Aiming to achieve net zero CO_2 emissions

— Promoting the incorporation of climate change measures into business strategies —

While the problem of climate change is becoming more serious, the global trend towards decarbonization is forcing countries and companies to change. Climate change measures are essential in order to contribute to the realization of a sustainable society and to achieve sustainable growth for companies. As a company that operates globally, the NIDEC Group has positioned "contributing to a sustainable global environment" as one of its key sustainability issues, and aims to achieve net zero CO_2 emissions from its business activities by FY2040 and net zero CO_2 emissions including its supply chain by FY2050. In order to achieve our goals, we are promoting the introduction of renewable energy, energy-saving activities, and the development and supply of products that contribute to decarbonization. We are also analyzing the business impact of climate change risks and opportunities, and are working to incorporate climate change measures into our management strategy. We will continue to work with our stakeholders to strengthen our efforts to address climate change.

Governance

Supervisory System

The NIDEC Group supervises the execution of sustainability-related operations and reports to the Board of Directors' Meeting at the Sustainability Committee, which is held once a quarter. This committee is chaired by an outside member of the Board of Directors and consists of two internal directors and three outside members of the Board of Directors.

Business execution system

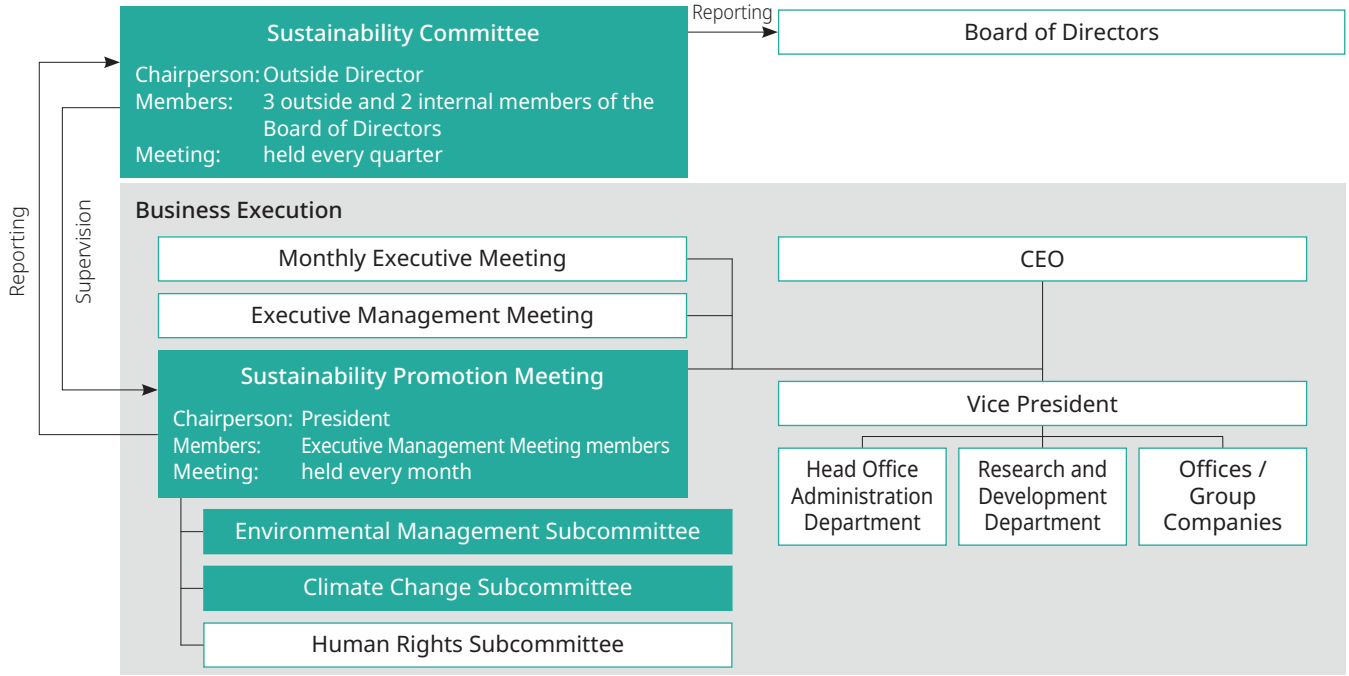
At the NIDEC Group's Sustainability Promotion Meeting, the status of business execution related to material issues (materiality) including the environment is confirmed, and the sustainability activity policy and important matters are deliberated and resolved. This meeting is chaired by the president and consists of members of the Executive Management Meeting. In addition, the Environmental Management Subcommittee and the Climate Change Subcommittee have been established under the Sustainability Promotion Meeting to promote environmental initiatives across the NIDEC Group.

Incorporating ESG indicators into executive remuneration

The NIDEC Group is increasing the effectiveness of its initiatives on sustainability issues by incorporating ESG indicators into executive remuneration.

