Review of the medium-term strategic goal Vision 2025

Review of Financial Performance

In July 2021, we established the medium-term strategic goal Vision 2025. This clarified our financial and non-financial targets for 2025 as milestones on the path to achieving consolidated sales of 10 trillion yen in FY2030. Regarding financial targets, we have set a target of 4 trillion yen in consolidated sales for FY2025, and have set a target of doubling sales per employee and operating income as a goal for improving productivity. We have also set a target of 15% or more for company-wide ROIC. The progress made towards these financial targets is as follows.

	Target for FY 2025	Results for FY2023
Consolidated net sales	4 trillion yen	2.3472 trillion yen
Improved productivity (net sales and operating profit per person)	Double sales and profit per person	Sales per employee in FY2020: 11.5 million yen ▶ In FY2023: 19.01 million yen (65% increase) Operating profit per employee in FY2020: 1.14 million yen ▶ In FY2023: 1.32 million yen (16% increase)
ROIC	Over 15%	4.5%

On April 1, 2024, Mitsuya Kishida was appointed president, and a new management structure was launched. With the keyword "One NIDEC," we are strongly promoting various measures, including the integration of technologies and human resources on a global basis, with the aim of achieving group-wide integrated management, or overall optimal management that grows while creating synergies among the group companies.

In July 2024, we announced the "medium- to long-term direction" under the new structure. The target sales of 10 trillion yen for 2030 remains unchanged, with 7 trillion yen to be achieved through autonomous growth and 3 trillion yen through new M&A. We have also established Five Business Pillars as areas we will focus on in the future. We aim to provide motors, related products and services in fields that align with global social trends, such as Base of AI Society, Productivity Efficiency, Mobility Innovation, Sustainable Infrastructure and Energy, and Home Appliances and Commercial Equipment that Support Our Lives. We also have a wealth of human resources and technology acquired through M&A and other activities around the world. By taking stock of these, bringing together the necessary technology and human resources, and making good use of them, we hope to pursue growth in our five business pillars.

Five Business Pillars

Better Life	Sustainable Infrastructure and Energy	Base of AI Society	Efficient Manufacturing	Mobility Innovation
Improving quality of life Pursuing reliability, safety and health	Contributing to infrastructure maintenance by efficient generation, storage and utilization of energy	Anticipating explosive demand and responding to required evolution	Leading labor-saving, automation, acceleration and high precision in manufacturing	Electrification and automation of eco-friendly vehicles
Home appliances	Power generator	Data center	Machine tools and Press machines	Automotive components
Commercial equipment (HVAC/elevators)	Battery Energy Storage System (BESS)	Semiconductor inspection / wafer transfer robot	Precision reducers	E-bike

Review of Non-Financial Performance

ESG evaluation

Our ESG-related goals are: ❶ **to solve social needs by accumulating world-leading, world-No.1 technologies;** ❷ **to promote ESG management centered on net zero CO_2 emissions; and** ❸ **to strengthen our organization and governance as One NIDEC.** In response to this, we have set five ESG materiality issues and 15 associated themes as important issues, while collecting opinions not only from within the company but also from external sources such as institutional investors. To promote action on these ESG materiality issues, we established the ESG Materiality Steering Committee, which is chaired by the president and brings together all of our executive officers to discuss important issues. The ESG Materiality Steering Committee began in May 2021 and has held a total of 29 meetings (five in FY2021, 12 in FY2022, and 12 in FY2023). Through the 29 meetings, we discussed the progress and issues of each of the five materiality issues and 15 themes, and decided on measures. As a result of these discussions and measures, in FY2023, our CDP climate change score and water score improved in many areas, and our overall score improved from C to B.

In FY2024, we will incorporate ESG indicators into executive remuneration and accelerate the promotion of the 15 themes associated with ESG materiality.
In line with this, we have reviewed the management structure of the ESG Materiality Steering Committee and established a new Sustainability Committee. Furthermore, the Environmental Management Subcommittee, the Climate Change Subcommittee, and the Human Rights Subcommittee have been established under the Sustainability Committee, and multiple departments are working together to discuss and implement sustainability initiatives from a perspective that is closer to that of frontline employees than in the past.

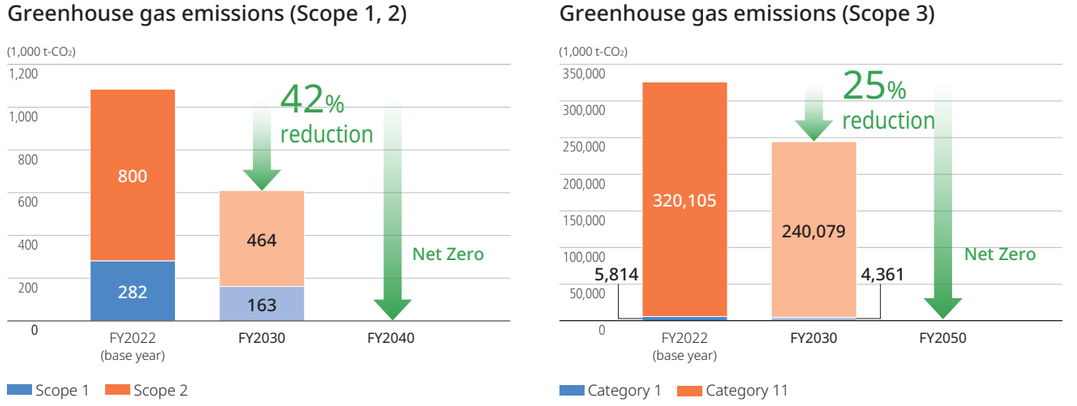
Net Zero CO_2 Emissions Target

Although we expect energy consumption to increase in proportion to business growth in the future, we will contribute to the realization of a decarbonized society by setting medium- to long-term targets to achieve net zero in Scope 1 and 2 by FY2040 and aiming for net zero in Scope 3 by FY2050, and promoting initiatives to achieve these targets.

In FY2022, we expanded the scope of our CO_2 emissions calculations to include all business domains, and in FY2023 we underwent third-party verification of our CO_2 emissions. In March 2024, we set new CO_2 reduction targets for 2030. This target was recognized as a target based on scientific evidence for achieving the "1.5°C target" in the Paris Agreement, and we received SBT certification from the international climate change initiative SBTi (Science Based Targets initiative).

- 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

NIDEC Group's medium- to long-term targets for reducing CO_2 emissions



* Scope 1: Direct greenhouse gas emissions from the business itself (fuel combustion, industrial processes).
Scope 2: Indirect emissions associated with the use of electricity, heat and steam supplied by other companies.
Scope 3: Indirect emissions other than Scope 1 and Scope 2 (emissions from other companies related to the business's activities).

Governance Structure

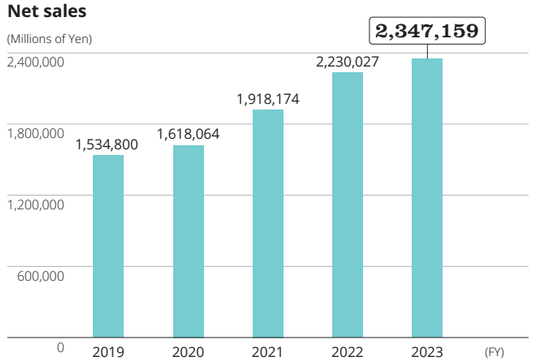
In February 2021, the Company established the Remuneration Committee, in August 2022, the Sustainability Committee, and in November 2022, the Nomination Committee. Each committee is composed of three or more directors selected by resolution of the Board of Directors' Meeting, with a majority of the members being independent outside members of the Board of Directors.

The aim is to further enhance the Company's corporate governance system by ensuring fairness, transparency and objectivity through the appropriate involvement and advice of independent outside members of the Board of Directors.

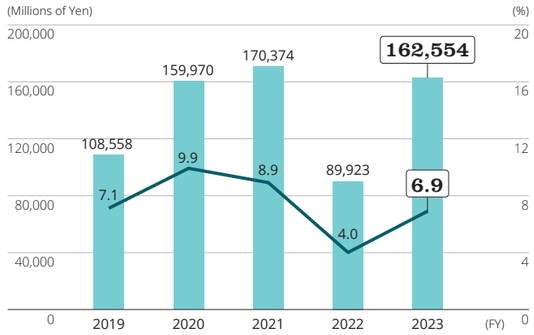
Performance Highlights

Financial Information

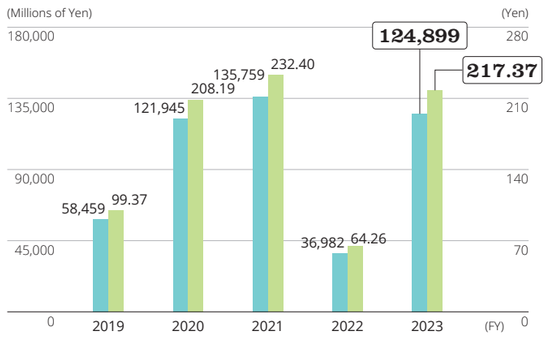
Net sales



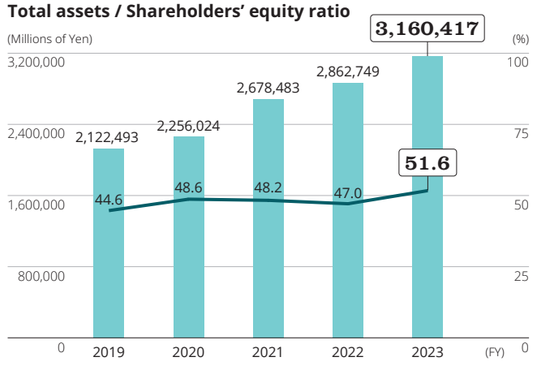
Operating profit / Operating profit ratio



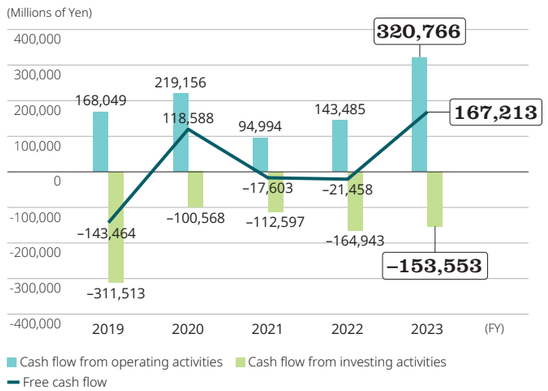
Profit attributable to owners of the parent / Earnings per share (EPS)*1



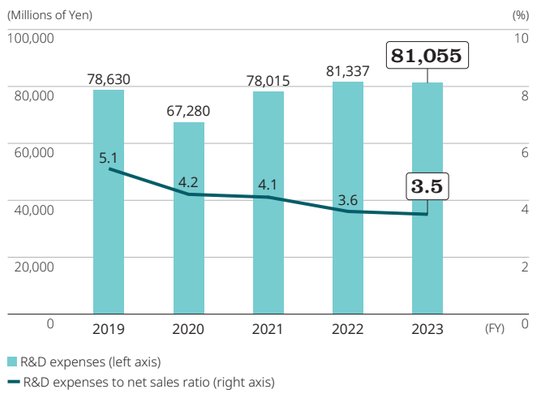
Total assets / Shareholders' equity ratio



Cash flow from operating activities / Cash flow from investing activities / Free cash flow



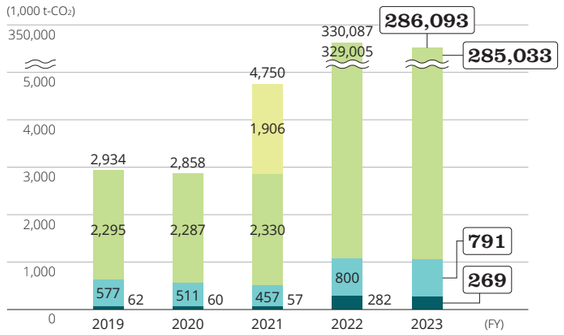
R&D expenses / R&D expenses to net sales ratio



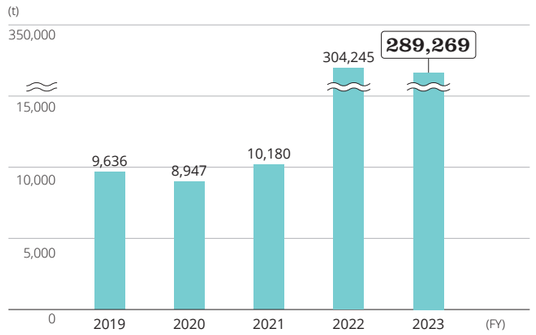
*1 Adjusted based on the 2-for-1 split imple-mented as of April 1, 2020. "EPS" and "Dividends" are expressed assuming that the stock split oc-curred at the beginning of FY2017.
*2 Data coverage rate relative to sales: FY2019: 59.2%, FY2020: 58.7%, FY2021: 53.5%, FY2022: 100%, FY2023: 100%.
*3 For calculation of the FY2022 data, IEA country-specific emission factors have started to be used. To calculate the data of FY2021 and before, the Ministry of the Environment's Calculation Method and Emission Factors Chart in the Accounting, Reporting, and Disclosure System was referred to.
*4 The GHG emissions in FY2021 doubled compared to those in FY2020 due to the expansion of businesses subject to data acquisition in Cate-gory 1 (marked by). The GHG emissions sig-nificantly increased in FY2022 compared to FY2021 as calculations for categories 8, 11, 12, and 15 started.

