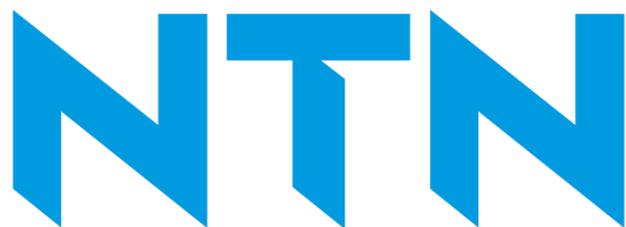
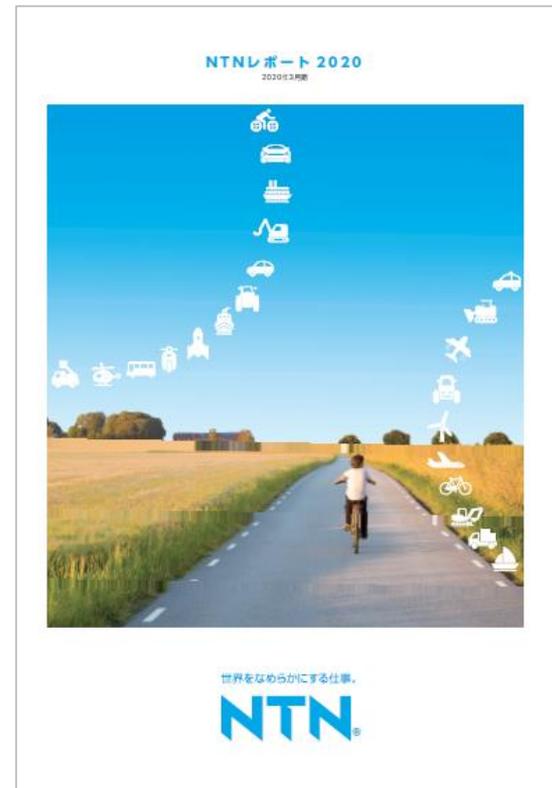


# NTN CORPORATION ESG Meeting



Make the world **NAMERAKA**



December 1, 2020  
NTN CORPORATION

# Introduction of Today's Participants

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- Director, Representative Executive Officer, President  
Hiroshi Ohkubo
- Corporate Value Promotion Dept. Manager, CSR Headquarters  
Kouhei Iguchi
- EHS (Environment, Health and Safety) Integrated Management  
Department Manager  
Masayuki Yamazaki
- Corporate Communications Dept. Manager, Corporate Strategy  
Headquarters  
Youichiro Mochida

## **1. Toward the Realization of "NAMERAKA society"**

Director, Representative Executive Officer, President Hiroshi Ohkubo

## **2. Activity Report**

Director, Representative Executive Officer, President Hiroshi Ohkubo

EHS (Environment, Health and Safety) Integrated Management  
Department Manager Masayuki Yamazaki

Corporate Value Promotion Dept. Manager, CSR Headquarters  
Kouhei Iguchi

## **3. Q&A session**

# Objectives of ESG Meeting

In addition to gaining an understanding of our ESG initiatives and progress, we will use this dialog to improve our future activities.

## [Our Challenges in the Previous Meeting in 2019]

- 1) Setting Medium-to Long-Term Targets for Environment
- 2) Strengthening Human Rights Efforts

### Social issues anticipated in future

Climate change

Environmental  
Pollution

Growth of  
Emerging Countries

Technological Innovation  
and Changes in  
Industrial Structure

Rising Human  
Rights Awareness

Changes in  
Demographics

Trade issues

### SUSTAINABLE DEVELOPMENT GOALS



GiFT supports SDGs.

## Items expected to be improved by NTN's ESG initiatives

- ✓ Investor confidence is likely to increase as compensation becomes more transparent, including long-term and short-term weighting and KPIs.
- ✓ Diversity of Board of Directors.

## Desired topics and other comments for the next ESG Meeting

- ✓ I would like to hear more specific details on governance initiatives.
- ✓ Explanation including progress on issues (setting medium-to long-term targets for environment and strengthening human rights initiatives).
- ✓ Some SCOPE3 based stories in environment.
- ✓ In society, human rights initiatives and the overall picture of the supply chain.
- ✓ Are the contents of the NTN PROUD AWARD contributing to corporate value?

