

# **Nidec and Society**

The Nidec Group provides innovative products and services, ensures business integrity, and contributes to society through its business and non-business activities. Supporting society in various ways, the Nidec Group is taking on challenges every day to stay competitive as a socially desirable business even 100 years from now.

## Our CSR Keywords

Innovation



Integrity



Responsibility

### To Our Stakeholders

#### Overcoming an Unprecedented Crisis to Become a Truly Sustainable Company





The novel coronavirus (COVID-19) is raging around the world, having a severe impact on the global economy and businesses. Our company is no exception. Our business has been significantly affected in many ways, including disruption of the supply chain. The COVID-19 crisis is very different from what we have experienced so far in that conducting business activities can affect human lives. Amid the COVID-19 pandemic, we must first protect the lives of our employees, then their families' lives, and thirdly the company. It has been about 50 years since our company was founded, but this is the first time we have ever conducted a business giving top priority to protecting people's lives. COVID-19 has brought such a profound crisis that has forced us to review the way we manage our business. I have heard that air quality has improved worldwide due to restrictions on economic activities. Environmental destruction caused by human activities has been "visualized." The world's landscape will change completely in the future, and efforts to protect the global environment will be required more than ever before.

I have confidence that we can overcome this crisis and carve out a new future. We have come across a major obstacle every 10 years, but each time we have turned an obstacle into an opportunity through united efforts by all employees. By continually evolving in response to changes in the world, we aim to become an indispensable company that plays a vital role in realizing a sustainable and prosperous society 100 years later.

Shigenobu Nagamori Founder, Chairman and CEO

5 Nogomil

Many companies claim that sustainability sits at the heart of their business, but a company's sustainability can only exist when growth is sustained. I believe that guaranteeing growth for our stakeholders, including customers, shareholders, investors, business partners, and employees, is the one and only sustainability.

Our company is currently on the verge of riding a great wave of technological innovation in five areas: "automotive electrification," "expansion of robot applications," "home appliances driven by brushless DC motors," "manpower-saving in agriculture and logistics," and "next-generation technology stemming from 5G communications." Strong expectations are placed on these areas as promising growing markets that contribute to the resolution of various global issues, including CO<sub>2</sub> emissions, traffic accidents, and population aging. I believe that elemental technologies we have cultivated thus far will be able to successfully bring breakthrough innovation in these five areas.

Our company has pledged to engage with the 17 goals for realizing a sustainable society (SDGs). While embodying sustainability in everything we do, we will seek to achieve our consolidated net sales target of 10 trillion yen in FY2030 and contribute to realizing a sustainable and prosperous society.

Jun Seki President and COO

Jun Sabi

#### Mission Statement

The aim of Nidec Corporation is to contribute to the development of society and welfare of the general public around the world. Nidec aims to do so by supplying the highest quality products. Our company is sincerely and enthusiastically dedicated to the trinity of technology, skillfulness, and modern science. Thereby, Nidec strives to promote prosperity of our society, our company, and all our employees.

#### **WE SUPPORT**



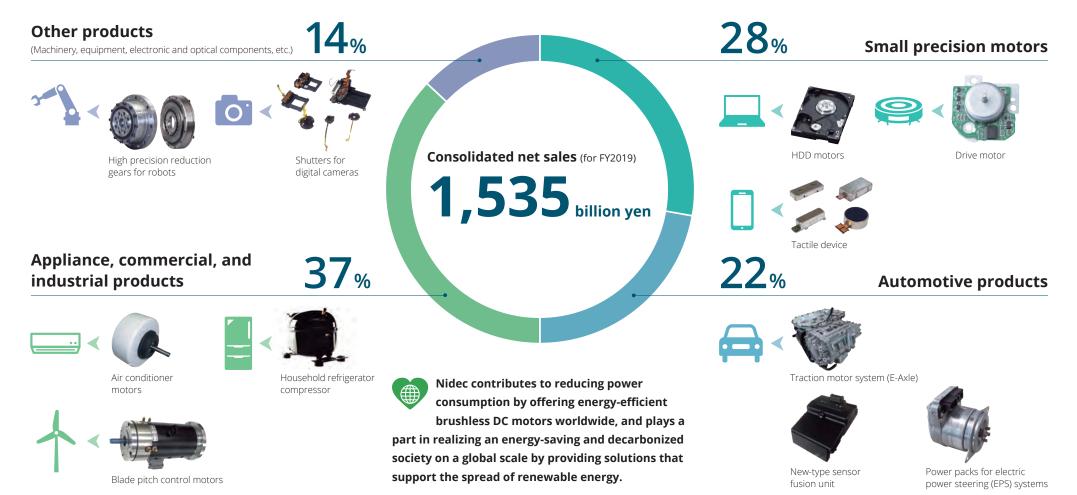
The Nidec Group joined the UN Global Compact and officially expressed its support for the 10 principles in August 2015.

**Nidec and Society** 

# Innovation for Everyone

Nidec Products Spinning and Moving in Our Daily Lives Nidec's motors are used in all aspects of our everyday life.

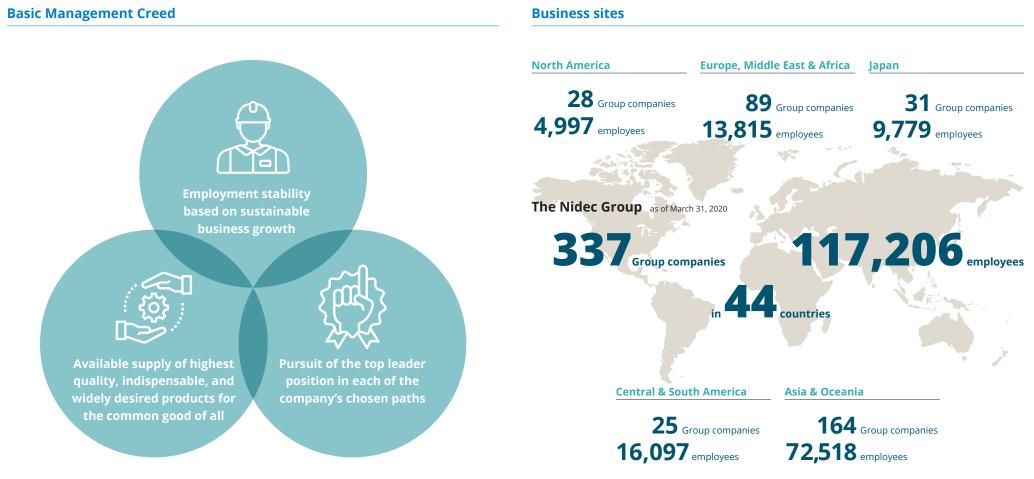
For more details, please see our website.