More Info ▶ P.80 Corporate Governance (Reflecting ESG targets in performance-linked compensation for directors)

Sustainability promotion system



Sustainability Committee agenda in FY2023

Date of meeting	Agenda	
1st: June 2023	• Recommendation of committee members • Report on the results of TCFD scenario analysis • Policy for producing the 2023 integrated report	• Plan for holding an ESG briefing session in FY2023 • Policy for social contribution activities and setting of priority fields
2nd: September 2023	• Report on the promotion of information security measures • Compliance with the CSRD (Corporate Sustainability Reporting Directive)	• Report on the publication of the Integrated Report 2023
3rd: December 2023	• Executive development plan • ESG briefing session plan for FY2023	• CO_2 reduction target setting and certification acquisition in line with SBT
4th: March 2024	• Report on initiatives related to product safety and quality • Report on ESG briefing sessions	• Plan to reorganize the sustainability promotion system

Strategy

A total of 143 executives and managers from the business areas that account for more than 95% of our consolidated sales (Small precision motors, Automotive products, Appliance, Commercial & Industrial Products, Machinery) conducted scenario analysis according to the following procedure to identify climate change risks and opportunities with a significant impact on our business, and to consider countermeasures.

More Info▶ P.53-54 Scenario Analysis Results

The results of the scenario analysis were reported to the general managers of each business division, the Sustainability Promotion Meeting, and the Sustainability Committee.

The workshop

Steps of scenario analysis

STEP 1 Determine the assumptions for scenario analysis

IP Scenario
- Transition risk scenario (2°C/1.5°C scenario)

Based on the IPCC's SSP1-2.6 scenario and RCP2.6 scenario, and IEA's NZE scenario, assume a world where various measures and regulations to realize a carbon-free society are introduced.

- Physical risk scenario (4°C scenario)

Based on the IPCC's SSP5-8.5 scenario and RCP8.5 scenario, assume a world where the introduction of measures and regulations to realize a carbon-free society is slow and weather disasters are becoming severe.

Timeline
- Short-term: 2025 / Medium term: 2030 / Long-term: 2050

Target
- Business areas that account for more than 95% of consolidated sales (Small precision motors, Automotive products, Appliance, Commercial & Industrial Products, Machinery)

STEP 2 Identify climate risks and opportunities

Using the TCFD Recommendations as a reference, we have listed the climate change risks and opportunities.

STEP 3 Assess business impact

Assess the business impact from the perspectives of the degree of impact on business, the timing of climate risks/opportunities becoming apparent, and the need for prompt action.
Quantitative evaluation was conducted for major climate change risks (introduction of a carbon tax, flood damage).

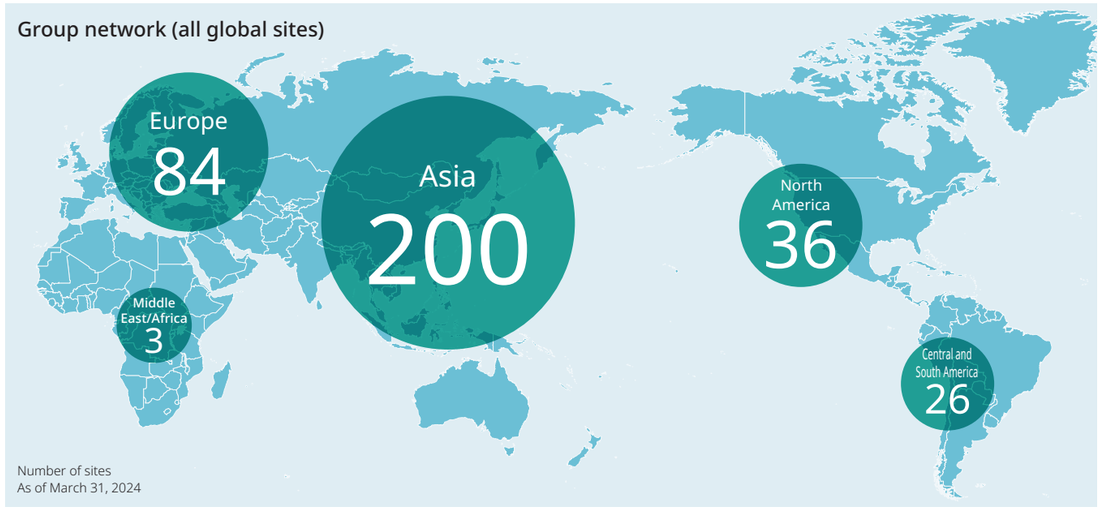
STEP 4 Examine countermeasures

Examine countermeasures Examine countermeasures for climate isks and opportunities that were evaluated to have a large impact on business.

Specific examples of countermeasures

Geographical distribution of production plants

Nidec has a group network covering over 348 companies in more than 48 countries around the world and aims to reduce geopolitical risks and climate-related physical risks by geographically distributing its operation sites.