Non-financial Information

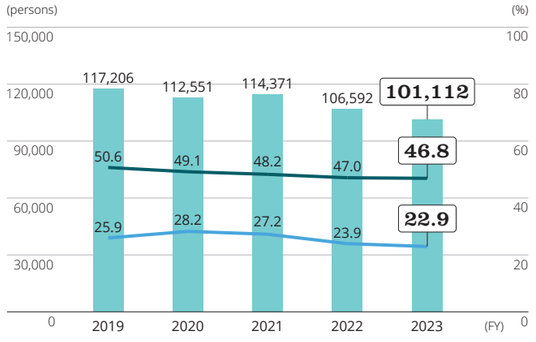
Greenhouse gas (GHG) emissions*2



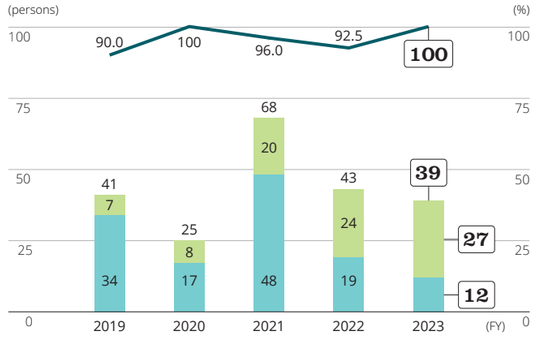
Amount of final waste disposal*2, *5



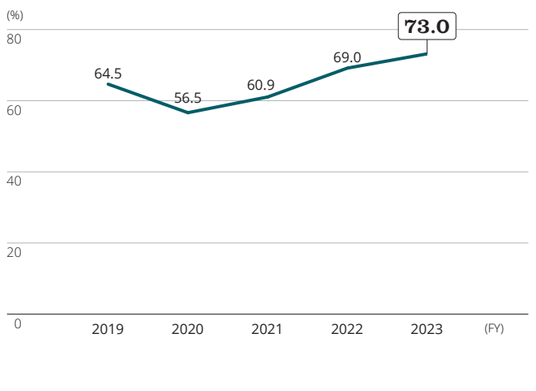
Number of employees (consolidated) / Female employee ratio (consolidated*6) / Ratio of managerial and director positions*7 held by women (consolidated*6)



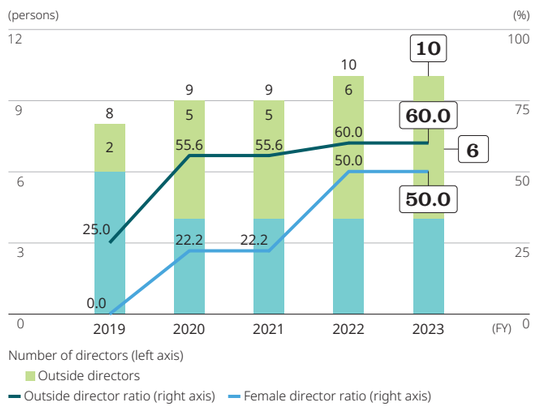
Number of employees who took childcare leave (non-consolidated) / Percentage of em-ployees who returned from childcare leave (non-consolidated)



Acquisition rate of annual paid leave (non-consolidated)



Number of directors



*5 For FY2021 and before, calculation was performed based on solid waste only.
*6 Calculation of consolidated data began from FY2019. In FY2023, 87.7% of employees of consolidated Group companies were surveyed.
*7 Managerial positions of section chief level or higher, and officers. Outside directors are included. Section chief level: Employees who fit the description (1) or (2) below, or those in equivalent positions.
(1) Position responsible for directing and implementing activities to achieve the daily oper-ational goals of the organization, and for communicating the instructions of managerial staff to the relevant subordinates (2) The head of an organization with two or more subsections, or 10 or more members

Evolving ROIC management to improve cash flow generation

— Achieving medium- to long-term corporate value improvement through appropriate capital allocation —

Akinobu Samura

Senior Vice President Chief Financial Officer (CFO)

Achieve further growth by improving cash flow generation

We have been boldly making growth investments, including M&A, and have improved our corporate value by achieving high growth and profitability centered on HDD motors. Amid major changes in the global market, new growth opportunities are expanding in various fields, including Water-cooling modules for AI data center servers and emergency generators, for which demand is rapidly expanding, as well as battery energy storage systems to promote the effective use of renewable energy and motors for eVTOL (electric vertical take-off and landing aircraft). In order to ensure that we take advantage of these opportunities and achieve further growth and increased corporate value, we are working to evolve our ROIC management and improve our ability to generate cash flow as our top priority.

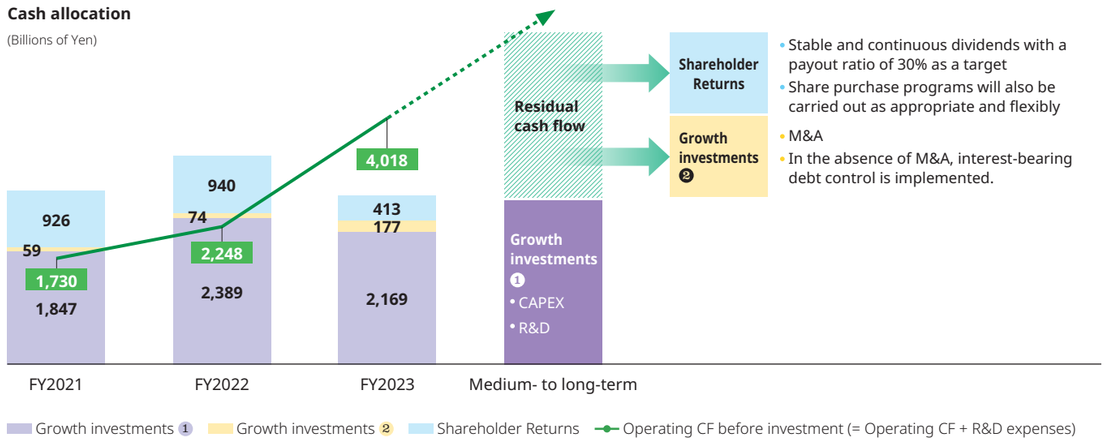
Cash allocation for improving corporate value

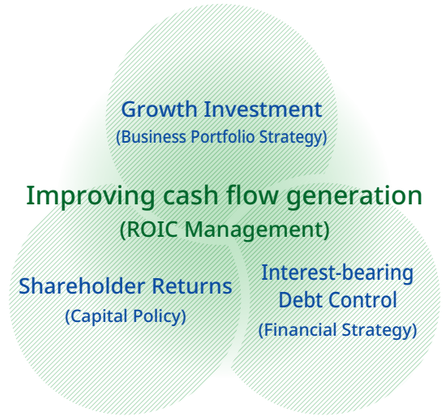
Since FY2021, we have been using ROIC (Return on Invested Capital) as one of our management indicators, and have been promoting improvement activities from both the perspectives of profitability and capital efficiency, with the goal of achieving an ROIC of 15% or more. Despite a period of decline in working capital efficiency due to the coronavirus pandemic, we were able to generate free cash flow of 167.2 billion yen (operating CF before investment*: 401.8 billion yen) in FY2023, a significant improvement on our previous record, as a result of our efforts to improve profitability and operating cash flow through working capital control, and to increase the efficiency of our investment activities. The cash generated in this way is allocated to “growth investment”, “shareholder returns” and “interest-bearing debt control” in a balance that contributes to the improvement of corporate value in the medium- to long-term.

* Operating CF before investment = Operating CF + R&D expenses

Cash allocation

(Billions of Yen)





Growth Investment (Business Portfolio Strategy)

Regarding growth investment, in order to achieve our target of 10 trillion yen in sales by FY2030, we are actively pursuing M&A that will have a synergistic effect with our existing businesses, as well as expanding production capacity for organic growth, CAPEX to improve productivity, and strengthening R&D. In making investment decisions, we will clarify business fields with relatively high profitability and fields with potential for future growth, and introduce a new system to support our business portfolio strategy so that we can optimally allocate the funds generated by our businesses. This is a system that enables the unified visualization of business and financial profiles (profitability, financial situation, etc.) for each business unit, such as “characteristics of the market entered” and “status of the company in the market entered”, and enables relative evaluation. Through this, we will optimize the allocation of funds based on the business portfolio strategy and achieve profitable growth in the medium- to long-term.

In addition, M&A is a powerful tool for optimizing business portfolios, and it has played an important role in our growth strategy to date. In the future, we will adopt new methods and pursue all possibilities.

Shareholder Returns (Capital Policy)

We have positioned the share price and market capitalization as important management indicators, and have been working to engage in careful dialogue with the capital markets. Therefore, in terms of shareholder returns, in addition to increasing the share price through business expansion and improved profitability in growth areas, we will implement stable and continuous dividends with a target payout ratio of 30%, and we will also flexibly implement share purchase programs, taking into account factors such as the funds for medium- to long-term growth investments, the current cash position, the share price level, and the total amount of shareholder returns.

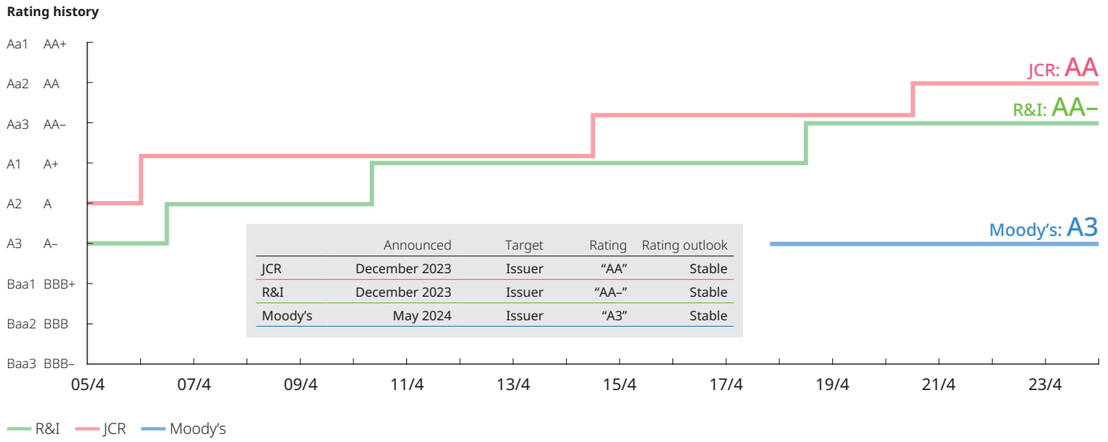
Interest-bearing debt control (Financial Strategy)

We believe that the basic principle of financial strategy is to balance securing growth investment funds with maintaining financial soundness. To this end, we have adopted the principle of “reinvesting cash generated by our own operations” to create a virtuous cycle, and our finance department, which acts as an internal bank, is at the center of the process, rigorously checking the profitability of investment projects and the adequacy of collection plans. At the same time, we are maintaining financial soundness by appropriately controlling the level of interest-bearing debt through the establishment of internal systems that promote the efficient use of funds, such as the setting of internal interest rates according to the creditworthiness of each business and the imposition of capital costs in the event that the invested capital budget is exceeded.

On the other hand, in order to carry out M&A, which plays a part in our growth strategy, in a flexible manner, we will secure a variety of funding methods and sufficient funding capacity, and we will build a strong financial structure that will enable us to maintain a certain credit rating* even if there is a need for funds for growth investment, including large-scale M&A.

* As of June 2024, the Company has obtained credit ratings from three domestic and overseas rating agencies, and is working to maintain and improve these ratings.

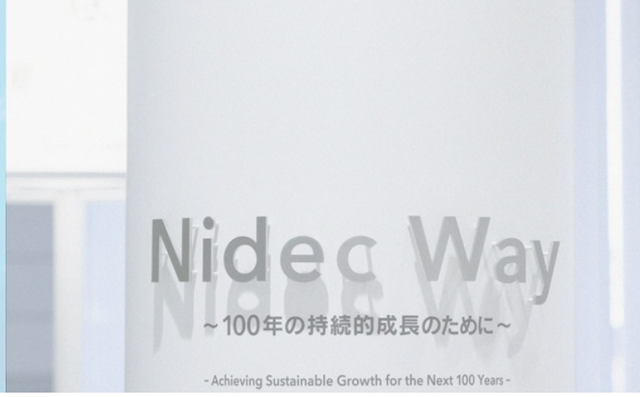
Rating history



	Announced	Target	Rating	Rating outlook
JCR	December 2023	Issuer	“AA”	Stable
R&I	December 2023	Issuer	“AA–”	Stable
Moody's	May 2024	Issuer	“A3”	Stable

Further Evolution in the Second Founding Period

— Unification of the Group through medium- to long-term growth and expansion of human capital —



Towards the expansion of human capital

In 2023, the year of our 50th anniversary, we changed our Japanese company name from "Nihon Densan Corporation" to "NIDEC Corporation", and we will continue to evolve as we enter a second founding period. As we enter a new stage in the next 50 years, we aim to achieve further growth, with sales of 4 trillion yen in FY2025 and 10 trillion yen in FY2030. To achieve this, we will break away from the old federal management style (which emphasizes the autonomy of individual companies), and to establish integrated group management style (One NIDEC: management that grows while creating group synergies from the perspective of overall optimization), we are promoting personnel measures and infrastructure development. Up until now, the company and its business have been driven by the strong leadership of its founder, Shigenobu Nagamori, but in the next 50 years of growth, under the leadership of the new president, Mitsuya Kishida, we will realize our vision of being a "global company that continues to grow for over 100 years" while passing on "NIDEC-ism" and the "NIDEC Way" (guidelines and standards for the behavior of all employees) to the next generation.

In addition, we are also striving to create a business group that can compete globally in order to become "the world's leading solution-providing business group that solves numerous problems for the people of the world". In creating a business group, we are focusing on the multifaceted human capital perspective in both the soft and hard areas of human resources, so that the entire group can have a firm core in the midst of diversity and work together to achieve the same dream as "One NIDEC". Furthermore, based on our corporate philosophy, corporate slogan and "NIDEC Way", which are the foundation of our strengths, we have compiled our basic approach to company organization and human resources as the "NIDEC Global Personnel Policies", and are putting these into practice as specific Human Resources Strategies and Measures. By removing the barriers between group companies and markets, and by pursuing a business group that can combine the technologies and human resources cultivated at each company under a solid corporate philosophy, we can maximize the effects of M&A (PMI), which is a feature of our business strategy.

Vision
- Nidec is a global company that will grow sustainably for the next 100 years and beyond.
- Nidec is the world's leading solution-providing business group that solves numerous problems for the people in the world.

Founder's spirit (The Challenging Road, NIDEC Way)

NIDEC Global Personnel Policies

"For Our Future, For Our Dream" We will continue to be an organization that is always ready to take on challenges for the future of people around the world and for our dreams.