## About the Nidec Group

Since its foundation in 1973, Nidec has been providing the world with indispensable products to improve the quality of people's lives, while developing industries as the world's leading comprehensive motor manufacturer. At the same time, we have achieved a dramatic growth, both by expanding our fields of business using active M&A and through organic growth as a driver.

Today, Nidec offers a wide variety of motors ranging from micro-size to super-large, as well as application products and services in IT, office automation, home appliances, automobiles, commercial and industrial systems, environment and energy, and many other businesses. In striving to be a world-leading company, Nidec will continue to take up challenges.





## CSR Rooted in Our Management Creeds and Responding to Social Expectations

Conduct business activities that contribute to realizing a sustainable society in a fair and ethical manner.

#### **Basic concept of CSR**



Since its foundation in 1973, Nidec has been engaged in business with its mission statement as the basis of its business management.

We established three basic management creeds and the CSR Charter in 2008 and the CSR Declaration on the Conduct in 2018.

The Nidec Group will implement the following three actions according to the spirit of the mission statement and the three basic management creeds:

1) social contribution through business activities, 2) sincere business management, and 3) social contribution through non-business activities.

Through these actions, the Nidec Group hopes to contribute to creating a society where people can live comfortably even 100 years from now, and to stay competitive as a socially desirable business even at that time.

#### Supporting and contributing to the SDGs aimed at creating value in society

The "Transforming Our World: 2030 Agenda for Sustainable Development" adopted by the United Nations General Assembly in September 2015 sets out 17 goals (Sustainable Development Goals: SDGs) as important guidelines for the international community to eliminate poverty and realize a sustainable society.

The Nidec Group supports the United Nations' initiative to create a sustainable society. In 2015, we joined the United Nations Global Compact, which sets forth 10 principles related to issues including human rights, labor, the environment, and anti-corruption, and have committed ourselves to contributing to realizing the SDGs.



For more details, see "Creation of Value That Realizes a Sustainable Society" on page 17.

#### CSR Charter and CSR Declaration on the Conduct, based on which individual employees should think on their own to fulfill their responsibilities

In 2008, the Nidec Group established the CSR Charter, which stipulates the company's basic stance regarding its involvement with society, based on the United Nations Global Compact and the Code of Conduct of the Responsible Business Alliance (RBA) (former Electronic Industry Citizenship Coalition: EICC).\* In 2018, we formulated the CSR Declaration as more specific guidelines available globally. As a complement to the CSR Charter, the CSR Declaration comprehensively prescribes appropriate courses of action to be followed in our business operations from the perspective of social responsibility. By weaving a shared value approach into the fabric of our workplace and supply chains, we will breathe life into the Declaration.

\* RBA (renamed from EICC in October 2017) is an organization established with the aim of resolving social, environmental, and ethical issues in global supply chains.

#### **CSR Charter**

With a keen awareness of our responsibilities as a part of society, Nidec Group pursues the common good by offering globally welcomed products and technologies. Nidec's ultimate objective as a socially responsible business entity is to ensure sustainable growth that generates stable employment. All Nidec directors and employees are required to perform their duties in a sincere and transparent manner with full respect for the spirit of this charter and the importance of corporate social responsibility (CSR).

#### • 5 basic stances

- 1. Work Sincerely and Honestly
- 3. Respect Human Rights
- 5. Maintain Good Relations with Society
- 2. Coexist Harmoniously with the Environment 4. Ensure Occupational Safety and Hygiene



For more details, see the full text of the CSR Charter on our website.

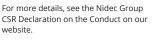
#### **CSR Declaration**

Regarding the five basic stances of the Nidec Group stipulated in the CSR Charter, this specifically states what we should or should not do.

- 1. Business Integrity
- 3. Harmony with the Environment
- 5. Harmony with Society

2. Respect for Human Rights and Labor Practices 4. Workplace Health and Safety 6. Framework for Ensuring Efficacy





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#### CSR Vision 2020 aimed at achieving non-financial indicators based on the medium-term strategy goal Under the new CSR Vision 2020, formulated based on the Vision 2020 medium-term strategic

goal launched in FY2016, we execute actions in eight areas of focus. These were selected from the three categories of environmental, social, and governance (ESG). The Nidec Group aims to achieve its net sales target of two trillion yen in FY2020 and 10 trillion yen in the further future. With the expansion of our business, we need to assume greater corporate social responsibility.

When selecting priority issues in the CSR Vision 2020, we focused on the perspectives of our customers, business partners, local communities, governments, employees, shareholders, civic communities, and other stakeholders. These priority issues were selected based on the levels of expectations and requests for them, grasped through dialogue with our stakeholders, as well as on their levels of importance identified in our internal survey based on the Nidec Group's corporate structure, business philosophy, strategies, etc.

#### CSR Vision 2020 8 areas for focus

#### **Environment**

- Environmental load reduction
- Environmental contribution through products
- Environmental conservation

#### Social

Diversity

• Globally competent talents

- Governance
- Corporate ethics
- Internal control Risk management

For more details, see "Creation of Value That Realizes a Sustainable Society" on page 8.

#### Mid-term strategic target, Vision2020

- Consolidated sales target: Two trillion yen
- Including a sales target for automotive products of 700 billion to 1,000 billion yen
- Consolidated operating profit ratio target: 15% or higher
- ROE (return on equity): 18% or higher
- Establishment of five regional HQ management units

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tails, see "Medium-and Strategic Goals" on our

Nidec and Society



### **Results of CSR Activities Bearing Fruit in Diverse Fields**

Individual employees across the world enthusiastically address social issues a continue working with local communities.

#### Promoting efforts to contribute to society through non-business activities

Nidec Group companies across the world have been involved in various social contribution activities rooted in local communities where they have operations. Part of these activities are introduced below by persons in charge of the activities.

In Japan

**Case 1)** Since December 2013, Nidec Elesys Corporation has participated in the Ecocap Campaign to raise the awareness of employees about social contribution. This campaign is a grassroots campaign to donate polio (infantile paralysis) vaccines to children throughout the world by collecting PET bottle caps as recycling resources and using the gain on their sales to purchase vaccines. It can

also help reduce CO<sub>2</sub> emissions by preventing caps from being disposed of by incineration. As of September 2019, approximately 110,000 caps, equivalent to polio vaccines for 138 children, have been collected. We hope that our activities will help children fighting diseases.