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# Toward the Realization of "NAMERAKA Society"

NTN aims to realize a **"NAMERAKA Society"**

NAMERAKA Society = A society where people can easily lead a secure and fulfilling life in harmony with nature.



Make the world **NAMERAKA**

**By solving social issues through creating new technologies and developing new products,**

**we will contribute to the development of a sustainable society.**

# NTN's purpose of existence

In our Corporate Philosophy, **the Founders' Spirit** has been passed down from founders Noboru Niwa and Jiro Nishizono who achieved domestic production of bearings.



Noboru Niwa

" Frontier Spirit "  
" Coexistence and  
Co-prosperity Spirit "



Jiro Nishizono

Corporate Philosophy:

**We shall contribute to international society through creating new technologies and developing new products.**

# NTN's purpose of existence

In December 2019, we established the NTN Group's Management Policy to present our management philosophy and stance to put into practice the corporate philosophy embodied in our founders' beliefs.

The NTN Group aims to realize a "NAMERAKA Society" through practicing its corporate philosophy. As a company that is trusted and needed by communities, including stakeholders, we engage in business activities with an emphasis on respect for human rights and compliance.

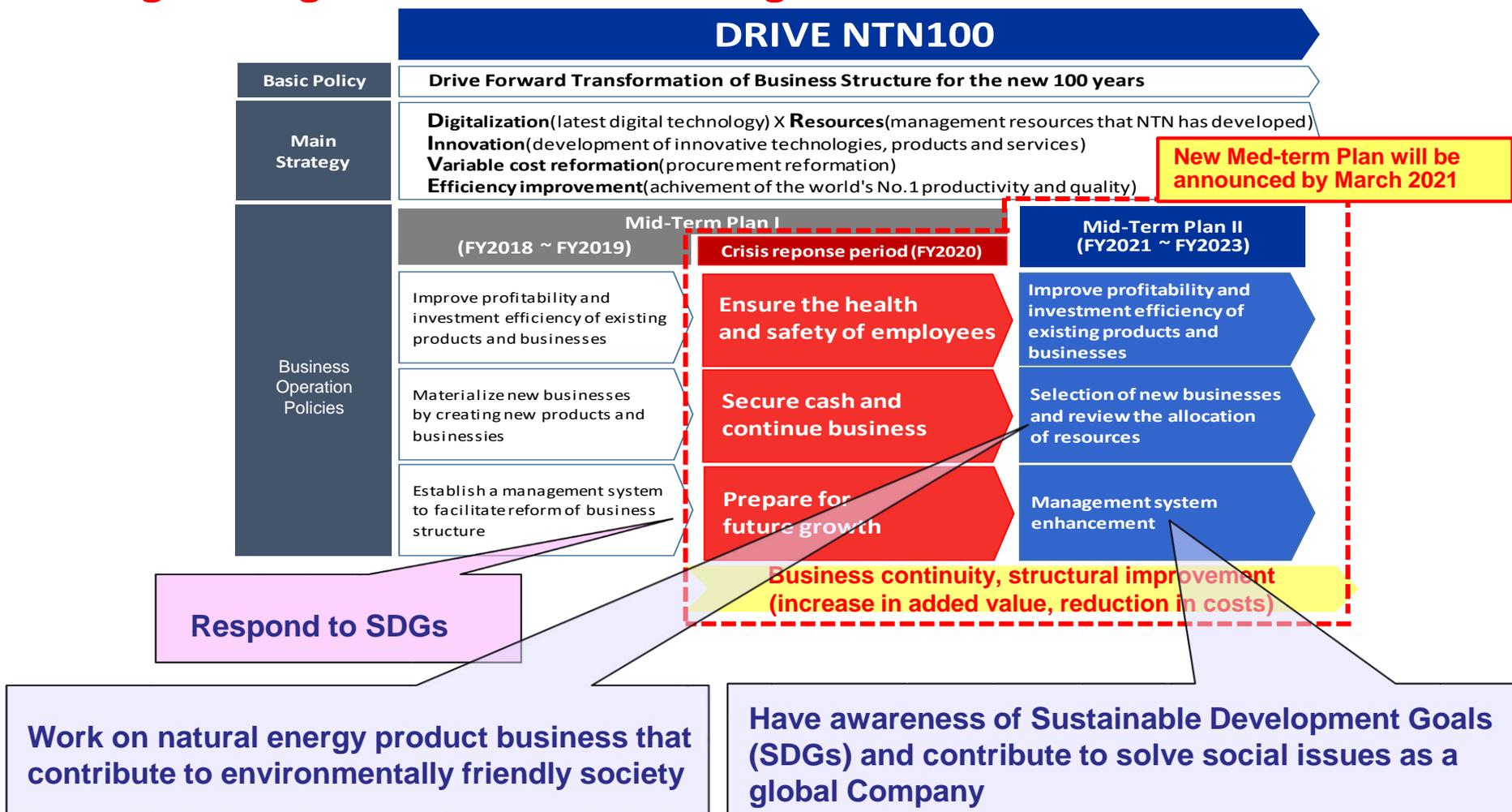
## ■ Stance to Stakeholders

<b>Employees</b>		We will respect diversity and individuality, and strive to create a workplace environment where employees can work safely and healthily.
<b>Customers</b>		We will pursue customer satisfaction by responding sincerely to customers and providing safe, reliable products and services.
<b>Business partners</b>		We will build good partnerships based on mutual trust with customer and work together to grow and develop under a fair and free environment.
<b>Local communities</b>		We will respect the culture and customs of local communities in which we operate, and through our business activities, we will respond to the expectations of local communities and build long-term relationships of trust.
<b>Shareholders and investors</b>		We will strive to return profits to shareholders through the creation of sustainable profits and build long-term relationships of trust through active communication.
<b>Environment</b>		We will contribute to the global environment through the provision of technologies, products, and services that contribute to the reduction of environmental impact in harmony with the natural environment in our business activities.