Reduction of size and weight, and resource saving by employing the "light, thin, short, and small" technology

Nidec manufactures socially and environmentally conscious products by making motors smaller and lighter and resource-saving. The first-generation model (Gen.1) of our EV traction motor system (E-Axle) achieved an overwhelming miniaturization of the motor by employing "light, thin, short, and small" technology and the oil cooling structure we had cultivated in the small precision motor business. The second generation (Gen.2) E-Axle, which began mass production in September 2022, achieved a 19% reduction in weight compared to Gen.1 thanks to the use of smaller magnetic circuits and inverters, based on the high-space-factor wire-winding technology, and also a substantial reduction in the amount of minerals used. In addition, the newly developed two-way oil-circulation system has improved the cooling capability, making it possible to use magnets that require significantly less amounts of dysprosium (Dy), terbium (Tb), and other kinds of heavy rare earth. Moving forward, we are planning to develop motors that do not use heavy rare earth or magnets.

Second-generation model has significantly reduced the use of minerals	19% lighter: First-generation model → Second-generation model
Aluminum	-25%
Magnetic steel sheet	-21%
Copper	- 7%
Rare earth	Significantly reduced the use of rare earth, aiming to achieve complete non-use in the future

Climate-related risks and opportunities with significant business impacts, and their countermeasures

* We have marked the climate change risks and opportunities that we have judged to have a significant impact on our business.

Impacts of climate-related risks and opportunities				Countermeasures	Small precision motors	Automotive products	Appliance, Commercial & Industrial Products		Machinery
					SPMS	AMEC	ACIM	MOEN	NMAB
Transition risks	Policies and legal regulations	Introduction of carbon taxes	●Increase in production costs and decline in price competitiveness due to carbon taxes	●Reduction of Scope 1 emissions through actions such as switching to LED lighting, introduction of energysaving equipment, replacement with low-carbon fuels, and optimization of manufacturing processes ●Reduction of Scope 2 emissions by introduction of renewable energy	○	○	○	○	
			●Increase in costs for introducing renewable energy * If measures are taken against carbon taxes	●Introduction of renewable energy at low cost through long-term contracts such as corporate PPA		○	○		
			●Increase in procurement costs of crude oil and fossil fuel-derived electric power	●Introduction of renewable energy ●Switching to LED lighting and introducing energy-saving equipment				○	○
			●Increase in procurement costs due to carbon taxes imposed on raw materials	●Use of low-carbon materials (including recycled raw materials) ●Reduction of size and weight, and resource saving by employing the "light, thin, short, and small" technology ●Introduction of multi-sourcing for procurement ●Reduction of supply chain greenhouse gas (Scope 3) emissions		○		○	
		Tightening of regulations for fuel efficiency and ZEVs	●Impairment of manufacturing facilities for internal combustion engine-related products	●Adoption of highly versatile design that allows conversion to other models ●Conversion of manufacturing equipment to other products		○			
			●Intensifying competition and price destruction due to an increase in newcomers	●Development of products with high technological and price competitiveness ●Gaining economies of scale due to the market share expansion ●Protect and utilize intellectual properties	○	○			○
			●Intensifying competition for raw materials due to the expansion of the EV market	●Miniaturization and weight reduction through lightweight, compact, and resource-saving technology ●Strengthening research and development to utilize alternative materials ●Implementation of vertical M&A ●Building a supply chain with high supply capacity ●Long-term contracts with suppliers				○	○
		Introduction of regulations related to rare earths	●Difficulty in procuring rare earth elements and increased procurement costs	●Development of products without heavy rare earth elements or magnets. ●Building a supply chain with high supply capacity	○			○	
	Technologies	Impact on R&D capabilities	●Risk of delay in new product development	●Development of elemental technology in collaboration with research institutes	○				
		Failure in investment in new technologies	●Loss of business opportunities if the environmental performance required by customers cannot be satisfied	●Joint development with customers ●Reduction of size and weight, and resource saving by employing the "light, thin, short, and small" technology		○			
		Transition to low-carbon technology	●Increased costs associated with switching to low-carbon raw materials and low-carbon processes	●Pursuit of the "light, thin, short, and small" technology ●Promoting initiatives that involve suppliers			○		
	Market	Changes in customer behavior	●Growing demand from customers to promote the use of renewable energy, and the suspension of transactions due to the failure to achieve carbon neutrality as planned	●Reduction of Scope 1 emissions through the use of LED lighting, the introduction of energy-saving equipment, the replacement of fuels with low-carbon fuels, and the optimization of manufacturing processes ●Reduction of Scope 2 emissions through the introduction of renewable energy ●Promotion of environmental initiatives through collaboration with customers ●Promotion of sustainability management ●Appropriate information disclosure and strengthening of dialogue with stakeholders	○		○	○	
		Rise in raw material costs, difficulty in obtaining raw materials	●Difficulty in obtaining rare minerals, steel materials, and other non-ferrous metals, such as high-end aluminum and copper, rising procurement costs	●Use of recycled raw materials ●Reduction of size and weight, and resource saving by employing the "light, thin, short, and small" technology ●Development of products that do not use heavy rare earths or magnets ●Building a supply chain with high supply capacity		○		○	
	Reputation	Changes in investor evaluations	●Increased costs of compliance due to stricter ESG evaluation criteria and expansion of fields requiring disclosure ●Difficulty in raising funds due to investors and financial institutions deeming information disclosure to be insufficient ●Decline in credit rating	●Appropriate information disclosure and strengthening of dialogue with stakeholders	○			○	
Physical risks	Acute	Impact of floods, submergence, torrential rain or typhoons	●Suspension of factory operation ●Damage to fixed assets and stocks ●Outage of infrastructure networks such as electricity and water supply ●Incurrence of costs for production and transportation of other factories ●Disruption of supply chain ●Increase in insurance fees	●Geographical distribution of production plants ●Introduction of multi-sourcing for procurement ●Implementation of BCP (business continuity plan)	○	○		○	○
	Chronic	Impact of droughts, water shortage, and changes in the precipitation pattern	●Difficulty in stably securing water, shortage of factory water due to water intake restrictions ●Increase in costs due to rising water prices ●Factory shutdowns due to tight electricity supply, constraints on raw material production and procurement capacity, increase in material purchasing costs ●Deterioration of water quality due to changes in precipitation and temperature patterns	●Geographical distribution of production plants ●Optimization of manufacturing processes to reduce water usage ●Improving water reuse and recycling rates		○		○	
Opportunities	Products/ services	Expansion of the market for products that contribute to decarbonization	●Increase in demand for automotive products (E-Axle, EPS motors, brake motors, electric oil pump motors, etc.) due to the expansion of the electric vehicle market ●Increased demand for energy-saving products (brushless DC motors, refrigerator compressors, water-cooling modules for data centers, HDD motors, high-efficiency motors for industrial use, machine tools with high energy-saving performance, environmentally friendly reduction gears, etc.) ●Increased demand for renewable energy-related products (BESS, smart microgrid solutions, wind power and hydroelectric power generation-related products, small-scale generators, machine tools for manufacturing wind power and gas turbine cases, etc.) ●Increased demand for products (can making press machines) that contribute to solving the plastic problem	●Strengthening the development of related products ●Reduction of size and weight, and resource saving by employing the "light, thin, short, and small" technology	○	○	○	○	○
		Market expansion for products that counteract temperature differences	●Increased demand for related products (such as air conditioner motors and air conditioner fans) due to the expansion of the market for air conditioning-related products ●Increase in demand for machine tools and press machines that can adapt to temperature changes		○				○
	Market	Expansion of EV market	●Increased demand for related products (E-Axle, electric power steering motors, brake motors, electric oil pump motors, in-wheel motors for e-Bike drive, etc.) due to the expansion of the electric car and e-Bike markets ●Increased demand for high-precision machine tools		○	○			○
		Progress of electrification	●Expansion of motor demand accompanying the progress of electrification					○	
		Entry into new markets with new products	●Expansion of new markets such as electric propulsion ships and electric aircraft				○		
	Resilience	Strengthening the supply chain	●Achieving disaster-resistant manufacturing through BCP	●Building a highly resilient supply chain					○