Organizational and human resources development policy (for software area)	Personnel system policy (for hardware area)
Encourage Uniqueness We respect individuals who proactively demonstrate their value.	Reward Based on **Contributions without Bias** Performance will always be rewarded in a correct, fair, open, and impartial manner using simple criteria, and appropriate career opportunities will be provided.
Respect Team Spirit We are open to diverse opinions and create new value through honest communication.	

Human resources development
Skill development, career support, training of executives, etc.

Planning and operation of personnel systems
Appraisal, compensation, ranking and other systems, recruitment, attendance, salary, etc.

Fostering organizational culture
Penetration of philosophies, organizational development, health-oriented business management, etc.

NIDEC Global Personnel Policies and major personnel measures

The most basic policy of the NIDEC Global Personnel Policies is "For Our Future, For Our Dream—Our organizations and human resources will continue to take on challenges for the future of people around the world and our dreams." Under this are a policy related to organizational and human resources development and a policy related to personnel systems. This is a way of unifying recognition and intent on a global scale by putting into words the basic policies and beliefs that will form the basis of the various strategies and measures that will be developed in the future. This policy also includes the idea of achieving a system and organizational management that allows the more than 100,000 employees of the NIDEC Group to work under a fair system and to move freely between businesses and companies according to their business and career needs.

With regard to the establishment of a global human resources system and organization, the Global HR Strategy Committee, which was established in April 2024, is engaged in discussions between President Kishida, the heads of each business division, the heads of HR at major overseas offices, and the domestic HR department. We will continue to promote the planning of a wide range of human resources measures with the aim of developing and revitalizing the organization so that employees around the world, especially the younger generation, can connect with each other. At the same time, we have also launched the "All for Dreams Committee" to pursue the NIDEC Group's purpose. We will consider bottom-up measures to help each and every employee pursue the "meaning of working for the NIDEC Group" while inheriting the management philosophy and corporate culture of the founder.

"For Our Future, For Our Dream"

We will continue to be an organization that is always ready to take on challenges for the future of people around the world and for our dreams.

Recruitment/retirement
- Strengthen public relations for recruitment

Personnel allocation
- In-house job posting/rotation in the Group

Successor (executive) development
- Training candidates for President
- Visualization and development of human resources with high potential

Organizational management (corporate governance)
- Building a global personnel system
- Nomination Committee, Remuneration Committee, executive remuneration management

Relocation
- Establishing relocation rules common to both inside and outside Japan

Welfare benefits
- Establishing the Group-wide integrated welfare systems

Encourage Uniqueness / Respect Team Spirit

Reward Based on Contributions without Bias

Organizational development
- Promoting organizational development tailored to workplace conditions

Human resources development
- Enhancing support for career development, providing customized training programs for management

Human rights, compliance, safety and health
- Overtime work management
- Human rights due diligence

Ranking
- Development, disclosure and utilization of job descriptions

Appraisal
- Operating Group-wide common evaluation and promotion criteria

Compensation
- Initiatives to increase annual income by 30% compared to FY2020
- Adopting Group-wide common bonus payment standards

* The personnel measures in the above diagram are mainly applied to the Japan region.

The Nidec Group's approach to human capital management

Human capital management is a way of management that views human resources as capital and maximizes their value to improve corporate value over the medium to long term. At the Nidec Group, the founder's spirit is placed at the core of its human capital management, from which the "NIDEC Global Personnel Policies" and other personnel guidelines and measures are developed. By building a foundation where all employees of the group can work together to overcome any barriers, we believe that we can achieve our vision of "a global company that continues to grow for over 100 years" and "the world's leading solution-providing business group that solves numerous problems for the people of the world" as set out in our corporate philosophy.

We believe these guidelines and measures will lead to contributing to the company's business performance and other achievements from organizational or personnel aspects. To achieve consolidated net sales of 10 trillion yen in FY2030 and become a global company that continues to grow for the next 100 years and beyond, we will steadily advance the development and implementation of guidelines and measures based on the above approach to human capital management.

Building independent and self-reliant organizations and developing human resources

— Independence and self-reliance from founder management: Building organizations and developing human resources that can think for themselves and create their own futures —

In our group management system, which is focused on the next 50 years, new leaders selected from within the NIDEC Group will take on management, and we are also building a succession plan and the mechanisms (organizational development and human resource development mechanisms) to ensure that sustainable management can be maintained no matter who becomes the leader.

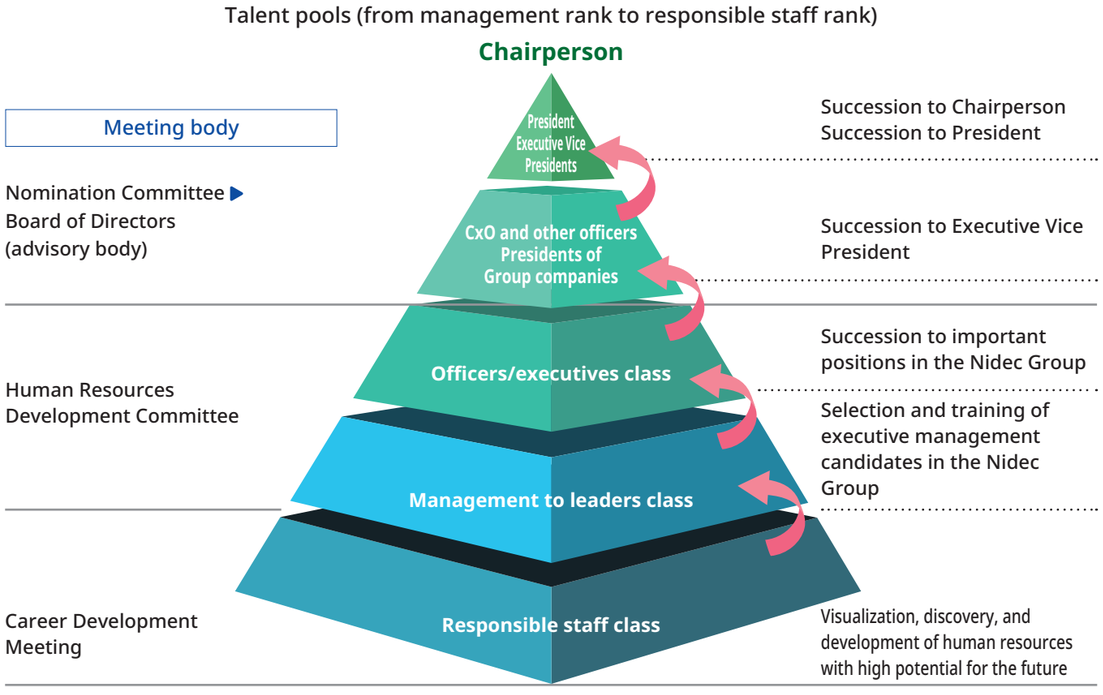
As we move from the previous top-down management style that made the most of the strong leadership of our founder, Shigenobu Nagamori, to a new group management system centered on the new president, Mitsuya Kishida, we need to make more changes than ever before to become an independent and self-reliant organization and workforce in order to realize our corporate philosophy and achieve our goal of becoming a "global company that continues to grow for over 100 years". To achieve this, we are focusing on the following three areas, with the "NIDEC Global Personnel Policies" at the center.

❶ Executive development: **Strengthening the group management system**
❷ Career development support and philosophy dissemination: **Encouraging challenges and envisioning the future on one's own**
❸ Organizational development: **Interpreting the role of one's own organization and aiming to maximize results**

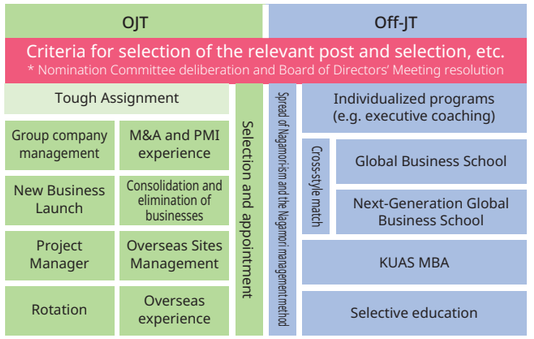
❶ Executive development: Strengthening the group management system

As we move towards a group management structure, a stable pipeline of talent for key positions is essential. To this end, we are visualizing key positions throughout the group, and while management executives are discussing the validity of succession plans, we are also identifying candidates who could become the next generation of management talent, and promoting strategic early development initiatives. In addition to tough assignments such as corporate restructuring and selecting and promoting talented individuals, we are also strengthening the development of potential management personnel through a training school established by the company's founder with the aim of spreading the company's philosophy and management mindset, and the Global Business School, which is designed to help students acquire a high level of management knowledge as the leaders of global companies, while combining knowledge acquisition with practical experience. In addition, we have begun implementing executive development measures tailored to the characteristics of each region.

Concept of talent pooling



* We have also established a system to prevent decision-making power from being concentrated in the hands of specific individuals by setting up a committee to discuss issues such as succession planning.



Nagamori Management School, a training program for business leaders run by Nagamori

❷ Career development support and philosophy dissemination: Encouraging challenges and envisioning the future on one's own

As stated in our basic policy, "For Our Future, For Our Dream—Our organizations and human resources will continue to take on challenges for the future of people around the world and our dreams", in our group management system, each and every employee is required to proactively demonstrate their value. For this reason, we are focusing on supporting career development and spreading our philosophy as a way of creating an environment in which employees can work together to achieve the same dream.

In terms of career development support, we provide support for drawing up a future plan by taking stock of and reviewing one's career through "career training for supervisors and junior staff" and "utilizing career plan sheets". In addition, we promote initiatives to realize career plans through career-related dialogue in 1-on-1 meetings and other daily activities. At times, we also support the realization of new career plans for employees through regular internal job postings.

In order to align the vectors of our employees and create an organization in which each employee can play a maximum role, we distribute and utilize "The Challenging Road", which summarizes the thoughts of the company's founder (NIDEC's philosophy and way of thinking, etc.). We are creating an organization with aligned vectors by creating an environment where "The Challenging Road" is a natural part of everyday work, and by providing opportunities to reflect on the level of understanding and implementation of the philosophy through regular training and other activities.

❸ Organizational development: Interpreting the role of one's own organization and aiming to maximize results

While continuing to uphold NIDEC's spirit, corporate culture, and 3Q6S, we are also working to implement the message from President, Kishida, "Open & Transparent (openly communicate what you can do, and don't hide your weaknesses)", we are not only focusing on individual employees, such as through executive development and career development support, but we are also working on organizational development to make the organization itself more autonomous and to reform it.

In organizational development, we conduct an "Organizational Performance Survey" with the aim of maximizing organizational results, and we consolidate and provide feedback on the results of employees' self-diagnosis of the organization from a multifaceted perspective, including the degree of penetration of the vision, workplace relationships, and the strength of achievement orientation. Furthermore, based on the results of the Organizational Performance Survey, we hold Workplace Workshops at each workplace where employees can honestly discuss what their workplace should be like, and through considering and implementing action plans that they can work on themselves to improve their organization and workplace, we are working to create organizational value.

We believe that communication between people is the most important factor in creating value and improving added value for an organization. In addition, we are working to foster a sense of unity within the organization through two-way communication between management and employees, while quickly establishing opportunities for interaction (dialogue) between President, Kishida and employees. Also, in terms of various domestic measures in the area of human resources, from fiscal 2021 we have been holding what we call HR Town Hall Meetings, where the person in charge of human resources at our company visits our domestic offices to work on things like ensuring that our human resources policies are understood and collecting opinions from employees.

Indicators for the penetration of the philosophy	FY2022	FY2023	FY2025 Target
Penetration of the vision	80.9%	76.4%	85.0%

*1 Penetration of the vision: Percentage of employees who responded "agree" or "somewhat agree" to the question "Is the company's management philosophy and vision shared at your workplace?" in the annual "Organizational Performance Survey".
*2 The decrease in the figure for FY2023 is mainly due to the fact that the personnel of the management level were temporarily unstable and unclear.

Exchange meeting for the President, Kishida, and employees

Materiality Initiatives

Maintain and foster globally competitive human resources

Materiality

- **Promote the discovery and development of global leaders**
  - — Strengthen the development of management personnel, including global human resources
- **Establish and make functional a global talent management system**
  - — Establish regional HR management
  - — Clarify positions subject to head office management
  - — Establish a global mobility policy

Human Resources

Background to the identification of materialit

The NIDEC Group aims to achieve consolidated sales of 10 trillion yen by FY2030, and in order to realize its vision of becoming "a global company that continues to grow for over 100 years" and "the world's leading solution-providing business group that solves numerous problems for the people of the world," it believes that it is essential to secure and develop human resources with high international competitiveness, that is, human resources that can play an active role globally. If we do not respond to these materiality issues, not only will we not be able to achieve the above-mentioned goals as a company that is developing its business globally, but there is also a risk that our corporate activities will come to a standstill if we suddenly need to find a successor for an important post.

Initiatives in FY2023

In terms of executive development, as an initiative with a medium- to long-term perspective rather than a short - term one, the Human Resources Development Committee, which was established in FY2020, discusses the appropriateness of succession plans (successor development plans) with management executives, while also identifying candidates for the next generation of management personnel and implementing strategic early development initiatives. As part of this initiative, we have been accelerating the development of management candidates since FY2022. In addition to assigning them high-level tasks such as corporate restructuring and selecting and promoting them, we also hold a training school (once a month) run by the company's founder to instill our corporate philosophy and management mindset. Furthermore, through the activities of the Nomination Committee, which was established in November 2022, we have appointed a new president for our company. The Nomination Committee carefully deliberates on the appointment of the new president, ensuring that the criteria for the appointment are met and that the candidate is suitable for the position.

In terms of career development support, in addition to the career interviews and career training for young employees that we have been conducting through the use of career plan sheets, we are also implementing the measures shown in the diagram below.

We are implementing training for managers to identify their strengths and weaknesses as leaders, and we are using individual feedback reports in on-the-job training. In addition to rolling out educational videos on daily conversations between superiors and subordinates (1 on 1) to Group companies in Japan, we are also implementing new training with an eye to supporting the career development of subordinates, and we are working to strengthen the development of subordinates and management capabilities in our own organizations.