# Positioning of ESG Initiatives

In FY2020 as “Crisis response period” and FY2021-FY2023 as “Mid-term Plan II”

## Strengthening ESG Initiatives through Business Activities



# Identification of Materiality

Identify fields in which NTN can specifically leverage its strengths and fields in which it can fulfill its social responsibilities in solving social issues through its business activities

※ A several examples are shown below from materiality idea

## ★ Strengthening Positive Impact

### Creating Value by Leveraging NTN's Strengths

Leveraging our uniqueness to create environment-contributing products and create new businesses based on social issues

E Environ- ment	Reducing energy loss
	Sustainable society using natural energy
S Society	Safety and comfort

## ★ Minimizing negative impact

### Pursuing Our Social Responsibility to Global Issues

Minimize negative impacts on humans and the planet (Environment issues, human rights issues, etc.)

E Environ- ment	Responding to Climate Change
S Society	Respect for human rights
	Human Resource Development
G Gover- nance	Strengthening Governance

# ★ Strengthening Positive Impact

## Aftermarket business

### Our Vision

Transformation from a "Manufacturing Company" into a "Company that Delivers Values to Customers through Products and Services"

## Industrial machinery Business

### Our Vision

NTN will become a company that customers in the industrial machinery market rely on most for its exceptional technological competence

## Automotive Business

### Our Vision

As an indispensable presence for the automotive market, NTN will become a company that offers products and services for vehicles all over the world

## Green Energy Products Business

### Our Vision

From "BtoB" to "BtoC,"  
Build sales and service network for green energy products

## Values offered to society

### Reducing energy loss



Contributing to reduction of energy consumption by reducing torque, more compact and light weight

### Sustainable society using natural energy



Contributing to the realization of a low-carbon society through the creation of renewable energy for local production and local consumption

### Safety and comfort



Supporting People's lives through high quality and reliability

## SDGs



## Development of "Low Friction Hub Bearing III" Reducing rotational friction by 62%

Improved fuel efficiency of automotive and tightened CO2 emission standards



On hub bearings that support wheel rotation are required to further reduce rotational friction