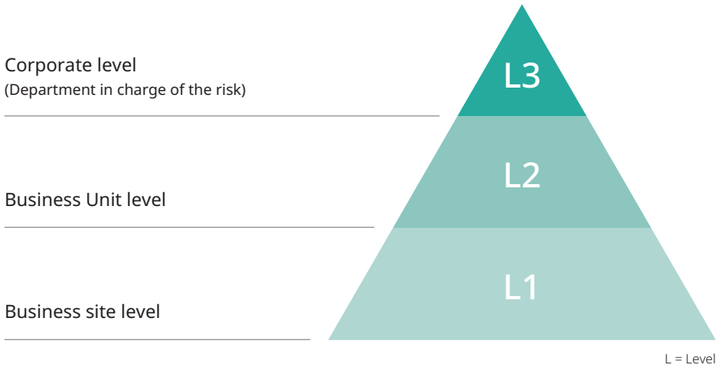
Quantitative evaluation of business impact

Risk	Financial impact	Calculation method
Introduction of a carbon tax	12.4 billion yen	The carbon price is based on the IEA's "World Energy Outlook 2022" forecast of 140 USD/t-CO_2 for developed countries in FY2030. CO_2 emissions (Scope 1 and 2) are calculated based on our 2030 target of 610,000 t-CO_2.
Flood damage	42.2 billion yen	Using the "Aqueduct" water risk analysis tool provided by the World Resources Institute, we assessed the impact of a disaster affecting all 38 locations assessed as having a high risk of flooding. We calculated the impact of damage to fixed assets and inventory, as well as the opportunity loss due to the suspension of operations, using the "Guide to Assessing Physical Risks in the TCFD Recommendations" published by the Ministry of Land, Infrastructure, Transport and Tourism.