Toward the future

We will expand the scope of candidates for next-generation management personnel to include foreign nationals, and promote the early and systematic implementation of training measures. The "Global Business School" (opened in 2016) and the "Next Generation Global Business School" (opened in 2017), where candidates for management positions in the NIDEC Group from around the world gather to acquire a high level of management knowledge as leaders of a global company, were suspended due to the impact of the coronavirus in recent years, but will be gradually reopened and efforts will be made to strengthen training by combining knowledge acquisition and practical application. In terms of developing the next generation of leaders and professional human resources, we will expand our lineup of human resource development measures, such as customized training that allows people to learn the content they want to learn, in order to promote autonomous growth, and we will also strengthen our support for career development. In terms of talent management and human resource allocation, we will establish the "Global Mobility Policy" and put in place a smooth transfer scheme in order to promote the right person in the right place globally.

Career Support Framework at NIDEC

	Promote career support for subordinates	Promote the autonomous career development of the individual			
	Superiors care about the career of their subordinate	Learning career development methods	Considering a career plan	Expanding career horizons	
Officers/executives	Career training for developing subordinates	Career training by age group * To be considered in order	Career Plan Sheet Career interviews between superiors and subordinates / Evaluation interviews JD release * To be considered in order	Other human resource development measures * Training and self-development programs tailored to career steps etc.	Work experience at the workplace (OJT) Internal recruitment Planned rotation (Functional axis human resource management system)
Management to leaders					
Responsible staff		Career training for new employees and new graduates in their second and fourth year			

Promote diversity

Materiality

- **Achieve the targets below related to women's empowerment (non-consolidated)**
  - — Ratio of female directors*: 20% or higher
  - — All managerial positions held by women: 9% or higher
  - — Ratio of female candidates for managerial positions*: 15% or higher
  - * Executive officer or higher position, including outside directors
  - * Referring to female employees in positions immediately prior to managerial positions
- **Recruit non-Japanese directors**

Human Resources

Background to the identification of materialit

NIDEC Group recognizes diversity as a source of competitive advantage. As we develop our business globally, we believe that we can respond effectively to the rapidly changing business environment and customer needs by respecting and accepting the differences that individuals have, and by making the most of those differences. If we do not respond to these materiality issues, even talented and motivated individuals may not be able to make the most of their abilities and values, and this could hinder creative business activities. In addition, the risk of prejudice, discrimination and harassment occurring will increase, and we can expect to see an increase in employee turnover as a result. For this reason, we are working to create a workplace environment and develop and promote human resources that will allow each organization and employee to fully demonstrate their potential. In addition, we are working to refine the "NIDEC-ness" (philosophy) that we have cherished since our founding to suit the times, and share it with all employees, while also promoting initiatives to foster unity of purpose even amid diversity.

Initiatives in FY2023

We believe that creating a workplace environment where the potential of each individual employee and the organization as a whole can be fully realized is important in order to achieve the goal of empowering women, which we have set as a materiality KPI. To this end, we are promoting organizational development that aims to improve performance by activating relationships between employees and connecting each workplace to the organization as a whole. We have introduced an "Organizational Performance Survey" to visualize the current situation in each workplace, and a "workplace workshop" where members of each workplace can have an honest dialogue based on the survey results, and we are working to foster an organizational culture and build an organization that can make decisions based on a vision while respecting diverse opinions.

Results of the Organizational Performance Survey
(excerpts from items related to career awareness)

	FY2022	FY2023	FY2025 Target
Career consciousness	50.2%	50.4%	55%

* Career consciousness: Percentage of employees who responded "agree" or "somewhat agree" to the question "Do you have a career direction in mind?" in the annual "Organizational Performance Survey".

Toward the future

We have been promoting diversity in terms of attributes such as the recruitment of female and foreign nationals since around 2005. In addition to these, we have been strengthening activities focused on the diversity of individual employees' values and career aspirations, and as of the end of FY2023, we have achieved all of our targets for each level, with a female officer ratio of 19.4% compared to the target of 10% or more, a female manager ratio of 8.1% compared to the target of 8% or more, and the ratio of female candidates for management positions was 15.2%, which is more than the target of 15% or more for each level (the target values here are for the single year of 2023).

We believe that we need to continue to improve on these indicators. We will set new targets and continue to support the development and promotion of employees within the company, while also focusing on diversity and inclusion initiatives that will maximize organizational performance by expanding the scope of diversity and making the most of the values and aspirations of each and every employee, regardless of their attributes.

Examples of female executives who are active in our company:
Naoko Toyoshima Head of Nidec Center for Production Technology R&D

Promote occupational safety and health, and health-oriented business management

Materiality

- Ensure a safe and comfortable work environment
- Reduce the number of serious accidents (those resulting in death or permanent disability) to zero
- Improve the Lost-time injury frequency rate
- Realizing health management as a unified NIDEC Group
- Receive certification as a White 500 Company (in the large enterprise category) under the 2025 Certified Health & Productivity Management Outstanding Organizations Recognition Program

Human Resources

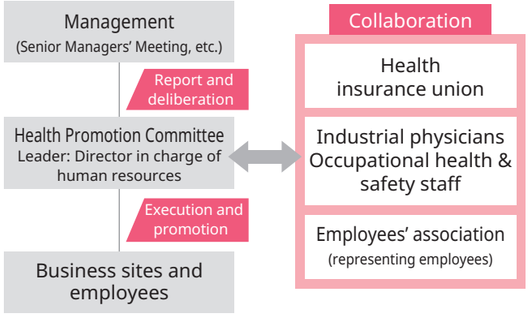
Background to the identification of materialit

The shrinking of the working population is a global social issue, and it is important for companies to support the health management of their employees in order to treat limited labor resources with care and maximize "human resource value". Therefore, the NIDEC Group is working on health management with the themes of creating a safe and comfortable working environment where employees can fully demonstrate their abilities and promoting the safety and health of employees, with the cooperation of the company and employees, in order to prepare for the risks of reduced productivity, loss of human resources, and reduced brand value in the event that the above four items are not addressed. The Health Promotion Committee, which is made up of members from across the company, is taking the lead in strengthening the system for managing and promoting health, and we are also working to improve health literacy by holding health seminars with industrial physicians and conducting health awareness surveys for all employees. In addition, we are promoting health management, such as by achieving a complete smoking ban on the premises of our domestic offices.

Health

Aiming to create a work environment that promotes our employees' mental and physical health and help them shine at Nidec to the greatest extent possible,

Health management promotion system



we have a Health Promotion Committee in place. Each business base has health promotion personnel to launch measures tailored to its workplace while working in collaboration with industrial physicians, i.e., health experts, and a health insurance union for the entire company to promote health-oriented business management. Furthermore, in order to establish a flexible health promotion system, preparations were made to establish an in-house health insurance association within the NIDEC Group, and this was officially established in April 2024.

Initiatives in FY2023

We held health seminars by industrial physicians to improve employee health literacy and the overall health of our employees. Each year, the theme of the seminar is decided based on the results of the Nidec Health Survey, an annual internal health survey. The seminar in FY2023 focused on the topics that were highly requested by employees and that were directly related to their health issues (e.g. stiff shoulders, back pain, sleep, smoking cessation, mental health). In addition, for employees with high health risks, we provide effective individual health guidance based on the results of health checkups and encourage them to undergo a thorough medical examination.

Toward the future

Currently, each Group company in Japan is implementing its own health management and promotion initiatives, but eventually we will build a foundation for promoting health-oriented management throughout the Nidec Group. We will implement medium- to long-term initiatives to strengthen our industrial health system, visualize the health status of the entire Group, and operate a cycle of improvement. We will continue our efforts to promote the physical and mental health of our employees and to create a work environment in which they can maximize their activities.

Safety

Based on past cases, the entire Group has taken on new measures aimed at eliminating workplace accidents.

Initiatives in FY2023

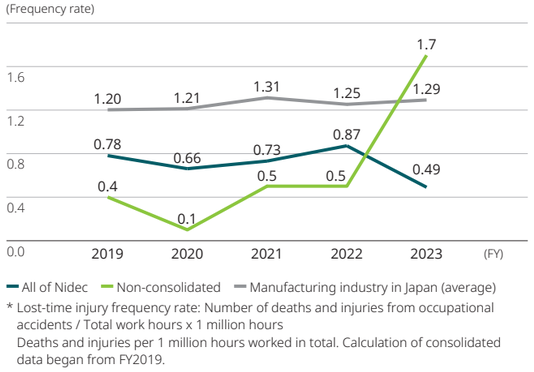
We achieved the planned targets for the materiality KPIs related to safety activity checks and remote safety checks.

Target	Results
A complete inspection of steps	2,370 cases improved
A complete inspection of areas where there is a risk of limbs being caught in the machine	8,651 cases improved

Toward the future

We will analyze the causes of the occupational accidents that have occurred, and implement group-wide inspections and countermeasures for the events that were the root causes, in an effort to eliminate similar accidents.

Lost-time injury frequency rate



* Lost-time injury frequency rate: Number of deaths and injuries from occupational accidents / Total work hours x 1 million hours
Deaths and injuries per 1 million hours worked in total. Calculation of consolidated data began from FY2019.

Respect human rights and follow proper labor practices

Materiality

[Follow proper labor practices]

- Manage working hours of employees, including those in managerial positions, from the perspective of occupational safety
- Reduce average overtime hours by improving productivity

[Respect human rights]

- Clarify human rights policies for workers including those in the supply chain, and spread them among employees

Human Resources

Background to the identification of materialit

If we do not address these material issues, there is an increased risk that our activities will have a negative impact, i.e. that stakeholders will be affected by human rights violations. In addition, we will be exposed to the following four major risks.

1. Reputational risk, such as consumer boycotts and damage to brand value
2. Operational risks such as strikes, the outflow of human resources, or the suspension of transactions with customers or suppliers
3. Legal risks such as being held liable for lawsuits or sanctions
4. Financial risks such as a decline in share price or divestment

In order to reduce and avoid these risks, we are promoting initiatives such as human rights impact assessments, the cessation, prevention and mitigation of negative impacts, monitoring and information disclosure as part of our human rights due diligence process.

Initiatives in FY2023

In FY2023, we are focusing on the following aspects of the human rights due diligence process: stopping, preventing, and mitigating negative impacts; and monitoring. Every year, we promote human rights awareness in line with International Human Rights Day and Human Rights Week. As a continuous initiative from FY2022, we have been conducting e-learning on the theme of "Respect for Human Rights in the Workplace" and compliance training that includes content on harassment. In addition, we are using SAQ (self-assessment) to survey and evaluate the current situation at the approximately 300 NIDEC Group locations, and are also promoting specific corrective measures. For example, the SAQ revealed that some bases were not implementing the NIDEC Group Human Rights Policies formulated in 2021, so we re-communicated these policies globally. In addition, we are promoting individual corrective measures at each base, such as ensuring that the NIDEC Global Hotline, which is the internal reporting contact point, is well known, and clearly stating the prohibition of harassment in the employment regulations. In order to prevent human rights risks in the supply chain, we are asking suppliers, mainly in Asia, to complete a SAQ and are currently investigating and evaluating the current situation. Based on the information obtained from the SAQ on the upstream supply chain, we are evaluating the risks in each category on two axes: the severity of the negative impact on human rights and the likelihood of occurrence, and prioritizing responses.

With regard to managing working hours, we continued to consider how to optimize the number of managers in Japan, and we also carried out micro-management of employees' working hours, and reported and liaised with the relevant parties as appropriate. We also made sure that employees who had reached a certain number of working hours in the middle of the month, and their superiors, were aware of the need to coordinate their work through sufficient communication.

Toward the future

We will strengthen our human rights due diligence to identify and minimize human rights risks at each NIDEC Group site and in our supply chain. Specifically, we will identify potential negative human rights impacts by conducting human rights impact assessments based on stakeholder feedback. In addition to implementing educational measures to verify understanding of human rights items centered on the Basic Policy on Human Rights at all global locations, and conducting regular SAQ surveys on human rights, we will also strive to take appropriate corrective and preventive measures, including through dialogue with locations and suppliers that are particularly high risk. We will also continue to ensure that working hours are appropriate and that occupational accidents are prevented. We will fulfill our social responsibilities as a company that employs over 100,000 people across the Group.

Realizing the NIDEC Group as a strong technical group

— Pursuing technology that contributes to the interests of both the company and society —

Michio Kaida

First Senior Vice President　CTO (Chief Technology Officer)
In charge of managing Nidec Product Technology R&D Center
In charge of managing Nidec Center for Production Technology R&D
In charge of managing Nidec System Manufacturing Engineering Center
Keihanna Technology Center Administration Department, Intellectual Property Department

Generating business from research institutes

In order for our company, the world's No.1 comprehensive motor manufacturer, to achieve further evolution, it is important for us to realize our vision as a business creator by bringing together the technologies of all the companies in our group. We have research institutes in Keihanna, Kyoto Prefecture, and Shin-Kawasaki, Kanagawa Prefecture, and we would like to develop the activities of these research institutes in areas that are closer to business. By having our research centers engage in business with a broad perspective, our company will be able to achieve self-reliance and autonomous growth, and we will be able to achieve even higher performance and profits.

The mindset of the personnel at the research institute is an important factor in terms of self-reliance and autonomous growth. We want the people involved in research and development to have the mindset of a manager who can create new businesses from scratch. In order to raise their mindset to the level of a manager, they must pay attention to the technologies they are researching. It is essential that each researcher pays close attention to their surroundings and always seeks to understand how a single technology can be related to many businesses and lead to business opportunities. In this way, a web of research and development will be woven throughout the entire group, enabling all technologies to be closely and organically combined. We believe that this "organic combination of composite technologies" is the foundation for realizing the NIDEC Group as a strong technology group.