Masashi Tashiro Nidec Elesys Corporation

**Case 2)** Nidec Corporation has dispatched employees recruited through in-house recruitment to elementary schools to provide environmental classes. The class content is originally designed to have elementary school students consider what they can do for the global environment, while learning how motors used in our daily lives work and motors'

relationship with electric energy. The scale of projects is expanding year on year. We continue these activities to teach more children about the fun of manufacturing and the importance of the environment.

Tomoki Watanabe Nidec Corporation



Outside Japan

**Case 1)** 2017 December, the local government held the "Decorate Your Christmas Tree" contest. A group of volunteers from different departments decided to participate the contest, and donate the prize to a charity institution. They won the first place and decided to donate the prize money to an institution that provides medical assistance for people fighting cancer in 2018 April. We are

proud that the Christmas tree has become hope and braveness for the people who receives assistance from the institution, while they fight against cancer day by day.



Jorge Batres Nidec Automotive Motor Mexicana

**Case 2)** Since 2010, we have a "Way to Engage" program, which is intended to promote our employees' awareness on CSR, and urge them to participate in social contribution activities. As part of this program, we plan social contribution activities that many employees can participate in, including the "Little Dreamers Project," a program launched in 2018 to make donations to a

foundation to support education for children who may otherwise drop out of school. FY2019 saw us donate app. PHP50,000 (app. US\$1,000) in this project. In another project, we support a feeding program, where we interact

Marvin Gil Baguion Nidec Motor Philippines Corporation



#### **Robust results based on the Vision 2020**

The CSR Vision 2020, formulated based on the Vision 2020 medium-term strategic goal, has set eight priority issues in three areas of environmental, social, and governance (ESG). These issues consist of items assessed as having a particularly great impact on society based on the expectations and requests of our customers, business partners, local communities, employees, shareholders, and other stakeholders and on the Nidec Group's business characteristics and philosophy. All of these issues have helped promote our Group-wide efforts to contribute to society, leading to achieving robust results.

Priority Issues	Target	KPI	Key Progress
Environment			
Environmental load reduction	Consistent reduction in energy consump- tions and environmental emissions attrib- utable to operations	5% reduction (intensity) from FY2015 benchmark	<ul> <li>In FY2019, greenhouse gas emissions and water consumption were reduced by 10% and 16%, respectively, at production sites from the FY2015 benchmark. On the other hand, power consumption and the waste amount increased by 4% and 79%.</li> <li>The Smart 2030 Project*1 was launched.</li> </ul>
Environmental contribution through products	Quantitative assessment of product- specific environmental performance	Overall framework in place for measuring total CO <sub>2</sub> emissions reduced per year	<ul> <li>Examination is underway on how to create a system that calculates the total amount of CO<sub>2</sub> reduction contributions of environmentally friendly products.</li> </ul>
Environmental conservation Society	Active participation in local environmental conservation efforts	Specific action program in place at each business unit	<ul> <li>The mangrove-planting project has continuously been carried out in Thailand since FY2007, and in FY2019, 222 participants planted a total of 600 trees.</li> <li>Eco-classes for elementary school students were held eleven times in Kyoto Prefecture.</li> </ul>
	A diverse workforce and leadership		In FY2017, the Women's Activity Promotion Office (current Diversity & Inclusion Office) was established, with three systems
Diversity	A diverse workforce and leadership	8% of all managerial positions held by women* <sup>2</sup>	<ul> <li>In FY2017, the women's Activity Promotion Office (current Diversity &amp; Inclusion Office) was established, with three systems (home working, staggered shift work, and by-the-hour annual paid days-off systems) being introduced.</li> <li>In FY2018, a spouse transfer leave system was introduced, and the comeback system was revised.</li> <li>The ratio of female managerial employees increased from 2.8% in FY2016 to 5.5% in FY2019.</li> </ul>
Globally competent talents	Training programs in place on a group- wide basis	Number of program participants or workshops held	<ul> <li>In FY2016, Nidec Global Business School was established, with a total of 51 employees having completed a training program.</li> <li>In FY2017, the Next-generation Global Business Leader Training Program started, with a total of 101 employees having completed the program.</li> <li>In FY2017, the overseas trainee program started, with a total of 31 employees dispatched to Germany, Netherlands, the U.S., and other countries.</li> </ul>
Governance			
Corporate ethics	Code of Conduct aligned with internationally accepted standards	EICC-based CSR management system covering 80% of operations worldwide	<ul> <li>In FY2017, the Nidec Group's CSR Declaration on the Conduct was formulated.</li> <li>In FY2018, the Nidec Compliance Handbook was issued.</li> <li>In FY2018, CSR audits based on the in-house standards referring RBA*<sup>3</sup> standards were conducted at 21 major production bases in Asia and Southeast Asia.*<sup>4</sup></li> </ul>
Internal control	Consistent management soundness and transparency	Strict compliance with internationally accepted corporate governance guidelines	• The Corporate Administration & Internal Audit Department maintained the effectiveness of internal control systems, and conducted activities to improve them.
Risk management	Highly viable risk management procedures implemented on a global basis	Global risk management system adopted by all operations	<ul> <li>BCP simulation drills were held at bases in and outside Japan, and a total of 3,026 employees have participated in the drills as of the end of FY2019.</li> <li>High-level risk management systems were established and implemented in approximately 75% of our business domains.</li> </ul>

\*1: Under the quantitative goal of reducing the total amount of greenhouse gas emissions in FY2030 by 30% compared to the results in FY2017, the project aims to achieve the goal by promoting energy saving and introducing renewable energy in all business sites throughout the world in the future.

\*2: On a non-consolidated basis of Nidec Corporation

\*3: Responsible Business Alliance (RBA) (former Electronic Industry Citizenship Coalition: EICC): The RBA Code of Conduct established by the electronic industry as standards for business activities in the global supply chain consists of the following sections: labor, safety and health, environmental conservation, management systems, and corporate ethics.

\*4: The FY2019 third-party audit, slated for the December 2019 – March 2020 period, was postponed due to the COVID-19 pandemic.

#### **Evaluation by society**







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Japan

# **Setting New Horizons**

## Challenge to New Environmental Strategies

Although global efforts have been made to address climate change issues beyond the boundaries of countries and companies, the international community has not yet come up with clear solutions to the issues.