From now on, we will work to improve the quality of our business impact assessments, and promote initiatives to effectively reduce climate change risks.

Risk management

We established a framework in which risk surveys are conducted for each of the levels illustrated below and the survey results are shared and mutually used.



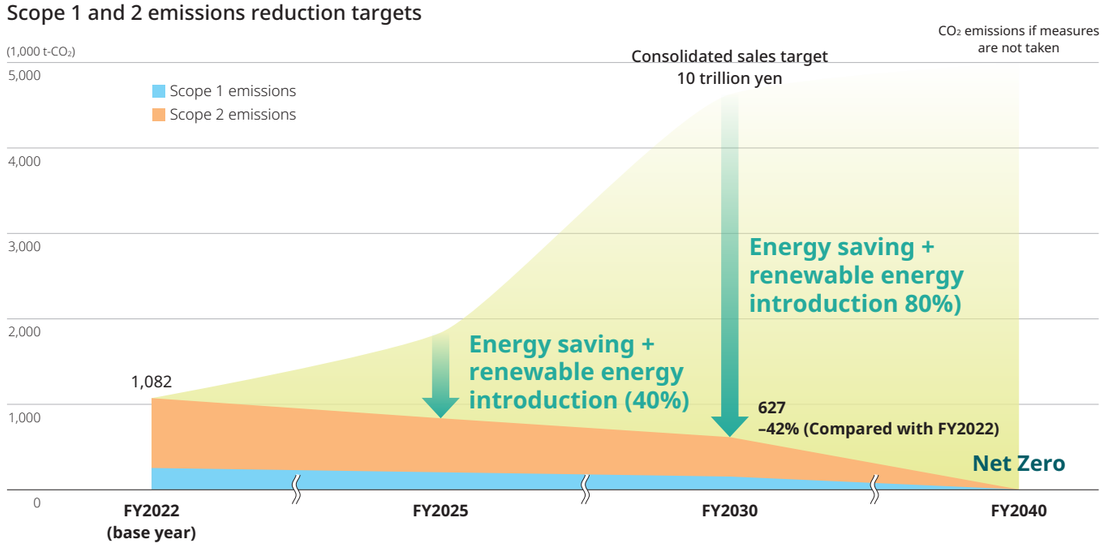
With risk managers in place at each of our global locations, we are working to detect and respond appropriately to factors that could hinder business continuity. We are focusing on comprehensively understanding and mitigating climate change risks through measures that focus on compliance with increasingly strict climate change-related laws and regulations, adapting to changing market trends, and strengthening communication with customers, investors, and other stakeholders, while also conducting BCP simulation training at our bases in Japan and overseas, assuming the occurrence of risks such as floods and droughts.

Indicators and targets

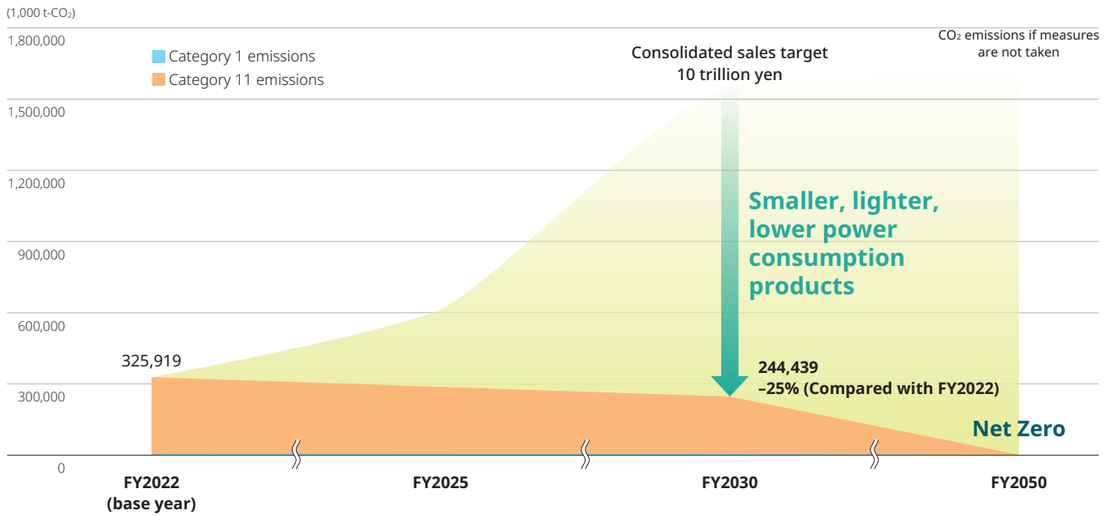
As one of the major axes of The medium-term strategic goal Vision 2025 and ESG materiality measures, the NIDEC Group aims to achieve net zero CO_2 emissions by fiscal 2040. In fiscal 2023, we underwent third-party verification of our CO_2 emissions and formulated CO_2 reduction targets for fiscal 2030 in line with the guidelines This target was recognized as a scientifically-based target for achieving the "1.5°C target" in the Paris Agreement, and we have obtained SBT certification.