From solving problems at your feet to creating next-generation technologies that generate profits

Key Issues

1. Accelerating the development of cutting-edge products
2. New Markets Case Support
3. Assisting E-Axle Production and Development
4. Horizontal deployment of productivity improvement measures and cost reduction strategy
5. Strengthening the analysis of technical and market information
6. Deepening of medium- to long-term development themes
7. Establishment of a global collaboration CTO cross-sectional technology review
8. Minimizing business risk

Finding core competence through the organic combination of technologies

If you look at the NIDEC Group, you will see that various technologies and know-how essential to manufacturing have been cultivated at each company and each base, including not only motor-related technologies but also elemental technologies, software technologies, sensing technologies, production technologies, and even quality control. As mentioned above, the role of the future research institute will be to take a bird's-eye view of these technologies and organically combine them. In order for our company to survive in the future market environment, we must not only focus on the component and hardware aspects of motors, but also on the overall system, which is a collection of technologies including software such as electronic control. I believe that the process of developing a system, through which different technologies are combined more deeply and efficiently, gives rise to a company's unique technology, or core competence. Even if each technology is commonplace, a system that has been brought together through core competence boasts a level of perfection that other companies cannot easily imitate. Such highly perfected systems not only give rise to new business, but also lead to next-generation technologies that can contribute to solving social issues.

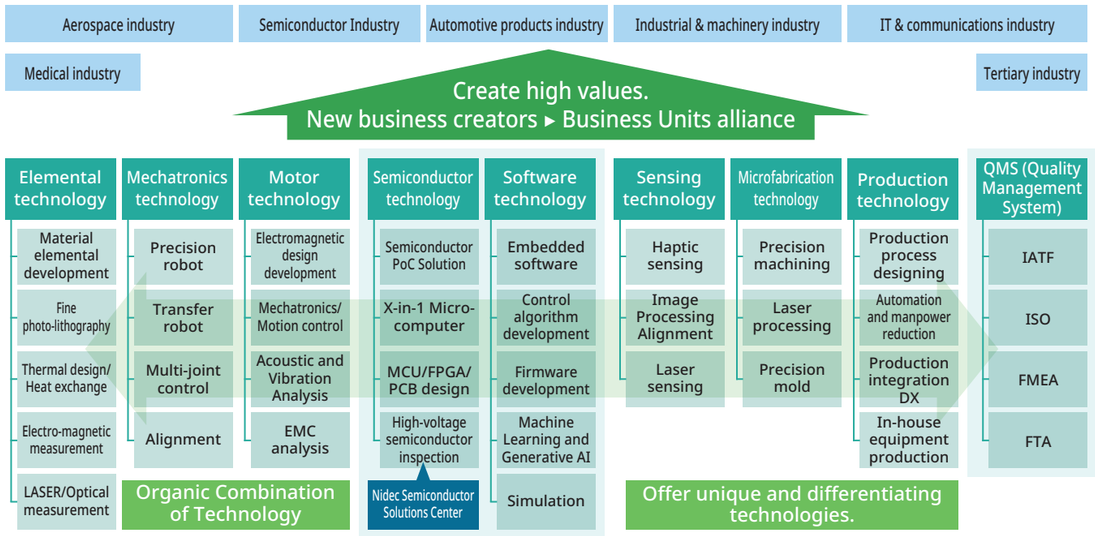
Creating next-generation technologies that generate profits

The NIDEC Group is able to develop its business into a wide range of business areas, with its core competence extracted from the organic combination of motors and various technologies. In particular, we believe that we can create new businesses in the three elements or five Areas focus based on market trends that we presented to you in July this year, with the aim of realizing a "Circular Society".

Among these, the business area that will support the Base of AI Society is particularly important. The demand for AI servers is continuing to expand, and as AI evolves and becomes more widespread, it is thought that AI itself will bring about further demand for AI and advanced data processing. As a result, it is expected that the business domain related to AI will grow explosively. The NIDEC Group has semiconductor inspection technology and thermal management technology for data servers that are essential for manufacturing AI, and while continuing to respond to social demand and solve problems, we are also researching and pursuing new technologies that will contribute to the development of an AI society in the future.

When we add up the size of all the markets we can enter in this way, we estimate that it will be on the order of 1,000 trillion yen. Even if we can capture just a few percent of that market, it will be a major step towards achieving the NIDEC Group's target of 10 trillion yen in sales by fiscal 2030. In order for the NIDEC Group to achieve further growth as "NIDEC of Technology" in the future, our research institute will pursue technologies that contribute to the interests of both the company and society.

Organic Combination of NIDEC Core Competencies



Materiality Initiatives

Pursue product safety and quality

Materiality

- Create a database for chemical substances contained in products to make it easier for the development department to determine the choice of materials, and shift to an environment-oriented development system
- Implement quality management reforms in the automotive-related business, and establish an overall quality control organization and system by FY2025
- Conduct assessment of all newly developed products and all products during the manufacturing process to reduce product safety risks

Products

Background to the identification of materiality

In our wide-ranging product lineup and supply, we are working to ensure quality and safety in all aspects of our operations, from product design and component selection to disposal and recycling, in response to customer requirements and relevant laws and regulations.

If we are unable to respond to the growing social demand for environmentally friendly product development, we may lose business opportunities due to our failure to comply with chemical substance laws and regulations in each country. In addition, as the automotive products business has grown to account for more than 20% of the NIDEC Group's consolidated sales, if we are unable to meet the quality needs of our customers in the automotive industry, there is a possibility that the NIDEC brand's credibility will decline due to product defects and recalls.

Initiatives in FY2023

The Small Platform Motor & Solutions Business Unit, which operates businesses in environmentally advanced countries such as EU countries and has many customers with a high awareness of environmental issues, has already complied with current regulations. However, it is expected that legal regulations and social demands will become even stricter in the future, so we are working to reduce the amount of lead used in materials that are difficult to replace and to curb CO_2 emissions by recycling resin materials in advance of the laws, regulations and demands of each country. Specifically, we are promoting the replacement of steel materials used in products for some customers with low-lead materials. We are making proposals, particularly to customers in the IT industry, and have received orders for low-lead materials for new products to be released in FY2023. In terms of promoting the use of recycled resin materials, we have proposed and shipped products that has increased the use of recycled resin materials to 50% to some customers, and we are currently evaluating the characteristics of these products, including their reliability. Toward the future, we will continue to develop products that use recycled resin materials and promote these to our customers.

Meanwhile, in the Automotive Motor & Electronic Control Business Unit, where quality requirements are even stricter, we are working to ensure high product and process quality through the Quality Management audit of project deliverables conducted by the Quality Assurance Department in the development of new projects. We have introduced a system in which the Quality Assurance Department, which is an internal third party, carefully examines and evaluates the deliverables (project tasks) of all departments. This initiative is implemented in line with the project plan, and by obliging the reporting of results to top management, we are improving the quality of product development and strengthening activities to prevent product safety risks within the Automotive Products Division.

The global quality management division, which was established as a cross-sectional function to oversee quality across the entire company, holds regular meetings attended by the quality assurance departments of each NIDEC Group company, and works to understand the quality situation at each company and share best practices across the company. In the product development flow of the entire NIDEC Group, we are promoting the maintenance of standard documents that guide basic quality assurance practices, from understanding customer requests to product and manufacturing process design, and after-sales service after mass production, and ensuring that these are thoroughly implemented in each business entity.

Toward the future

With regard to reducing the environmental impact of substances in the Small Platform Motor & Solutions Business Unit, we recognize the importance of initiatives to address PFAS (Per and Polyfluoroalkyl substances: a general term for organic fluorine compounds containing two or more fluorine atoms), which has been attracting increasing attention in Japan and overseas in recent years. We will aim to become a leading environmental company by promoting activities to prevent the use of materials containing PFAS, as well as the unintentional use or contamination of products with these materials.

In addition, the Automotive Motor & Electronic Control Business Unit will continue to use the mechanisms it has introduced to reduce product safety risks, and will conduct 100% product assessments of new developments and manufacturing processes.

The Global Quality Management Division will oversee quality assurance for the entire NIDEC Group, without regard to business unit or company boundaries.

Respond to changes in the technological environment and the industrial structure

Materiality

- Continuously launch new products that lead the Five Big Waves to resolve social issues
- Continue to pursue the high efficiency and miniaturization of motors that contribute to energy and resource saving

Products

* The Five Big Waves: Five business areas related to global social issues and their growth markets, which we place particular emphasis on in the medium-term strategic goal Vision2025.

Background to the identification of materiality

In order to realize a sustainable society, our company is working to promote the development of products and technologies that will help solve global social issues through our products and business activities. One of the risks of not taking this approach is the loss of business opportunities due to our inability to provide products that meet the needs of customers and markets.

Initiatives in FY2023

In order to continuously promote CO_2 emission reduction activities through product development and business activities, we are calculating the CO_2 emissions of our main products based on LCA (Life Cycle Assessment) and organizing them by product group. We are accumulating this information and using it in product design with consideration for reducing environmental impact, and are working to promote environmental value.

Toward the future

We will strive to develop products and technologies that contribute to reducing the environmental impact on society and our customers, and aim to promote the widespread use of these products. Specifically, we will promote research and development that contributes to energy and resource conservation, CO_2 emissions reduction, and improved recyclability through the development of more efficient motors and products that are smaller, lighter, thinner, and more compact.

"SynRA™" high-efficiency motor that reduces electric power consumption

The high-efficiency synchronous reluctance motor "SynRA™"*1, which was launched in 2022, does not use magnets and achieves the highest level of efficiency class IE5*2 in international high-efficiency standards. This motor combines the basic principles of a synchronous reluctance motor with those of a cage-type induction motor, and achieves high efficiency by using a special reluctance design for the rotor. In the future, it is expected that there will be increasing demand for reducing the electric power consumption of motors due to factors such as high-efficiency regulations for industrial motors in various countries, the environment, and rising energy prices, and there are high expectations for the application of the "SynRA™" to various uses.

In May 2024, we concluded a Memorandum of Understanding (MOU) with the Metal Industries Research & Development Centre (MIRDC) of Taiwan on technical development, manufacturing, application, etc. of products related to high-efficiency motor systems. We will continue to expand the range of applications for industrial motors through cooperation with MIRDC, starting with pumps for water treatment facilities.

We believe that the widespread use of the high-efficiency "SynRA™" motor, which reduces electric power consumption, will make a significant contribution to reducing the burden on the global environment, and we will continue to promote further research and development in the future.

*1 SynRA (Synchronous Reluctance Motor with Aluminum Cage Rotor)
*2 IE5: IE is an efficiency level defined in the International Electrotechnical Commission's (IEC) energy efficiency guidelines for motors (IEC60034-30-2), with IE5 being the highest efficiency level.

High-efficiency Synchronous Reluctance Motor "SynRA™"

Signing of MOU for cooperation in the development, manufacturing, and application of high-efficiency motor system-related products

Protect and utilize intellectual properties

Materiality
Transform our IP portfolio to one that responds to social and business changes, including decarbonization and power and manpower saving, and use the new IP portfolio

Products

Background to the identification of materiality

Our company is working on product development, seeing the business opportunities arising from the "Five Big Waves" that include issues such as decarbonization, saving electric power, and reducing the need for manpower as opportunities. If the transformation of our IP portfolio is delayed, there is a concern that our competitiveness will decline and our contribution to society will be impeded, so it is important to protect the results of product development with intellectual property rights and to transform them in a timely manner.

Initiatives in FY2023

In FY2023, we continued to build and manage IP portfolios that match each stage of the product lifecycle, and to utilize these rights. We also conducted thorough prior research into the intellectual property rights of other companies, and proceeded with our business activities while respecting these rights. In addition, we strengthened our activities to analyze market trends and other information using intellectual property information, and we implemented activities to build a stronger intellectual property portfolio based on this information.

As the volume of data handled in AI-based processing is expected to increase even further in the future, there is a problem with the heat generated by the semiconductor processors and other devices used to process this data, and there is a growing demand for water-cooling module products with high cooling capacity in data centers that use large numbers of these devices. By analyzing the technologies of various companies for each product issue, such as improving cooling performance and achieving high reliability, we have been able to quickly identify areas where we can make a greater contribution to society and move forward with patent applications. As a result of these activities, we have been able to strengthen our intellectual property portfolio related to technologies such as pumps, power supplies, and circuit boards, which are features of our products and contribute to system redundancy.

As a result of these activities, we were able to build and transform our SDG-related intellectual property portfolio, centered on the "Five Big Waves", towards the realization of a sustainable society, and maintain a high ratio of 56%.

Keeping with last year, we were selected as one of the "Top 100 Global Innovators 2024" by Clarivate. This award selects the top 100 innovative companies and organizations in the world by analyzing intellectual property based on four evaluation criteria: success rate, geographical investment, influence, and scarcity.

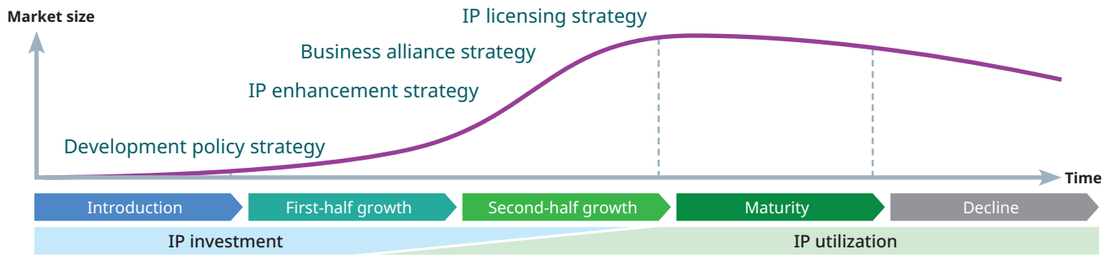
Other awards

- Two inventions by the NIDEC Group received the "Kyoto Invention Association Chairman's Award" and "Invention Encouragement Award" at the 2023 Kinki Local Commendation for Invention.
- Two inventions by the NIDEC Group received the "Excellence Award" and "Award" at the 67th Kyoto Prefecture Commendation for Invention.

Toward the future

We will continue to transform and utilize our intellectual property portfolio in response to business changes. We will also further invigorate our intellectual property analysis activities, which we have been strengthening up to now, and by conducting analysis activities that utilize intellectual property information from the early stages of the product lifecycle, we will accurately grasp the social trend information obtained from these activities and promote the development of new products that contribute to the realization of a sustainable society. Through such activities, we aim to "contribute to the business through the creation of intellectual added value", and we will also strive to improve the value of intellectual property through the establishment of an organization of intellectual property professionals and the creation of an internationally competitive intellectual property portfolio.