The Nidec Group will take a new step to make a further contribution to resolving climate change issues in response to requests from society.

## New Vision and Targets



Smarter Operation



Smarter Product



Smarter Action

### Message from Our CSR Officer

## Global trends accelerating toward the decarbonization of society

Over the past few years, extreme weather events considered to be caused by climate change have occurred frequently across the world, and have done serious damage to various areas. In Japan, too, record-breaking heavy rains and intense heat have often occurred, and more and more people really feel the impact of climate change than ever before.

Under these circumstances, trends toward environmental regulations in the global business environment are further accelerating. The Paris Agreement, adopted in December 2015, aims to limit the rise in average global temperatures to below 2°C of pre-industrial averages, with efforts to limit warming to 1.5°C. Although the international community focused on achieving the goal of limiting global warming to 2°C at that time, an increasing number of countries mainly in Europe currently aim to attain the challenging goal of limiting the temperature rise to 1.5°C. This situation proves that climate change issues have become increasingly critical, and that the international community has become more united toward realizing a decarbonized society.

#### The Nidec Group's new challenge

In the situation where environmental regulations are strengthened to realize a decarbonized society, the Nidec Group, which has 337 companies and 117,206 employees and operates its business worldwide, takes on a great responsibility. We believe that it is essential to realize a decarbonized society to contribute to creating a sustainable L is essential to realize a decarbonized society to contribute to creating a sustainable society, in order to remain a company needed in society.

society, in order to stay competitive as a socially desirable business even 100 years from now and to remain a company needed in society.

To fulfil this responsibility, the Nidec Group has thus far provided various environmentally friendly products. For instance, we have helped reduce environmental burdens by offering energy-efficient motors to cut power consumption. We have also taken the lead in promoting conversion from gasoline-powered vehicles to electric vehicles by actively offering traction motors used to propel electric vehicles.

In addition to providing these environmentally friendly products, we have launched a new project called "SMART 2030" to drastically reduce the amount of CO<sub>2</sub> emitted by our company. Although we have set the goal of reducing the amount of CO<sub>2</sub> emissions on the basis of per employee and per sales amount, the SMART 2030 Project aims to reduce the total amount of CO<sub>2</sub> emitted through our business activities by 30% compared to FY2017, by FY2030.

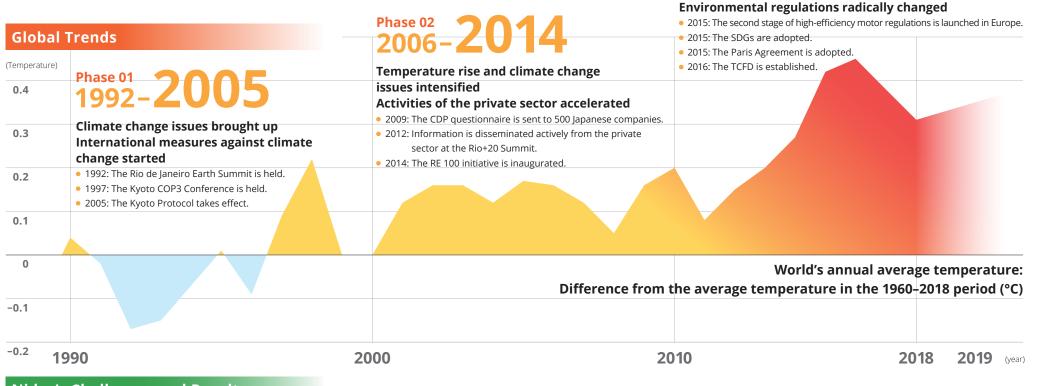
The Nidec Group continues to conduct business activities with the belief that we will contribute to the world by making products that spin and move.



Akira Sato First Senior Vice President and CPO

## Global Trends and Nidec's Efforts for the Environment

As a global manufacturer that must contribute to resolving climate change issues, the Nidec Group continues to respond to requests for addressing climate change issues from the perspective of society and in keeping with global trends.



#### Nidec's Challenges and Results

## 1998-2007

#### Foundation for environmental and social management created

- 1998: Nidec acquires the ISO 14001 certificate.
- 2004: The first medium-term environmental conservation plan is launched.
- 2004: The Environmental Report is issued.
- 2004: A new environmental philosophy and policy is established.



## 2008-

#### CSR activities grouped Environment-oriented management accelerated on a company-wide basis

• 2008: The CSR Promotion Office / Formulation of the CSR Charter is established.

Phase 03

and decarbonized society

2015 -

Global collaboration to promote a shift to a low-carbon

- 2010: Data start to be provided to CDP.
- 2010: The Nidec Group Biodiversity Action Principles are established.
- 2015: Nidec joins the UN Global Compact.
- 2016: Nidec formulates the CSR Vision 2020.



Nidec employees plant mangrove trees in Thailand.

#### **Setting New Horizons**

### The Nidec Group and Climate Change Issues

#### 1998-2007: Climate change emerging as a social issue / Nidec's environment-oriented management started

Worldwide discussion about climate change issues began at the United Nations Conference on Environment and Development held in Rio de Janeiro (Rio de Janeiro Earth Summit) in 1992. Under the United Nations Framework Convention on Climate Change, which was adopted at this Earth Summit, the Conference of the Parties (COP) has been held annually. Since the Kyoto Protocol was adopted at COP3 in 1997, there have been increasing social concerns about measures against environmental and climate changes. In 1998, Nidec Corporation acquired the ISO 14001 certificate for the first time in response to social requests. In 2004, one year before the Kyoto Protocol came into force, we revised our environmental philosophy and formulated an environmental policy to enhance our environmental management system. The issuance of the Environmental Report, a predecessor of the current CSR Report, began in the same year.

## **Our Action**

**Setting New Horizons** 

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Foundation for environmental management created

> Start of the issuance of environmental reports

#### 2008–2018: Escalation of climate change issues and companies' active launch of measures

Although various national governments began to take measures against climate change, no major improvements were made due to a confrontation between developed countries and emerging countries. During this time, however, the private sector, including companies and NPOs, launched actions independently.

In 2008, Nidec Corporation established an organization dedicated to CSR and formulated the CSR Charter to clarify its basic principles of CSR. At the same time, we began to create a system to collect data on environmental burdens covering all our group companies. In 2010, we began to use CDP, an information platform to analyze and disclose corporate data on environmental burdens and corporate efforts to cope with climate change. Since then, we have continued to disclose our climate change-related data.