- Reduce Scope 1 and Scope 2 emissions by **42%** compared to FY2022 by FY2030
- Reduce Scope 3 emissions by **25%** compared to FY2022 by FY2030

Scope 1 and 2 emissions reduction targets



Scope 3 emissions reduction target



In addition, we have identified "contributing to a sustainable global environment" as one of our materiality issues, and have set the following targets.

Materiality

Environment

- By FY2025, increase the introduction ratio of renewable energy to 40% on a consolidated basis
- Reduce CO_2 emissions by introducing the EV traction motor system (E-Axle/BSG): Cumulative total from FY2020 to FY2025: 11,700,000 t-CO_2
- Reduce CO_2 emissions by introducing electric power steering (EPS-PP/EPS) motors: Cumulative total from FY2020 to FY2025: 26,261,000 t-CO_2
- Reduce CO_2 emissions by introducing electronic brake booster (EPS-PP/EPS) motors: Cumulative total from FY2020 to FY2025: 10,029,000 t-CO_2
- Reduce CO_2 emissions by introducing motors for compact EVs: 35,000 t-CO_2 per year
- Reduce CO_2 emissions by introducing motors for e-bikes: 32,000 t-CO_2 per year
- In 2025, reduce the volume of waste generated in intensity per unit sales by at least 3% from the level of FY2022
- Fully complete water risk assessments at all production sites

Materiality Initiatives

Contribute to decarbonization through products

Materiality

Environment

[Contributing through Automotive Products]

- **Reduce CO_2 emissions by introducing the EV traction motor system (E-Axle/BSG):** Cumulative total from FY2020 to FY2025: 11,700,000 t-CO_2
- **Reduce CO_2 emissions by introducing electric power steering (EPS-PP/EPS) motors:** Cumulative total from FY2020 to FY2025: 26,261,000 t-CO_2
- **Reduce CO_2 emissions by introducing electronic brake booster (EPS-PP/EPS) motors:** Cumulative total from FY2020 to FY2025: 10,029,000 t-CO_2

[Contributing through the small precision motors]

- **Reduce CO_2 emissions by introducing motors for compact EVs: 35,000 t-CO_2 per year**
- **Reduce CO_2 emissions by introducing motors for e-bikes: 32,000 t-CO_2 per year**

Background to the identification of materiality

We recognize that the following risks may occur if we fail to meet the materiality KPI for "contributing to decarbonization through products".

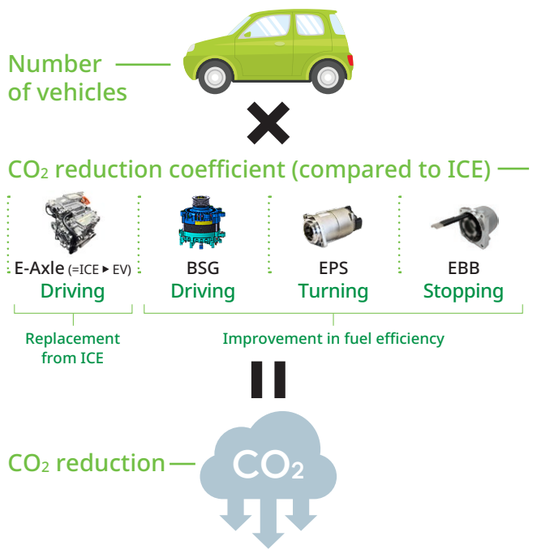
First, there is a possibility that our social credibility will decline. If we do not conduct business with consideration for the environment and society, we may lose the trust of our customers and investors, and there is a risk that our corporate brand value and image will decline.

Next, there is a possibility that our competitiveness will decline. If we are unable to provide high-performance products that reduce environmental impact, our competitiveness will decline relative to other companies, and there is a risk that our position in the market will decline compared to companies that are working towards the realization of a sustainable society.

Automotive product

It is said that more than 10% of the world's CO_2 emissions come from automobiles. We are contributing to the reduction of CO_2 emissions by replacing automobile-related parts with high-efficiency, energy-saving motors. We are focusing on the three main elements of automobiles: "driving", "turning" and "stopping". For "driving", we supply the "E-Axle" drive motor system for electric vehicles, for "turning" we supply motors for electric power steering, and for "stopping" we supply motors for electric brakes. We have set KPIs for reducing CO_2 emissions for each of these, and are working towards the realization of a decarbonized society.

CO_2 reduction calculation formula



* ICE: An energy generator that uses fuel to produce mechanical power. Internal combustion engine.