Intellectual property activities in line with the product lifecycle



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

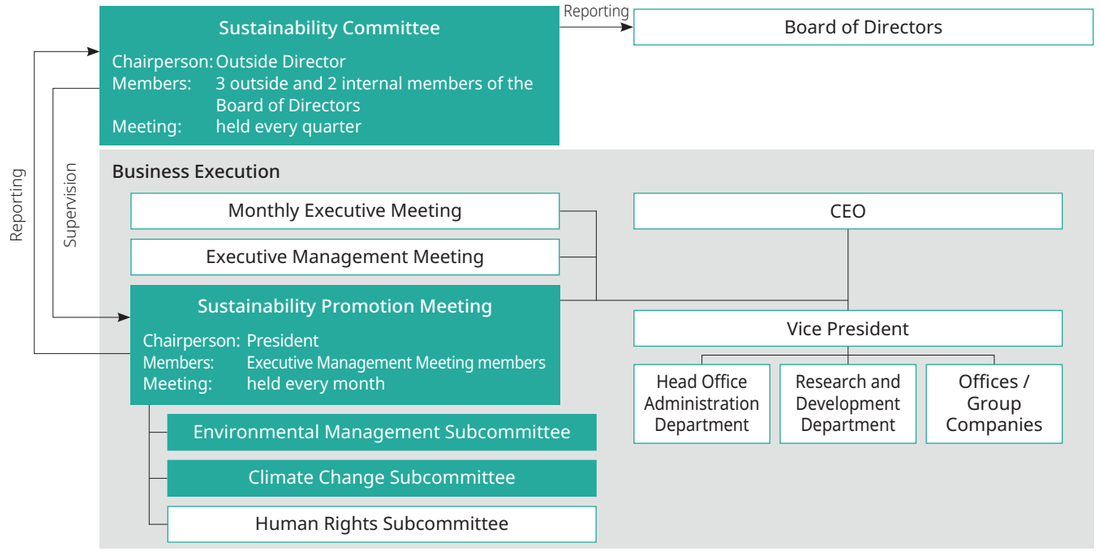
At the NIDEC Group's Sustainability Promotion Meeting, the status of business execution related to material issues (materiality) including the environment is confirmed, and the sustainability activity policy and important matters are deliberated and resolved. This meeting is chaired by the president 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).

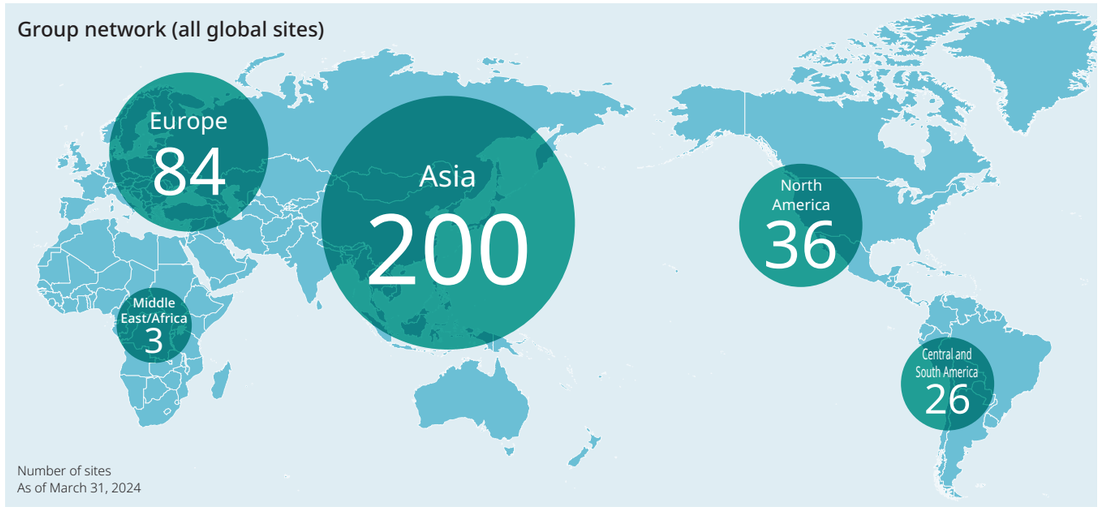
STEP 4 Examine countermeasures

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					○

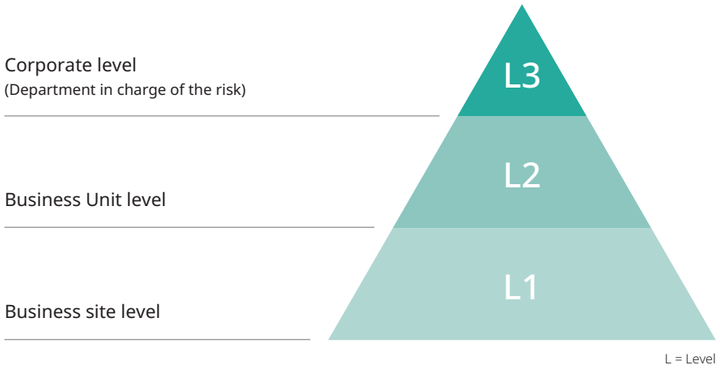
Quantitative evaluation of business impact

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.



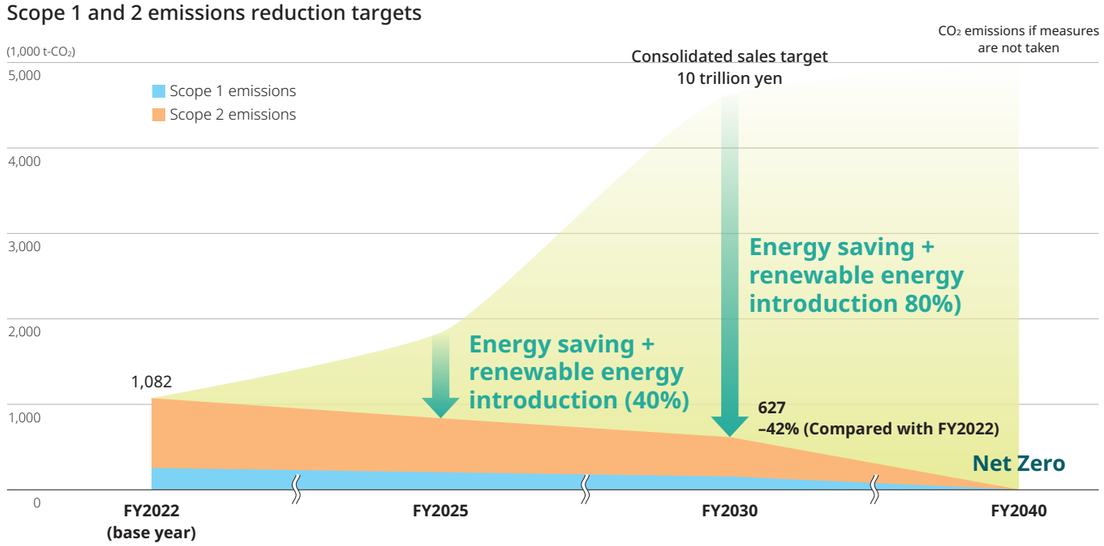
With risk managers in place at each of our global locations, we are working to detect and respond appropriately to factors that could hinder business continuity. We are focusing on comprehensively understanding and mitigating climate change risks through measures that focus on compliance with increasingly 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

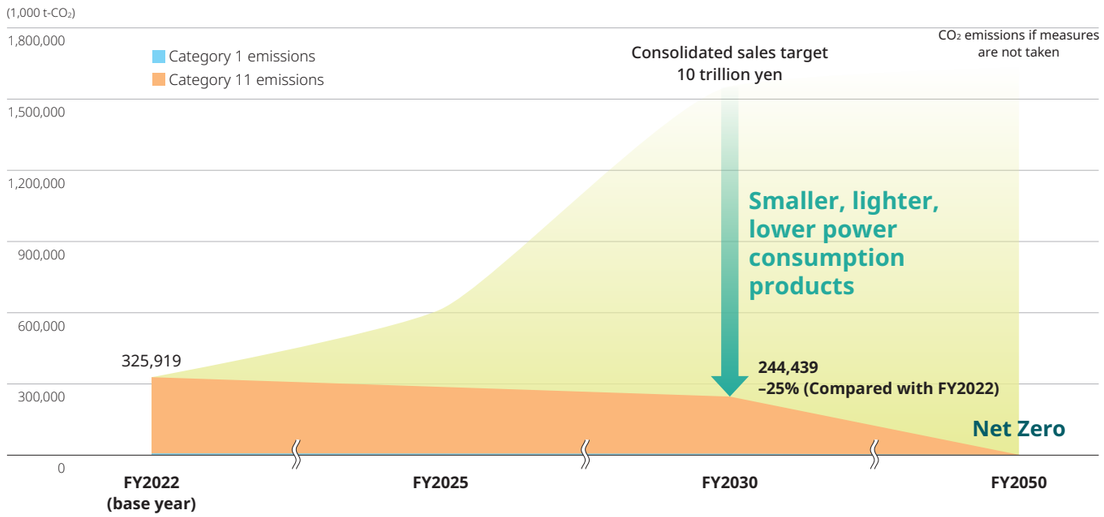
As one of the major axes of The medium-term strategic goal Vision 2025 and ESG materiality measures, the NIDEC Group aims to achieve net zero CO_2 emissions by fiscal 2040. In fiscal 2023, we underwent third-party verification of our CO_2 emissions and formulated CO_2 reduction targets for fiscal 2030 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".

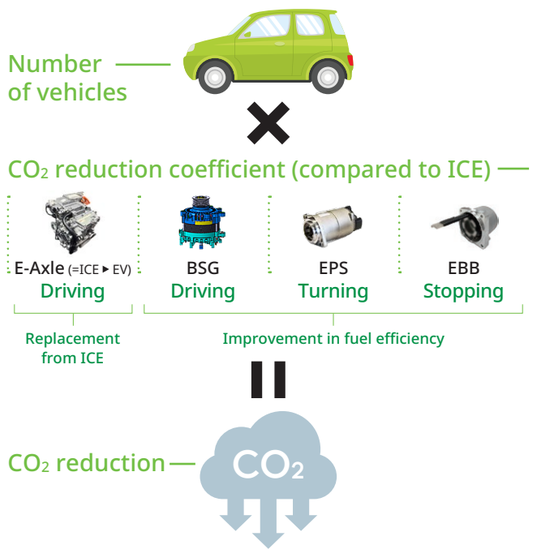
First, there is a possibility that our social credibility will decline. If we do not conduct business with consideration for the environment and society, we may lose the trust of our customers and investors, and there is a risk that our corporate brand value and image will decline.

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.

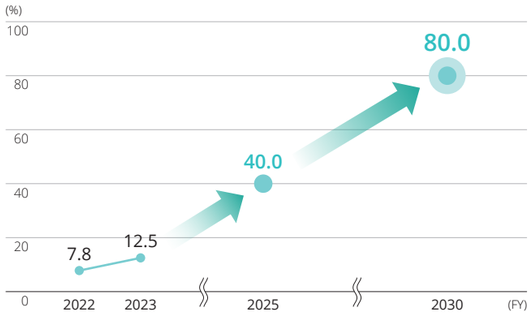
Solar power generation system installed at NIDEC PRECISION (ZHEJIANG)

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.

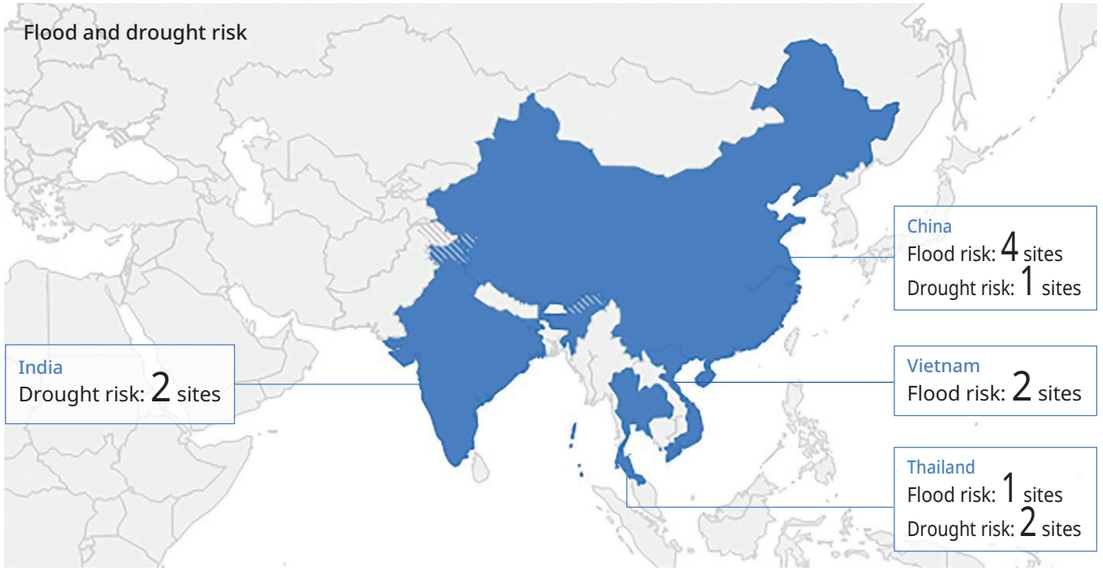
Initiatives in FY2023

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



Materiality Initiatives

— Build an internationally competitive supply chain to solve social issues —

Materiality

- **Conduct human rights due diligence on major suppliers: Implementation rate for high-risk suppliers by 2025: 100%**

Supply Chain

CSR procurement flow

Background to the identification of materiality

Supply chains are linked to many social issues. Companies need to conduct business while considering the impact on the environment and society as a whole, not just their own profits. If social or environmental risks in the supply chain are uncovered, such as when the rights or safety of workers at suppliers are not being protected, or when the raw materials used in procured goods are linked to environmental destruction, this can lead to a slowdown in the procurement of raw materials and parts, and damage the sustainability of the company's supply chain, which in turn could affect the company's ability to continue its business. Furthermore, the lack of transparency and risk management in the entire supply chain may be exposed, damaging the company's reputation and credibility, and there is a risk of consumer boycotts and social criticism. On the other hand, addressing materiality can lead to the mitigation of social and environmental risks in the supply chain, and enhance the sustainability of the company. In addition, by strengthening sustainable procurement activities and risk management, you can gain the support of consumers and create opportunities to acquire new customer segments. By working to solve social issues throughout the supply chain, you can demonstrate leadership within your industry and build a competitive and robust supply chain. In order to achieve sustainable business operations and strengthen competitiveness, proactive measures and initiatives are required to solve social issues throughout the supply chain.