Environment-oriented management accelerated on a group-wide basis

#### 2019: New challenges

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Curbing climate change requires us to realize a future where we move away from fossil fuel-derived energy sources and cover almost all energy needed in the world with renewable energy-derived electricity. The Nidec Group contributes to spreading various electrical products and reducing global power consumption by providing energy-saving motors in all fields. We also contribute to spreading renewable energy through the provision of battery energy storage systems. In addition, to reduce the amount of CO<sub>2</sub> emitted through our group's business activities, we launched a new project called SMART 2030 aimed at reducing the total CO<sub>2</sub> emissions regardless of the size of a plant and a business facility. This strategically critical project aims to launch measures to effectively address climate change issues.

#### Launching SMART 2030

### Time to Evolve a Climate Change Strategy

The level of people's awareness of climate change issues increased after the Paris Agreement's adoption in 2015. Climate change issues are now increasingly recognized as top-priority and urgent issues of the world. The increase in the amount of CO<sub>2</sub> in the atmosphere is a major cause of global warming, which causes serious climate change impacts. Companies with large CO<sub>2</sub> emissions are required to engage in decarbonization efforts, aiming to achieve zero CO<sub>2</sub> emissions.



The Nidec Group has implemented a three-year mediumterm environmental conservation plan since 2004, aiming to reduce CO<sub>2</sub> emissions per unit of sales by about 1% on a yearly basis. In this plan, even if the amount of CO<sub>2</sub> emissions increased, the CO<sub>2</sub> emissions would be evaluated as efficient if there is a larger increase in sales.

However, this evaluation method became unacceptable after the Paris Agreement was adopted in 2015.

The Nidec Group then launched a SMART 2030 Project, a new strategy to address climate change, in 2019. This project aims to reduce the total amount of CO<sub>2</sub> emissions in FY2030 by 30% compared to FY 2017, without adopting the evaluation method based on the CO<sub>2</sub> reduction per unit of sales. We at Nidec are committed to achieving a very challenging goal of significantly reducing CO<sub>2</sub> emissions while increasing the company's revenue and production.

The sectorial breakdown of global CO<sub>2</sub> emissions shows that the power generation sector accounts for the largest share of the emissions at 42%, followed by the transportation sector, at 24%\*. Creating the decarbonized society envisioned in the Paris Agreement requires us to switch to CO<sub>2</sub>-free power generation and transportation methods. The Nidec Group offers breakthrough products that help people, for example, use solar power instead of thermal power, and ride electric vehicles (EVs) instead of gasoline-powered ones.

In the transportation sector, Nidec provides traction motors for EVs, which correspond to the internal combustion engines in gasoline vehicles. Our aim in this business is to lead others in the decarbonization of vehicles, and achieve the top share in the EV market.

In the power generation sector, Nidec provides battery energy storage systems (BESSs), which stabilize renewable energy supply, to help use the energies effectively.

\* Source: International Energy Agency "CO<sub>2</sub> Emissions from Fuel Combustion 2018" Global CO<sub>2</sub> emissions (from fuel combustion, 2016)  $CO_2$  is emitted not only through business activities: A large amount of it is emitted from individual people's daily activities as well. In Japan, such household-generated  $CO_2$  emissions are said to account for more than one-sixth of the nation's total  $CO_2$  emissions.

Some suggest that preventing serious climate change requires a virtually complete elimination of carbon emissions by 2050. However tough this task may seem, it is something that each of the approximately 120,000 Nidec employees working in the world should face and try to overcome.

## Smarter Operation - Implementing SMART 2030 to Innovate Ourselve

Eyeing an electrified future, Nidec accelerates its decarbonization efforts.

## SMART 2030 to Constantly Reduce the total CO $_{2}$ Emissions by 30% by FY2030

In 2019, Nidec launched SMART 2030, a project to address the global "decarbonization" trend, which sets forth qualitative and quantitative goals based on our climate change actions while anticipating our FY2030 goal by constantly monitoring progress toward it.

Nidec has in place two pillars to achieve the goal, *i.e.*, "Make our businesses more energyefficient," and "Adopt renewable energies actively."

#### Priority measures to achieve the goal

#### **Energy-efficient operations**

- LED lighting for new facilities
- Energy-saving air conditioning
- Al-backed manufacturing processes



Nidec Sankyo Corporation employees check the company's energy efficiency.



Nidec Tosok (Vietnam) Co., Ltd.'s air conditioning equipment with an energy-saving operation control system

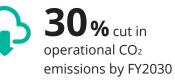
### Identify and publicize: • climate change-related

 climate change-related risks and opportunities
 mitigation/adaptation measures

**Qualitative Target** 

#### **SMART2030**

#### **Quantitative Target**



 $-\,$  This is Nidec's group-wide project, covering its business sites in and outside Japan.  $\,$  -

 \* Operational CO<sub>2</sub> emissions: Scope 1 (direct emissions from owned or controlled sources) and Scope 2 (indirect emissions from the generation of purchased energy)
 \* Base year of the quantitative target: FY2017

#### Renewable electricity

- Purchase renewable electricity directly from power suppliers
- Purchase certified renewable electricity using a Green Power Certification System
- Generate renewable electricity using solar panels, etc.



Solar panels installed on the roof Nidec (Zhejiang) Corporation's building



Nidec Research and Development Center, Japan Operates Entirely on Renewable Energies



## **Smarter Product**

- Energy-efficient and Environmentally Friendly Products

Nidec seeks to optimize the environmental performance of all of its products to create values that suppress and mitigate climate change.

## ronmental performance

#### Contributing to SDG Goals 7 and 13 and Producing Products with Environmental Values More Quickly

More than a billion people are believed to be still living in areas without electricity, where the primary source of energy is thermal power, such as coal, oil, and other fossil fuels. Controlling CO<sub>2</sub> emissions, the cause of climate change, requires a stable electric power supply to such no-electricity areas, followed by a supply of electricity produced from CO<sub>2</sub>-free renewable energies.

The Nidec Group has so far provided environmentally friendly products with energy-saving and long-life features, typified by energy-efficient brushless DC motors; now, however, based

on what's happening in the world, we are focused on providing products that contribute to realizing a sustainable, electrified society powered by renewable energies. Using electricity storage systems that help stabilize renewable energy supply, lightweight and high-power traction motors that are key to spreading EVs, blade pitch control motors that maximize the amount of wind that wind power generators can receive, and so many other products, the Nidec Group stays committed to curbing climate change.