Initiatives in FY2023

The second-generation E-Axle, which began mass production in 2019, was expected to be launched in September 2022 and increase sales, but due to the global slowdown in EV growth and excessive competition in China, the production of unprofitable models was reduced from the second half of FY2023, and the strategy was changed from increasing sales volume to focusing on profitability. Due to the decrease in the number of units shipped, the amount of CO_2 emissions reduced by E-Axle in FY2023 decreased compared to FY2022.

As a major initiative in FY2023, we have started development of the third-generation E-Axle model. We are preparing to expand sales volume from FY2024 and contribute to reducing CO_2 emissions with this product, which has technological advantages such as lower cost and higher profitability compared to the second-generation model, as well as various functional integration (7-in-1) and high-speed rotation (12% increase in torque density).

Toward the future

We aim to increase sales of highly profitable and competitive models by developing and reliably launching the third-generation model of E-Axle and continuing cost reduction activities for existing models. We will also continue to develop next-generation technologies such as steer-by-wire, which controls the angle of the tires by connecting the steering wheel and tires with an electric signal, and expand sales of products with technological superiority.

In addition, our electronic brake booster (EBB) and electro-mechanical brake (EMB) motors, which boast a high market share in the "stopping" field, are expected to contribute to reducing engine load and CO_2 emissions by replacing conventional brake systems with our products in a field where market expansion is expected in the future. In order to make up for the reduction in CO_2 emissions due to the decrease in the number of E-Axle shipments in FY2023, we will add the reduction achieved by electric brake motors to our KPIs from FY2024, and will continue to contribute to decarbonization in the three major elements of automobiles: "running," "turning," and "stopping."

Small precision motors (e-Bikes)

In the ASEAN region and India, motorcycles play a very important role as a means of transportation. In particular, in urban areas, traffic congestion is a serious problem, so motorcycles are widely used as a means of smooth transportation. In addition, because they are more economical than cars, they are also very important in that they allow more people to access them. In these regions, several million motorcycles are sold each year, and the number is increasing year by year.

On the other hand, as transportation systems such as motorcycles have rapidly developed in these regions, serious environmental problems have arisen. There are many old vehicles and vehicles that do not meet emission standards, and in addition to the CO_2 contained in exhaust gas from internal combustion engines causing global warming, respiratory diseases and other health problems due to air pollution are increasing. In order to solve these environmental problems, electric motorcycles, which do not have internal combustion engines, are attracting attention as one of the next-generation means of transportation. The e-Bike market is growing rapidly due to stricter environmental regulations and subsidy policies in various countries, and it is said that the number of e-Bikes sold worldwide (excluding China) will increase from 1 million in 2023 to 3 million in 2024 and 10 million in 2025. In India in particular, around 7% of all motorcycles sold are already electric, and new manufacturers are entering the market, making it a very active market.

Initiatives in FY2023

The total number of our electric drive motors for e-Bikes sold has reached over 100,000 units (as of April 2024). As of FY2023, we are mass-producing these motors for customers not only in Japan, but also in Europe, ASEAN, and India. By supplying drive motors for electric motorcycles, we have contributed to the switch from gasoline-powered motorcycles to e-Bikes, and in FY2023 alone, we contributed to a reduction in CO_2 emissions of 5,000 tons.

Toward the future

One of the features of our drive motors is that they are lightweight, compact, and small, which saves electric power, and they also have low vibration, which improves quietness. We have established a development and production system for motors that meets market demands, and we are developing a wide range of motors, including low-priced in-wheel types, highly convenient side-wheel types, and high-performance center types.

The electrification of motorcycles is expected to progress rapidly in the future. In preparation for future increases in production, we have started up a new factory dedicated to the production of drive motors for e-Bikes, in addition to our existing factories. While pursuing further miniaturization and higher performance of motors, we are also developing integrated motors that combine motors and inverters.

In this way, we will contribute to a decarbonized society by expanding sales of drive motors for e-Bikes and replacing them with next-generation models that have a low environmental impact.

HONDA "EM1 e"

Reduce CO_2 emissions attributable to business activities

Materiality

- **By FY2025, increase the introduction ratio of renewable energy to 40% on a consolidated basis**
- **Annually disclose a climate change scenario in line with the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations**

Environment

Background to the identification of materiality

The NIDEC Group has set a target of achieving sales of 4 trillion yen by FY2025, and it is necessary to reduce CO_2 emissions while expanding the scale of business. If the introduction of renewable energy, which is a key measure for reducing CO_2 emissions, does not progress as planned, and if a carbon tax is introduced, there is a risk of increased costs. In addition, there is a risk of business suspension or a decline in reputation if the company is unable to respond to requests from customers and investors for action and disclosure on climate change.

Initiatives in FY2023

Aiming to increase the ratio of renewable energy, we are promoting initiatives that focus on both energy-saving activities and the introduction of renewable energy. As a typical example of energy-saving activities, NIDEC Vietnam installed covers on the heaters of its injection molding machines, reducing the amount of electric power consumed by its production and air conditioning equipment.