Initiatives in FY2023

We participated in a subcommittee of the United Nations Global Compact Japan and examined internal operational rules with reference to industry trends regarding human rights due diligence. For example, in the NIDEC Supplier CSR Self-Assessment (SAQ) conducted in FY2023, in order to identify human rights risks, which had been an issue, we added questions about specific items and regions that were considered to have a high risk of human rights violations, based on the information obtained in the subcommittee, and conducted a survey. Based on the supplier information obtained in this survey, we measured the probability of human rights violations occurring and the severity of the damage after they occur for each category, and identified the potential human rights risks in our own supply chain and determined the priority of our initiatives. In addition, with regard to the SAQ items that we have been continuously implementing, we have developed them from the previous evaluation of the entire supply chain to a more detailed evaluation, and we have analyzed the suppliers that we have judged to be at high risk based on our standards (3% of the total) and the suppliers that scored below our standards in the human rights section of the materiality KPIs (1% of the total). We plan to conduct individual interviews and surveys with these suppliers in the next fiscal year and beyond.

Toward the future

We plan to conduct on-site surveys and hold dialogues with suppliers who scored below the benchmark in the human rights section of the 2023 SAQ. If issues are identified through visits and interviews, we will request corrective action and continue the human rights due diligence cycle.

Nidec supplier CSR self-assessment

Starting from FY2018, we have conducted the Nidec supplier CSR self-assessment to understand the status of CSR procurement and have our supply chain partners report on the status of their implementation of the Nidec Group Supply Chain CSR Promotion Guidebook and the Nidec Group's Basic Policy on Human Rights. The survey is designed to assess the status of each supplier's CSR activities, based on a total of 111 items in Chapters 1 through 6 of the Nidec Group Supply Chain CSR Promotion Guidebook. Regardless of whether the evaluation is high or low, feedback, etc. is provided to all suppliers to encourage further improvement.

	FY2021	FY2022	FY2023
Number of suppliers that conducted a Nidec supplier CSR self-assessment	698	732	876

Dissemination of policies and standards to suppliers

The NIDEC Group places great importance on collaboration with suppliers in its pursuit of sustainability in the supply chain. The NIDEC Group Supply-Chain CSR Promotion Guidebook and NIDEC Group Human Rights Policies set out the policies and standards for building a sustainable supply chain, and these are being rolled out to all global suppliers. We also stipulate compliance with these policies and standards in our basic purchasing contracts. In addition, in order to conduct due diligence on potential new suppliers, we always request that suppliers with whom we are starting new transactions respond to the NIDEC Supplier CSR Self-Assessment and conduct risk assessments of social issues.

NIDEC Group Supply-Chain CSR Promotion Guidebook

Example 1 **Clarified policy on reducing excessive working hours**

- Suppliers shall comply with all applicable wage and hour laws and regulations, including those relating to minimum wages, overtime, and maximum hours. Further, Suppliers are encouraged to implement corrective measures in situations where the number of hours worked by employees, including overtime, repeatedly exceeds 60 hours per week.
- Unless otherwise provided by applicable local law, Suppliers shall provide all employees with a minimum of one day off per week or every seven day period. This rest period must be in addition to any annual leave provided under national legislation and practice.

Example 2 **Commitment to exceeding the minimum wage in the region / meeting the cost of living**

- Suppliers shall ensure that compensation paid to employees complies with all applicable wage laws, including those relating to minimum wages, overtime pay and legally mandated benefits. Illegal, unjustified wage deductions as a disciplinary measure shall not be permitted.
- For each pay period, employees shall be provided with a wage statement that includes sufficient information to verify accurate compensation for work performed.

* Please click the URL below for the "Nidec Group Supply-Chain CSR Promotion Guidebook."

https://www.nidec.com/-/media/www-nidec-com/corporate/procurement/green/pdf/Supply%20Chain%20CSR%20Guidebook%20JP.pdf

Holding CSR seminars at major sites

As Nidec promotes CSR activities throughout its supply chain, it is important that our procurement personnel first understand Nidec's CSR policies. Since FY2018, Nidec Corporation and Nidec Group companies in Japan have conducted CSR seminars for purchasing personnel based on the Nidec Group Supply Chain CSR Promotion Guidebook. In FY2023, the number of seminars increased significantly as the scope of the program was expanded to include employees in departments other than purchasing (such as development, production, and quality assurance departments). Going forward, we plan to actively expand CSR seminars by increasing the number of seminars (four times a year), holding them at overseas locations, and holding them for suppliers.

	FY2021	FY2022	FY2023
Number of CSR Seminars Held	250	—	1,300

Small Precision Motors

Review of FY2023

Net sales decreased 2.3% year on year to 415,709 million yen. Sales of HDD motors decreased 10.0% year on year to 70,608 million yen, mainly due to a decrease in sales volume. Sales of other small motors decreased by 0.5% year on year to 345,101 million yen, while operating profit increased by 40.5% year on year to 37,474 million yen as a result of the significant reduction in fixed costs and the steady improvement in cost and sales prices in response to the impact of the decrease in sales and changes in the product mix. In addition, the impact of foreign exchange rates increased sales by approximately 20,800 million yen compared to the previous year, and operating income increased by approximately 1,400 million yen compared to the previous year.

Regarding HDDs, the global shipment volume decreased from approximately 170 million units in 2022 to approximately 120 million units in 2023. Regarding HDDs for data centers, after the coronavirus pandemic ended, there was a slowdown in investment by major IT companies, leading to inventory adjustments, and demand for our HDD motors also continued to decline, but there were signs of a recovery in demand in the second half of 2023. Demand for DC motors also fell for other small motors, such as those for optical discs and office automation equipment. On the other hand, new business opportunities have arisen, such as water-cooling modules for data centers, against the backdrop of the rapidly growing demand for AI.

Medium- to long-term growth strategies

The demand for the optical disc and office automation equipment motors that our company has been involved with is decreasing as a medium- to long-term trend. In addition, it is difficult to expect significant growth in the existing products of this division, as global shipments of IT equipment such as PCs equipped with HDD motors and fan motors, and smartphones equipped with vibration motors, are not expected to grow significantly in the future.

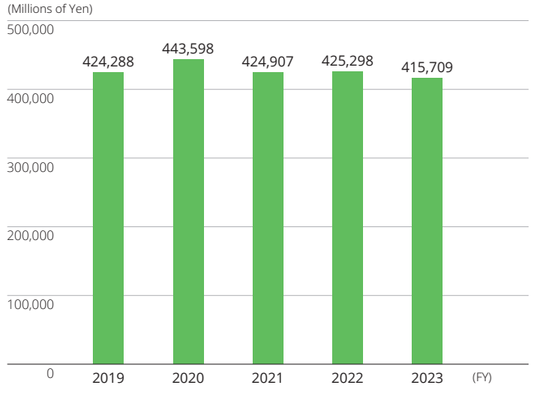
In this business environment, it is essential to shift the business portfolio in order to continue growing in the future. In this context, we are working on a new growth business: water-cooling modules for AI servers. Until now, the mainstream method for cooling the computing servers used in data centers, companies, research institutions, etc. has been air cooling using fan motors, but in the field of AI, which is expected to expand in the future, the AI-oriented semiconductor computing devices (CPUs/GPUs) that perform learning processes based on huge amounts of data generate significantly more heat than conventional devices. Therefore, it is thought that water-cooling systems, which have significantly higher cooling capacity than air-cooling systems, will become essential in the future, as air-cooling systems that rely on air conditioning equipment will be unable to cool the large number of servers lined up in buildings. In order to meet the growing demand for water-cooling modules accompanying the development of AI, our company is working to expand production capacity, manufacture parts in-house, and develop next-generation products.

We are also working on the development of motors for electric motorcycles. Just like in the four-wheeled vehicle market, the wave of electrification is also sweeping over the two-wheeled vehicle market, and we recognize this as a market where we can expect to see a significant expansion in demand for motors for drive units in the future. The global production volume of two-wheeled vehicles is approximately 60 million units, and India, which accounts for approximately 20 million of these, is the largest market. Therefore, we are focusing our sales activities on two-wheeled vehicle manufacturers in India, and we are already supplying several top manufacturers.

In 2014, we established a factory in Nimrana, Rajasthan, India, for the purpose of manufacturing and selling Automotive products and Appliance, Commercial & Industrial Products. In December 2023, we opened a new building to produce drive motors for e-Bikes. We hope to capture the strong demand for motors for e-Bikes in India.

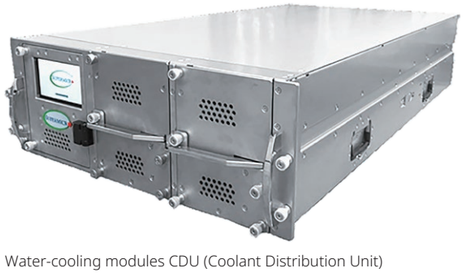
In fields other than those listed above, we recognize that there are significant business growth opportunities in fields such as logistics, agriculture, and medical and nursing care and healthcare, and we recognize these as key areas for our Three New Activities (New markets, New products, New customers).

Net sales



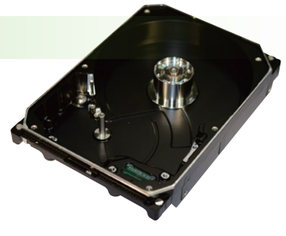
Operating profit / Operating profit ratio

Main Products

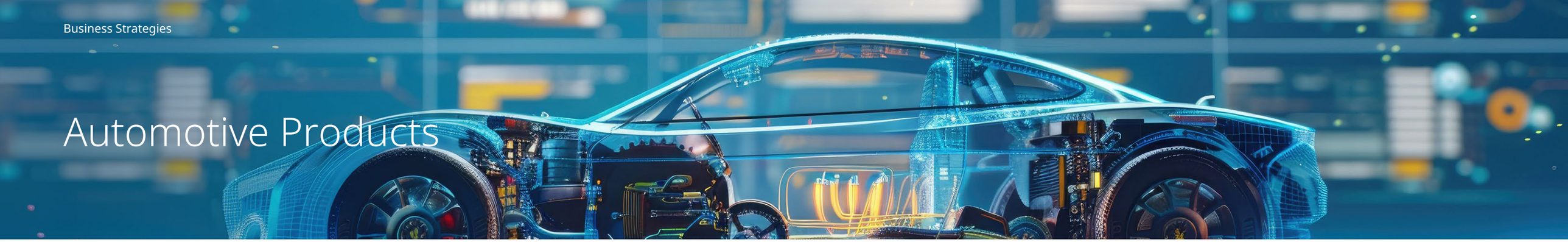


Water-cooling modules CDU (Coolant Distribution Unit)

e-bikes motors



HDD motors



Automotive Products

Review of FY2023

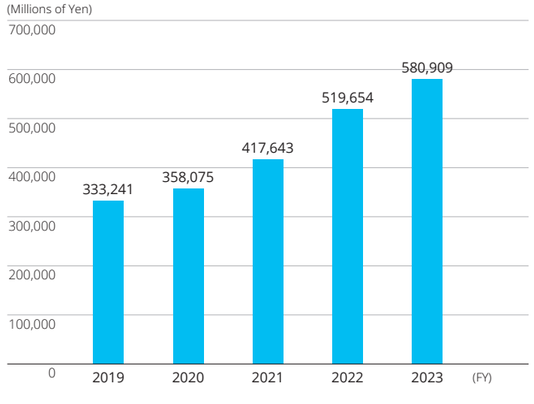
Net sales of this category increased 11.8% to 580,909 million yen for this fiscal year compared to the previous fiscal year by the impact of recovery in automobile production on a global basis, although NIDEC faced the fiercer competition in Chinese EV market.

In the automotive organic business (existing business), NIDEC promoted a significant reduction in fixed costs even though this business increased profits due to sales expansion. In the Battery EV related business, in addition to further significant reduction in fixed costs, we have shifted the strategy to put first priority on our profitability such as limiting orders for unprofitable models.

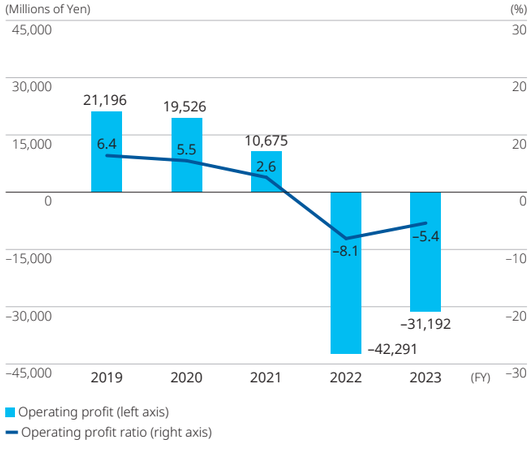
Along with this, including an impact of recording restructuring costs by approximately 59,800 million yen, operating profit of this category increased 11,099 to 31,192 million yen loss for this fiscal year compared to the previous fiscal year. The impact of foreign exchange rates on sales was an increase of approximately 31,500 million yen compared to the previous year, and on operating income, an increase of approximately 300 million yen compared to the previous year.

Regarding Battery EV related business, we made "Re-start" in line with the strategic shift, and the new structure is going smoothly. We will take on the speedy challenges for our future growth that maximizes the our group's inherent strengths.