#### Future that Nidec foresees and its areas of focus

Industrial electric motor systems account for one-third of the increase in power demand.

Increase in income levels helps home appliances to spread in the world. With the widespread use of electric vehicles (more than 200 million in the world), the electricity needs for vehicles increase.

The global diffusion of more advanced infrastructure systems accelerates.

Electricity becomes the primary means of the world's terminal energy consumption.

## The Nidec Group seeks to curb and mitigate climate change by manufacturing products that are used widely in an electrified society.

## Smarter Action

– Strong Action by Individual Employees

Acting under the "One Nidec" initiative as Members of the Global Society.

"We installed solar panels on our roof that cover almost all of our household electricity requirements. We have 2 electric cars and an electric lawn mower which are also powered by our solar panels."

Carla Otto Nidec Americas Holding Corporation (US) "I try to avoid CO<sub>2</sub> emissions by taking the shuttle bus to my office and riding a rental bicycle to go out on weekends instead of driving."

Ding Wei Nidec (Dalian) Limited (China) "I will make it a habit to bring a paper bag to avoid using a plastic bag every time I go shopping."

Nguyen Thi Duyen Nidec Vietnam Corporation (Vietnam)

We must <u>reduce CO<sub>2</sub> emissions to virtually zero</u> by 2050. What can you do as an individual?

"I love nature, but I cannot avoid driving to commute. So I spend my time taking care of the green spaces at home. I also avoid big trips by plane during my vacation."

Verena Kriebus

"I try to buy food from local farmers and appliances that consume less electric energy. At one point, I would like to power my home with renewable energy."

Tatiana Montero Nidec Global Appliance (Brazil) "I try to reuse home appliances, recycle everyday items, and reduce my travel footprint. I also tell my children the importance of reducing CO<sub>2</sub> emissions and what they can do about it."

Toshinori Takahashi Nidec Mobility Corporation (Japan)

# **Creating Sustainable Values**

## **Creating Values to Realize a Sustainable Society**

The Nidec Group supports the UN initiatives aimed to create a sustainable society.

In addition to being part of the UN Global Compact that upholds ten guiding principles in the areas of human rights, labor, the environment, and anti-corruption, and we are committed to helping realize the SDGs.



The SDGs (Sustainable Development Goals) are the set of global targets adopted by the United Nations in 2015, comprised of 17 goals that we must achieve by 2030 to realize a sustainable society.

#### SDGs on Which the Nidec Group Places a Special Focus



Ensure healthy lives and promote wellbeing for all at all ages



Ensure access to affordable, reliable, sustainable and modern energy



he Spread of EVs" on page 20



Build resilient infrastructure, promote sustainable industrialization and foster innovation

For more details, see "Eliminating Labo Shortage" on page 18.



Make cities inclusive, safe, resilient and sustainable



Ensure sustainable consumption and production patterns

For more details, see

"Business Activity-based Environmental Burden

Reduction" on our website



Take urgent action to combat climate change and its impacts



For more details, see "Accelerating the Decarbonization of Society" on page 19.

For more details, see "Contributing to the Spread of EVs" on page 20.

## Eliminating Labor Shortage



The intensifying problem of the dwindling birthrate and aging population causes a serious labor shortage. Securing an enough number of transportation workers is becoming increasingly difficult in distribution centers and plants, which more manpower is expected to be in need in the future. To help address this issue, the Nidec Group provides labor robots capable of performing physically demanding work.

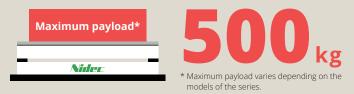
#### Case 1

### Next-generation autonomous transport cart S-CART<sup>®</sup>, which does more than carrying loads **S-CART**

The S-CART, the series of autonomous, flexible and convenient transport robots that Nidec developed to carry various large, heavy loads by themselves, have such features as: 1) remote control by tablet terminal; 2) magnet tape-free guideless navigation based on a laser measurement system and a floor layout memory function; and 3) compact design capable of long-time operation with the use of a high-capacity lithium battery. After debuting in December 2018, the S-CART 500 has proved to be capable of carrying a payload of up to 500 kg despite its size, which is compact enough for the product to be used in such small facilities as distribution centers. These features, combined with its merit of low-floor performance, significantly increased the S-CART series' applications in logistics settings. The S-CART series will continue to use the sensing, the robotics, and many other technologies that the Nidec Groups is focused on as we try to further expand its applications.



#### Nidec's "Strength" that Has Impact on Society



#### **Our Story**



Hitomi Yoshida S-CART Business Unit, Nidec-Shimpo Corporation

#### For More flexible and Simpler Transport Operations

The term "chronical labor shortage due to dwindling birthrate and aging population" is used so frequently now. The logistics industry, in particular, is said to have difficulty in soliciting female and senior workers due to its nature, and conventional image, as an industry that requires physically demanding, standing work. We developed the "S-CART," an autonomous transport cart, to help resolve this issue. Nidec-Shimpo had long provided automated guided vehicle

(AGV) units that have reduction gears, motors, and controllers for a long time, before launching AGVs themselves.

As explained in the left section of this page, the S-CART is a magnet tape-free AGV that runs on guideless navigation whose layout you can change flexibly. The cart's other autonomous features include deciding a destination based on the goods it carries, and avoiding obstacles by itself. Among all the S-CART series models, I would personally recommend S-CART 500, a generalpurpose AGV that has a maximum transport capacity of 500 kg, together with other features such as a conveyor, a lifter, and a robot, all of which enable the cart to fully demonstrate its functions as a transport robot. The cart, also equipped with a function to follow a person or a cart, is designed to work with humans as well. As the term "follow" suggests, the cart literally follows you, and you will soon start feeling as if the cart were your own pet. Some female users have even commented to me how cute the cart is, that it stimulates their maternal instinct, etc.

As labor shortage is said to intensify even further, we stay committed to engaging in product development and improvement so that our S-CART models can work in various places and environments, from factories to warehouses to hotels to commercial facilities.

## Accelerating the Decarbonization of Society



In 2018, the IPCC\*<sup>1</sup> released the Special Report on Global Warming of 1.5°C, which calls on limiting the rise in global average temperatures to 1.5°C of pre-industrial averages. Based on this report, global trends toward the decarbonization of society are accelerating. The Nidec Group, which has contributed to energy saving through the provision of highly efficient motors and related products, is also exploring ways to make a further contribution to the global environment, tackling another challenge to create energy.