Injection molding machine with heat insulation cover attached

In terms of introducing renewable energy, Nidec Precision (Zhejiang) utilized an on-site PPA* to introduce a 1,600kW solar power generation system. In fiscal 2023, despite an increase in the number of NIDEC Group business sites, the ratio of renewable energy introduced increased from 7.8% in the previous year to 12.5% due to these and other measures.

* On-site PPA (Power Purchase Agreement): A contract format in which a power generation company installs power generation equipment on the premises of a customer and supplies electric power and environmental value.

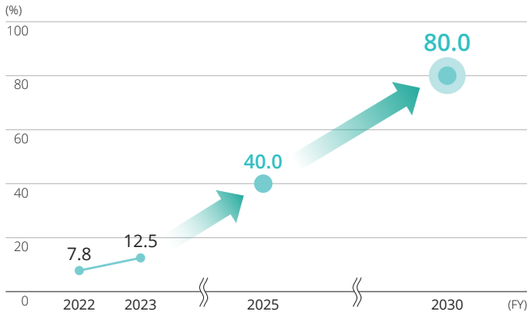
Solar power generation system installed at NIDEC PRECISION (ZHEJIANG)

Toward the future

In our energy-saving activities, we plan to select model factories in each business units and promote initiatives. We will promote energy-saving activities by deploying energy-saving measures that have been confirmed to be effective at model factories to other business sites. In terms of introducing renewable energy, in addition to introducing renewable energy at each business site, we plan to implement comprehensive renewable energy procurement on a regional basis using virtual PPAs*.

* Virtual PPA: A contract type in which only environmental value, not actual electric power, is traded with the power generation business operator.

Renewable energy introduction ratio



Manage waste and hazardous waste

Materiality

- **In 2025, reduce the volume of waste generated in intensity per unit sales by at least 3% from the level of FY2022**

Environment

Background to the identification of materiality

In recent years, as the increase in waste has become a global social issue, our company has been focusing on building business processes that minimize the generation of waste. We are working to make effective use of raw materials, not only by eliminating waste as much as possible in the manufacturing process, but also by minimizing the use of containers and packaging materials. In addition, we are also continuously working to promote recycling by thoroughly sorting waste. If we do not respond to materiality, first of all, from a business perspective, there is an increased risk of legal violations, as well as increased costs for purchasing raw materials and disposing of defective products. On the other hand, from a social perspective, there is a risk of increased environmental impact from waste landfill and increased energy and CO_2 emissions from waste disposal.

Initiatives in FY2023

As part of our efforts to reduce the amount of waste generated, we have been promoting resource conservation through a review of product design. We have also steadily promoted activities to reduce defective products, which are one of the causes of waste generation. As a result of these initiatives, the amount of waste and valuable resources generated in FY2023 was 289,271 tons, a 4.7% reduction compared to FY2022 on a sales basis. Improving material yield in the manufacturing process is also an important initiative. As a result of analyzing the amount of waste generated for each resource, it was found that the largest amount of waste was generated by iron used as raw materials, and it was clear that improvements in processing losses during manufacturing would have a reduction effect.

Toward the future

In product design, we will accelerate resource conservation by consolidating and sharing best practices within the company. In addition, we will work to solve the issue of improving material yield in the manufacturing process by further analyzing the amount of waste generated for each resource and the causes of waste generation.

Handle water risks

Materiality

- **Fully complete water risk assessments at all production sites**

Environment

Background to the identification of materiality

Water is the most precious resource that is indispensable for people's lives and industry, and it is said that, excluding seawater, icebergs and glaciers, the amount of water resources that can actually be used on Earth is only about 1% of the total. Our company uses water for cooling and cleaning at our production bases, and the depletion of water resources could have an impact on business continuity, such as shortening or suspending factory operations. In addition, if the risk of flooding increases due to climate change, there is a risk of operational shutdowns and disruption to the supply chain due to flood damage. Furthermore, if we violate wastewater regulations, there is a risk of affecting the surrounding areas and water source areas.

Initiatives in FY2023

We assessed the impact of water risks on the business activities of all of our production bases around the world using the World Resources Institute's (WRI) Aqueduct and the World Wide Fund for Nature's (WWF) Water Risk Filter, based on five categories: "flooding," "water shortage," "water quality," "water supply variability," and "regulation/reputation." As a result of these initiatives, it was revealed that 38 sites were at risk of flooding and 40 sites were at risk of water shortages, so we identified flooding and water shortages as important risks for our company. We then conducted a detailed survey of local information and business activity information, and identified a total of 12 sites in China (5), Thailand (3), Vietnam (2), and India (2) as being at high risk of flooding and water shortages, and confirmed that certain risk countermeasures were being taken at each of these sites.

Toward the future

Based on the initiatives we have been promoting to date, we will set targets for reducing water intake and wastewater volume, etc., and formulate activity plans to reduce water risk. By steadily advancing the water risk assessment process in this way, we will reduce the impact not only on our business, but also on the surrounding areas and water source areas.

Flood and drought risk