Net sales



Operating profit / Operating profit ratio



Medium- to long-term growth strategies

1. Automotive organic business (existing business)

In the Automotive organic business (existing business) segment, we aim to leverage the tailwind of market changes, such as the recovery in global automobile production volumes due to the easing of supply constraints for semiconductors and other components, and the electrification of automobile components associated with the "CASE revolution" typified by the spread of automated driving, to drive business growth. In addition to automotive products such as electric power steering motors and brake motors, which boast the world's largest market share, we expect sales of products essential for the electrification of automobiles, such as electric oil pumps and electric water pumps, to grow.

The realization of automatic driving is dependent on the implementation of by-wire technology, which controls brakes, steering, etc. using electrical signals, and motors are essential for the realization of this technology. For example, feedback actuators provide a reaction force to the steering wheel to assist the driver's movements. Furthermore, motors for electric power steering require a higher level of redundancy than conventional products.

In addition, we have received a large order for power control components such as inverters and DC/DC converters for hybrid vehicles. The entire group has a diverse lineup of automotive products, and we will continue to support the evolution of automobiles by providing solutions that meet customer needs.

2. EV traction motor business

1 E-Axle business of the joint venture company

In the Chinese EV market, where the healthy competitive environment is being lost due to the development of intense price competition, we have quickly made a strategic shift to prioritizing profitability ahead of other companies. We have established a joint venture with a Guangzhou Automobile's group company, and for the time being we will focus on producing E-Axles for Guangzhou Automobile through this joint venture, while limiting orders for unprofitable models. At the same time, we are implementing measures to respond to competition in the Chinese EV market, such as thorough cost reductions through further localization of development and parts procurement, and the development of a third-generation E-Axle.

In Europe, meanwhile, Nidec PSA emotors (NPe), a joint venture with the Stellantis, began full-scale mass production of E-Axle in FY2024, and the company's results have also started to be included in consolidated results. We are currently working to rapidly ramp up production, and in the first half of FY2024 we will assess the production capacity required in Europe, while also working to improve profitability through measures such as reducing material and subcontracting costs and improving quality, in preparation for the full-scale production that will begin in the second half of FY2024. The Stellantis Group has announced that it will produce 5 million electric vehicles globally in 2030, and NPe will ensure that it captures the long-term shift to electrification as an in-house function.

2 Supply of motors and motor components for E-Axles

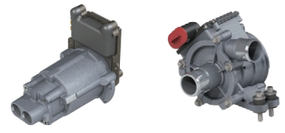
Among European automobile manufacturers, there is consideration of importing and selling products from China in partnership with Chinese EV manufacturers, and of producing in Europe in anticipation of additional EU tariffs on Chinese-made EVs. In light of these developments, our company will leverage the technological capabilities, cost competitiveness, and sales track record we have cultivated in the challenging market since the dawn of the EV market to focus on supplying not only E-Axles themselves, but also the motor components of E-Axles, such as rotors and stators. We will also propose the same parts supply to Japanese automobile manufacturers. By developing a high-value-added parts business that makes the most of our strengths, we will work to improve the profitability of our EV traction motor business.

Main Products

New electric power steering motor power packs (Column-Type)

E-Axle

ABS/ESC motors



Electric oil pumps (left)
Electric water pumps (right)

Appliance, Commercial & Industrial Products

Review of FY2023

In the Motion & Energy (MOEN) with a focus on industrial related sector, in addition to capturing the tailwinds of expanding power generator and clean energy markets consistently, we expanded new businesses against the backdrop of strong infrastructure related demand despite the continued reconciliation of the demand for home appliances. As a result, net sales of this category increased 5.7% to 966,082 million yen for this fiscal year compared to the previous fiscal year. In the home appliance related sector, we realized a significant increase not only in sales but also in profit due to fundamental cost structure reform such as a substantial reduction in fixed costs. In the industrial related sector, we also realized a significant increase in profit due to the continuous manufacturing cost and sales prices improvement, in addition to the higher sales. As a result, operating profit of this category increased 62.2% to 114,874 million yen for this fiscal year compared to the previous fiscal year.

The impact of exchange rates on sales was an increase of approximately 58.6 billion yen compared to the previous year, and on operating income, an increase of approximately 5.9 billion yen compared to the previous year.

Medium- to long-term growth strategies

Since the outbreak of the new coronavirus infection in 2020, so-called “nesting demand” has driven growth in this division, with compressors for refrigerators, motors for home air conditioning, and motors and gears for transport robots used in the delivery centers of e-commerce companies. After the coronavirus pandemic, global demand for home appliances and CAPEX have continued to be sluggish, and the drivers of performance in FY2023 have shifted to industrial-related products, including generators for auxiliary power supplies for data centers, battery energy storage systems (BESS), and medium- and large-sized motors for energy infrastructure-related equipment. Although this division has a diverse range of businesses under its umbrella, we believe that growth can be expected in the following fields in the medium- to long-term.

Generators for auxiliary power supplies for data centers

The amount of data in the world continues to increase, and the number of data centers is also on the rise. The demand for generators for auxiliary power supplies as a backup in the event of a power outage is increasing, and orders are increasing. We expect sales to increase at a CAGR of 12% from FY2022 to FY2026.

Solutions for renewable energy

Against the backdrop of the trend towards net zero CO_2 emissions, and with the increasing demand for alternative power, there is a growing need for battery energy storage systems (BESS). BESS is a system that stores and transmits the electric power generated by renewable energy sources such as solar power and wind power. We provide services to transmission operators in various countries, and contribute to the stable supply o renewable energy. In response to the increase in demand, we expect sales to increase at a CAGR of 28% from FY2022 to FY2026.

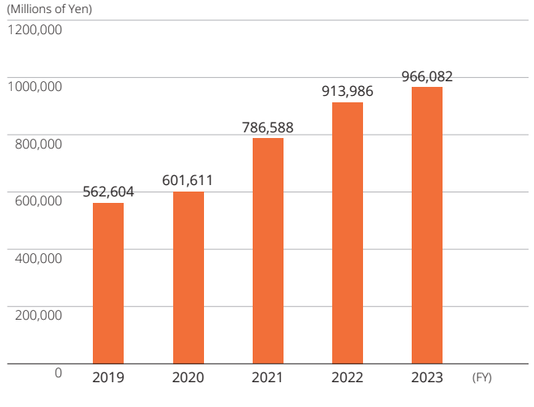
In FY2023, multiple contracts for the installation of BESS were announced. Two contracts worth a total of approximately 70 million euros have been signed with Neoen, a French renewable energy power generation company, for the installation of BESS. These systems are scheduled to begin operating in Finland and Sweden in the first half of 2025, with capacities of 93.9 MWh and 112.9 MWh, respectively.

We also announced a collaboration with French company NW. We plan to supply a total of 2.5 GWh of BESS in France by 2028.

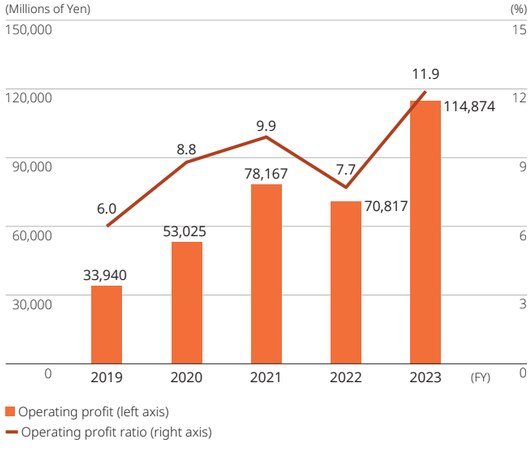
Medium- and large-sized motors for energy infrastructure-related equipment

In 2012, our company acquired Ansaldo Sistemi Industriali S.p.A. of Italy. The company has now been in business for over 170 years, and since its founding it has been supplying large motors, generators, drives, etc. for the power generation and oil & gas fields. Currently, these businesses are growing significantly in response to the trend towards the use of renewable energy and the electrification and efficiency of energy infrastructure. As an example of a recent large-scale project, we received an order for large motors for the Transalpine Pipeline (TAL) efficiency improvement project, which transports oil from Trieste in Italy to Austria, Germany and the Czech Republic. By supplying high-efficiency motors, we contributed to improving pump efficiency and reducing vibration. We also received an order for motors for a liquefied natural gas production system in Qatar. In liquefied natural gas production sites, compressors are used in the process of condensing and liquefying natural gas. Gas turbines were previously used, but there is a demand to switch to motor-driven systems due to environmental measures and efficiency needs, and we received the order. As customer needs shift in line with decarbonization, NIDEC’s large motors are playing an active role. In these businesses, we also provide maintenance after delivering the motors. As our large motor business expands, we would like to focus on the maintenance business as well.

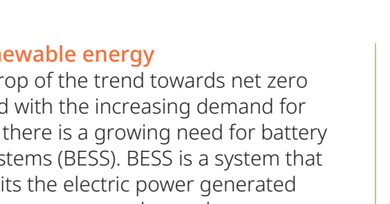
Net sales



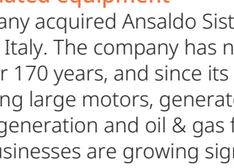
Operating profit / Operating profit ratio



Main Products



Battery Energy Strage System (BESS)



Generators for auxiliary power supplies

45MW hi-speed moter-generator

Other Products

(Machinery, Electronic and Optical Components, etc.)

Review of FY2023

In the machinery category, net sales increased 5.2% to 298,375 million yen for this fiscal year compared to the previous fiscal year due to sales increase of machine tool and press machine related business and newly consolidated subsidiaries despite lower sales of semiconductor inspection systems, LCD panel handling robots affected by market cycle. Operating profit of this category increased 24.7% to 43,867 million yen for this fiscal year compared to the previous fiscal year, mainly due to an increasing sales.

In the Electronic and optical components category, net sales decreased 1.4% to 81,839 million yen and operating profit of this category decreased 2.7% to 13,214 million yen for this fiscal year compared to the previous fiscal year. In addition, the impact of foreign exchange rates increased sales by approximately 2,100 million yen compared to the previous year, and operating income increased by approximately 500 million yen compared to the previous year.

Medium- to long-term growth strategies

Other products are divided into two groups: machinery, which account for about 80% of sales, and electronic and optical components, which account for about 20% of sales.

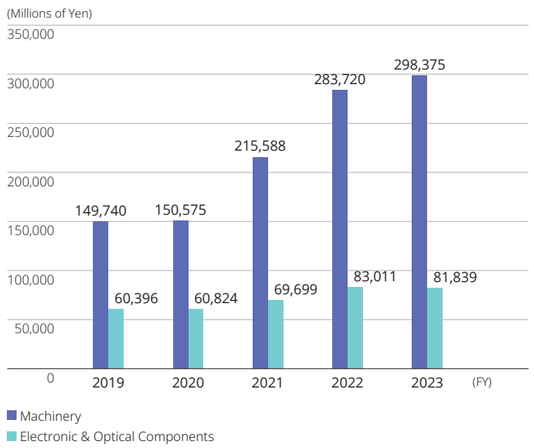
Machinery and Automation Business Unit, which accounts for the majority of the Machinery segment, is expected to be the core of future growth. Nidec Drive Technology Corporation (formerly Nidec-Shimpo Corporation), one of the group companies, is divided into three main businesses: Reducers, Press machines, and Machine tools.

The reducer business is expected to see future demand increase due to the labor shortages that are spreading, particularly in developed countries. With the aging population and declining birth rate in the world's top GDP countries such as the United States, China, Europe and Japan, the ratio of the working-age population (aged 15 to 64) is decreasing, and automation in factories is becoming an urgent issue. For this reason, the use of collaborative robots in production processes is expected to accelerate in the future. We have newly released the medium- to large-sized internal gear planetary reducer "Kinex" in November 2023. This, together with the small-sized FLEXWAVE® strain wave gear that we have been producing for some time, means that we now cover all the Reducers for robot axes. We manufacture in Japan at the Ueda and Komagane factories, in Asia in China and the Philippines, and in Europe in Germany and Spain, and supply our products widely both in Japan and overseas. We will also expand our business to include collaborative robots, which are expected to grow in the future.

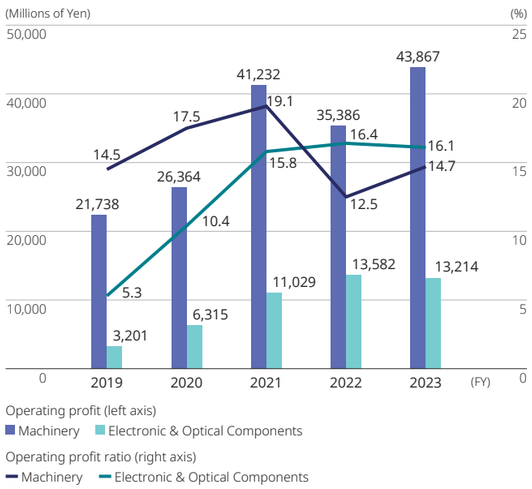
In the Press machines business, we have a full lineup of products, from 10-ton to 4,500-ton press machines, as well as peripheral equipment such as roll feeders. Furthermore, we produce products in Japan, the United States, and Spain, and supply a wide range of products globally.

In the Machine Tools business, we acquired Mitsubishi Heavy Industries Machine Tool (now Nidec Machine Tool) and OKK (now Nidec OKK) in FY2021, PAMA S.p.A. in Italy in FY2022, and TAKISAWA in FY2023. The acquisition of TAKISAWA was the first takeover bid by our company. Our machine tools business, which was launched with the acquisition of Mitsubishi Heavy Industries Machine Tool in 2021, has grown to approximately 100 billion yen in sales in 2023. Today, our product portfolio includes machining centers, lathes, gear cutting machines, and large-scale general-purpose machine tools, and now we provide one-stop products and services to many customers. We aim to become the world's No. 1 comprehensive machine tool manufacturer by fiscal 2030.

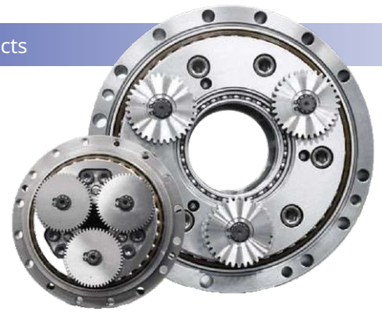
Net sales



Operating profit / Operating profit ratio



Main Products



Reducers

CNC Lathe

Press machines