliance Committee assessing and managing each of these risks in accordance with the following process.

### ■ Risk Management by the Sustainability Committee

To realize our Sustainability Vision (long-term vision), we have identified items of particular importance as materialities, which we are working on by setting specific strategic items, key performance indicators, and action items backcasting from 2030 as a starting point. Materialities are evaluated from the perspectives of creating business opportunities, risk reduction, strengthening management foundations, and corporate governance using the two axes of "importance to society and stakeholders", and "importance to Nissha". The identified issues and their position within the Group are prioritized by the Sustainability Committee, and identified through deliberations and resolutions by the Board of Directors.

We have identified the following material issues relating to climate change from the perspectives of risk reduction and creating business opportunities.

	Materiality	Related SDGs
Risk reduction	Responding to climate change	
Creating business opportunities	Contribute to the safety and comfort of transportation and logistics, and the reduction of environmental impact	 
	Promotion of circular economy	  

The ESG Task Force is responsible for activities related to risk reduction. The ESG Task Force works based on key performance indicators and action items approved by the Sustainability Committee and reports the state of its activities to the Sustainability Committee on a quarterly basis.

Activities related to creating business opportunities are handled by the business organization. The business organization reports to the Chairman of the Board, President and CEO at monthly meetings (business reviews), at which the Chairman of the Board, President and CEO confirms the progress of business strategies based on key performance indicators and gives instructions on necessary action.

The Sustainability Committee reports its activities annually to the Board of Directors, and the Board of Directors utilizes the contents of the report to formulate the Medium-term Business Plan and Rolling Plan.

Refer to 3-3 Promotion Framework for Sustainability / 3-4 Materialities (Key Issues) and KPIs

### ■ Risk Management by the Risk Management and Compliance Committee

We select risks by carrying out risk assessments over the entire Group and selecting from both a business activity perspective and a company-wide perspective. From the business activity perspective, hearings were held with each business unit and subsidiary, in addition to the relevant subcommittees, and assessments were made in line with business activities. Then, assessing them from a company-wide perspective in order to work to integrate the risks selected from a business activities

perspective with management strategies, the important risks (including climate change risks) are selected at a general meeting held once a year.

## Risk Assessments

### (1) Target risks

- Cross-group risks including compliance risks  
Refer to 28-4 Risk Assessments

### (2) Selection process for key risks

The following process is used by the Risk Management and Compliance Committee to select key risks.

- For the above cross-group risks, the high-value risks calculated using the "probability of occurrence" and "impact when it occurs" horizons are considered the "inherent risks".
- In addition, the "effectiveness of control activities" is evaluated, and risks with low "effectiveness of control activities" with respect to "inherent risks" are selected as key risks.

### (3) Management method

- Key risks (low "effectiveness of control activities" with respect to "inherent risks"): The lead department or subcommittee establishes key performance indicators and action items, and the Risk Management and Compliance Committee confirms progress (business risks are led by the business organization and confirmed by business reviews and other means).
- High "effectiveness of control activities" with respect to "inherent risks": Subject to monitoring and the Risk Management and Compliance Committee confirms the status of maintenance and operation by the lead department or subcommittee.
- Cross-group risks other than "inherent risks": Managed by the business organization and lead department, and reported at the Monthly Business Review (MBR).

The company has selected Business Continuity (natural disasters such as earthquakes, typhoons, and floods) as one of our key risks and includes climate change risk in this category.

As a measure to address risks, a "Business Continuity Plan" has been formulated to prepare for and respond to natural disasters and emergencies should they occur, and the plan is promoted by the Busi-

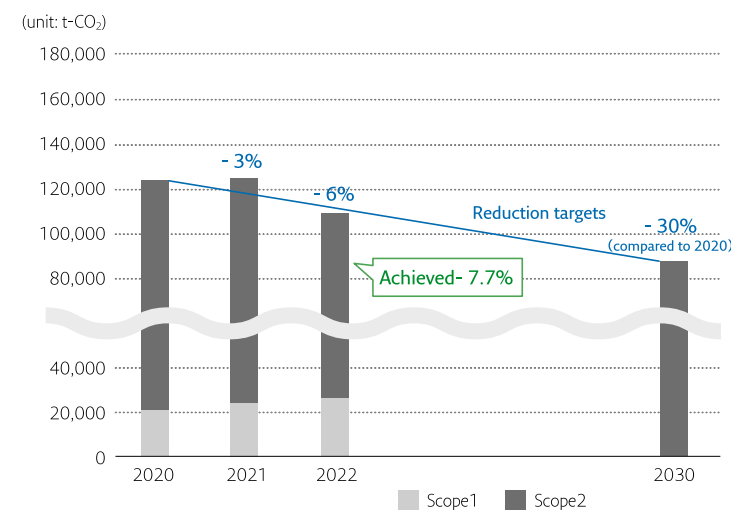
ness Continuity Management Subcommittee of the Risk Management and Compliance Committee. The Business Continuity Management Subcommittee, which manages such risks, works to mitigate risks based on KPIs and action items approved by the Risk Management and Compliance Committee, and reports the state of its activities to the Risk Management and Compliance Committee.

## 6-4 Indicators and Targets

We have defined total CO<sub>2</sub> emissions as an indicator for assessing and managing risks related to climate change. Our Sustainability Vision aims for a 30% reduction in CO<sub>2</sub> emissions in 2030 (compared to 2020), with a view to achieving carbon neutrality by 2050.

In the next fiscal year and beyond, we will consider establishing and publishing indicators and targets to assess and manage climate change-related business opportunities.

### The Nissha Group's CO<sub>2</sub> Emissions Reduction Target and Results (Scope1 and 2)



\* We are in the process of calculating Scope 3 for initiatives to set future reduction targets and reduction efforts, and have disclosed the emissions that we have been able to calculate for the fiscal year ended December 2022. We will continue to work on expanding the scope of these calculations.

The Nissha Group views sustainability as an initiative toward the achievement of sustainable growth and development for both the company and society. To achieve sustainability, we consider social issues to be business opportunities. It is important not only that we leverage our strengths to provide products and services that help resolve social issues on an ongoing basis, but also that we strengthen the management foundation underpinning our business activities, reduce risks that could hamper business continuance, and promote governance to ensure these are all carried out appropriately.

Addressing climate change is positioned as one of the most important of the many social issues, and we believe that contributing to resolving this issue through our business activities will provide enormous business opportunities for the Group. Meanwhile, although the transition and physical risks associated with climate change are important, we believe that their impact on our finances will be limited if sufficient measures are taken to address the risks we have identified through our analysis.

Our analysis based on the TCFD recommendations was conducted on the Industrial Materials business and Devices businesses. In the next fiscal year, we will continue to analyze our three core businesses, including the Medical Technologies business.