## CaseBattery Energy Storage Systems that Support the Use of<br/>Renewable Energies

Power generation from renewable energies such as wind and solar energy are affected by weather conditions. Electricity supply cannot constantly meet demand and the supplied electricity does not conform to frequency standards (Hz). These power problems, including power failure and unstable power quality, occur frequently throughout the world and serve as barriers to the realization of a decarbonized society.

To resolve these problems, Nidec ASI S.p.A. has focused on microgrid technology, which ensures optimum power management on a regional basis through the integration of various power generators and storage batteries, taking advantage of its knowledge of industrial power systems and power quality. In particular, special attention is paid to BESSs<sup>\*2</sup>, which can store surplus power to ensure stable power supply at the time of power shortage, as a core technology, and a project aimed at establishing large-scale BESSs in various parts of Europe has been underway. Through the project, the total operating capacity of BESSs has reached 612 MW (the volume that can cover the power consumption of 120,000 households) as of the end of FY2019. This project is attracting considerable attention in European countries, which are ahead of other countries in terms of initiatives for limiting warming to 1.5°C, as well as emerging countries, which are advancing the creation of power infrastructure toward economic growth.

 \*1: Intergovernmental Panel on Climate Change: A body set up by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to conduct surveys and offer recommendations on climate change.
 \*2: Battery Energy Storage System



BESSs supplied to STEAG GmbH in Germany

#### "Achievements" that have an impact on society





#### \* The volume that can cover the power consumption of 120,000 households.

#### **Our Story**

#### Ensuring a Stable Energy Supply Worldwide

The BESSs, produced by Nidec ASI S.p.A., based in Milan, Italy, are growing into the main pillar of Nidec's renewable energy business. In 2016, Nidec ASI drew attention by supplying BESSs with a total capacity of 90 MW, which is the world's largest capacity to date, to STEAG GmbH, a leading power company in Germany. According to a survey conducted by Bloomberg New Energy Finance, the total global operating capacity of BESSs produced by Nidec ASI is more than 500 MW, which is ranked top in the world.



Franck Girard Chairman & Managing Director, Nidec ASI s.a France

With this background, I attended the Innovation for Cool Earth Forum (ICEF), an international conference held in Japan in October 2018, on behalf of the Nidec Group. At the ICEF, approximately 1,000 people from academic, industrial, and governmental circles in about 80 countries and regions discussed the resolution of climate change issues. At the subcommittee "Renewable Energy Microgrid and Energy Access," I gave a presentation on the microgrid solution business, including BESSs, citing our company's case. In the presentation, I introduced the value provided by BESSs and their future issues through a case example where the establishment of a demand-side area power system for renewable energy in a mountain village in Chile enabled local residents to receive a stable power supply 24 hours a day, 365 days a year.

Due to the spread of the use of renewable energy on a global scale, the global BESS market is continuing its rapid growth by an annual average of 10% to 15%. I anticipate that this strong growth will continue for at least the next 10 years. I would like to continue to contribute to ensuring a stable power grid in the world and realizing a decarbonized society through the spread of high-quality and state-of-the-art BESSs as a market leader.

## Contributing to the Spread of EVs



To address climate change issues, which are becoming increasingly severe, the use of electric vehicles (EVs) is one of the most effective measures that both companies and households can implement. In response to the continuously growing expectations of the international community, the Nidec Group contributes to the spread of EVs by reducing the price and improving the quality of traction motors, which are the heart of EVs, and traction motor systems, taking advantage of technologies that it has cultivated.

## CaseCompact and Powerful traction Motors that Accelerate the3Electrification of Vehicles

There is currently a pressing need to make various EV systems more light-weight, compact, and highly effective toward the further penetration of EVs. In particular, a major theme is technological innovation in traction motors, which serve as the engines of EVs, and their peripheral equipment, which controls motor drive.

Since 2010, the Nidec Group has engaged in the traction motor business based on its wealth of knowledge about in-vehicle and small precision motors. Consequently, we developed an E-Axle traction motor system integrating a motor, an inverter, and a gearbox. This integrated traction motor system comprised of a motor, which is a delicate electronic component, and a gearbox associated with vibration, features great compactness and light-weight. For instance, the Ni 150F series models for B-segment electric vehicles\* have achieved a weight of 87 kg, with the motor volume being about half of the same output-level products provided by competitors. Another strength of this system is that a new cooling system uniquely developed by us enables the motor to rotate with high efficiency and at a high output in spite of its compact size. This traction motor system has begun to be mounted on various models of vehicles.

\* B-segment EVs are those with an overall length of 3,750 mm to 4,200 mm, and ordinary compact cars fall into this category.



#### "Light-weight" that has an impact on society



#### **Our Story**



Takanobu Oyama Design Department 1, Automotive Business Group, Nidec Corporation

cooling system unique to it to allow for the realization of ideal heat management.

To promote the spread of EVs, it is necessary not only to develop environmentally friendly EVs, but also to lower the price of EVs to enable consumers to easily purchase them. Accordingly, we have completely sought to increase the quality of our motors as well as to reduce their cost, and have realized a low-cost Axle traction motor system by integrating three components—a motor, a gearbox, and an inverter—and attaining the miniaturization of the system. The price of EVs is significantly affected by the cost of in-vehicle motors. If in-vehicle motors come down in price, the price of EVs also drops. Developing low-cost and highly efficient in-vehicle motors promotes the development of EVs and has a profound impact on the spread of EVs.

We are planning to further develop the E-Axle traction motor system, which is just a module, in the future. We will propose not only the E-Axle traction motor system as a single item, but also the entire vehicle platform, consisting of batteries, chassis, and other modules, to automotive manufacturers. Moreover, we will advance the development of the E-Axle traction motor system to make it more compact and light-weight, aiming to offer more than our competitors. Through such development, we would like to accelerate the spread of EVs and make the use of EVs common worldwide to contribute to the decarbonization of society.

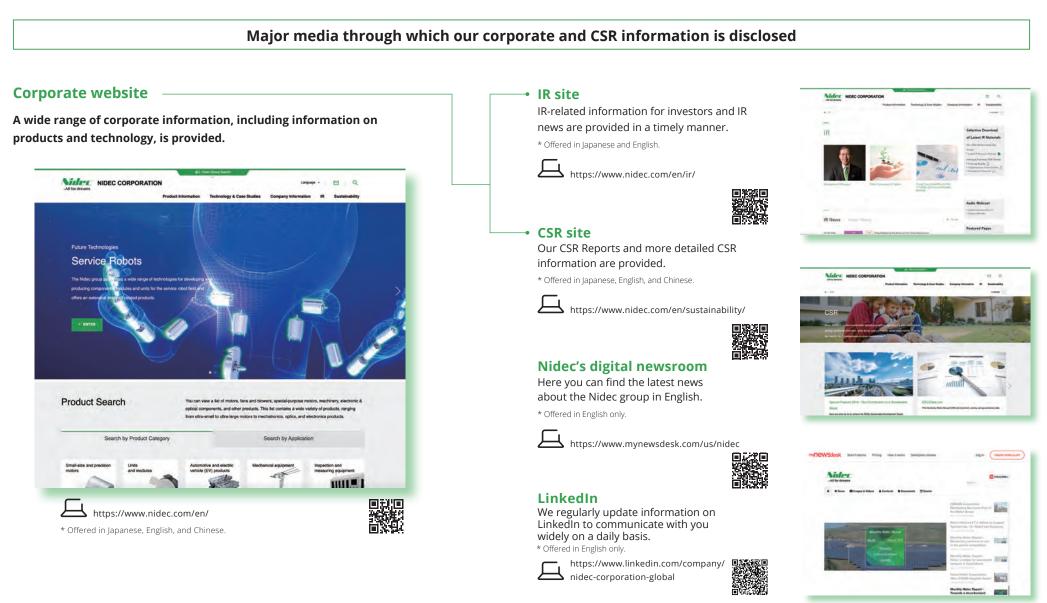
## For a Future Where the Use of EVs Are Common

To realize the decarbonization of society, which is a common global issue, the spread of EVs is indispensable. We planned to develop compact and light-weighted next-generation traction motors which have high efficiency that enables EVs to stably run a long distance and which can provide automotive manufacturers with the freedom to design vehicles.

It is necessary to develop highly efficient motors to enable EVs to stably run a long distance. Nidec has adopted a two-way oil

## To Those Who Want to Know More about Us

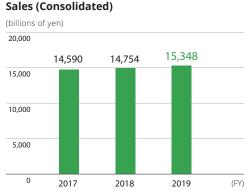
The Nidec Group is endeavoring to make complete and detailed disclosure of our information to people in society to promote a better relationship with them through the active dissemination of information.



## **Corporate Profile**

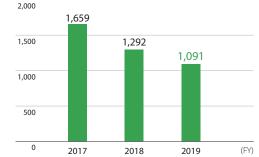
Company name	NIDEC CORPORATION
Address	338 Kuzetonoshiro-cho, Minami-ku, Kyoto 601-8205, Japan
Founded	July 23, 1973
Brand name	Nidec
Paid-in capital JPY87.78 billion (as of March 31, 2020)	
Representative	Shigenobu Nagamori Founder, Chairman and CEO Jun Seki President and COO
Total shares issued	298,142,234 (as of March 31, 2020)
Stock listings	First Section, Tokyo Stock Exchange

#### **Financial Condition**

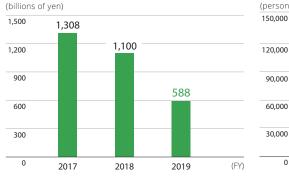


#### **Operating Income (Consolidated)**

(billions of yen)

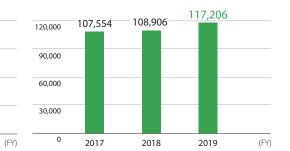


#### **Current Net Income (Consolidated)**



#### Number of Employees (Consolidated)

(persons)



## About the CSR Report 2020

#### **Editorial Policy**

It is the Nidec Group's important business management issue to fulfill its corporate social responsibility (CSR), and incorporate sustainable development into its business activities. In fulfilling our CSR, dialogue, cooperation, and collaboration with our group's stakeholders (mainly customers, supply chain partners, local communities, employees, shareholders, and the global environment) are essential. It is in contribution to this effort that we have been issuing this report, a compilation of the Nidec Group's CSR policies and philosophies, action results, and issues, every year since 2004. In addition to this report, which is a digest of our CSR-related information, please read the CSR page of our corporate website for more details.

#### Scope of Report

Our CSR Report 2020 focuses mainly on the headquarters, domestic and overseas R&D facilities, and production sites of Nidec Corporation, Nidec Techno Motor Corporation, Nidec-Shimpo Corporation, Nidec Tosok Corporation, Nidec Sankyo Corporation, Nidec-Read Corporation, Nidec Copal Electronics Corporation, Nidec Elesys Corporation, Nidec Mobility Corporation, Nidec Machinery Corporation, Nidec Copal Corporation, Nidec Global Service Corporation, and Nidec Servo Corporation.

#### **Reporting Guidelines**

Environmental Reporting Guidelines 2018, Ministry of the Environment of Japan GRI Sustainability Reporting Standard

#### **Reporting Period**

With a main focus on the company's activities during FY2019 (April 2019–March 2020), this report includes activities ongoing from the past as well as information on the latest activities.

#### Publication

September 2020 (Previous edition: November 2019; Next edition: Scheduled for November 2021)

#### **Publishing Office**

Investor Relations & CSR Promotion Department, Nidec Corporation

#### **Editor's Note**

COVID-19 has not only threatened human lives but also posed environmental and social challenges to us all. All of the Nidec Group's 120,000 employees will be required by international society to make more concrete efforts in the three areas of the environment, society and governance (ESG) as employees of a global company.

Our CSR Report 2019 was an overall summary of the key initiatives that we had undertaken and planned to undertake in the future. The reason why this report follows the contents of the 2019 report is because we want all Nidec

Masahiro Nagayasu General Manager, Investor Relations & CSR Promotion Department

Group employees to confirm once again what the Group must do to become a truly sustainable corporate entity. We hope that all employees will challenge themselves to create a wave of revolution toward a new era.



#### • Cover photos and pictures

Featured on the front and back covers of this report are lively snapshots of Nidec employees' jolly-looking children and pictures drawn by them, capturing their happy little moments of harmonious contact with nature. The Nidec Group envisions a sustainable future where a harmonious balance between nature and human activities safeguards the interests of children and generations beyond.



#### NIDEC CORPORATION

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