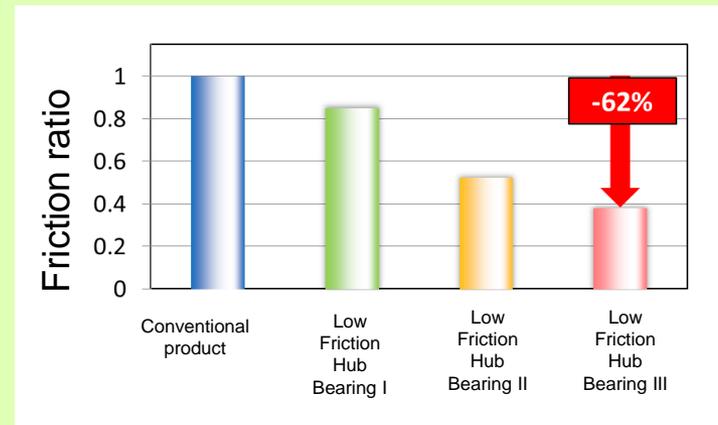


Development of low friction grease  
Employing a seals structure with labyrinth



Rotational friction reduced by 62% compared to conventional products

Improved fuel efficiency by approximately 0.53%  
Increased operating life and resistance to fretting

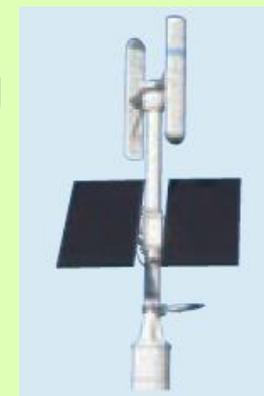


**Contributing to low fuel consumption of automotive and Improving environment performance**



## Implementation of Long Distance Wireless Transmission Experiments between Bases for building disaster mitigation and surveillance systems using renewable energy and IT

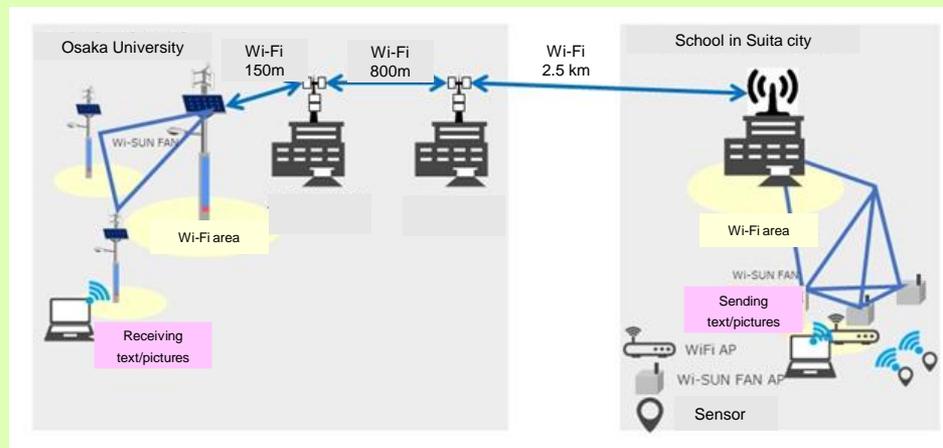
The occurrence of a situation where power outages or telecommunications shutdowns due to a natural disaster make it difficult to understand the situation of the disaster and conduct relief activities



Through three independent power supply units, NTN Green Power Station, information on an assumed disaster situation were transmitted and received using long-distance wireless system to



Send a message to a location 2.5 kilometers away to check the damage caused by camera images



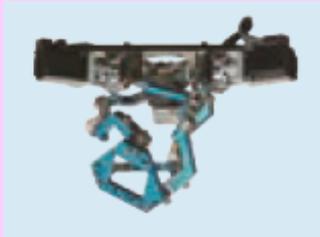
**Contribute to the safety and security of local communities by building disaster mitigation and surveillance system**



## Sophistication and utilization of control technology to realize labor saving

Begin mass production of i-WRIST for use in appearance inspection

The module products can replace inspection tasks done by people, contributing to labor-saving and automation at manufacturing sites



Wrist Joint Module "i-WRIST"

## Utilizing microscopic coating technology in the regenerative medicine field

iPS-derived cells formed as artificial three-dimensional structure by proprietary microscopic coating technology

Supporting regenerative medicine and drug discovery that will lead to early detection and treatment



Applied our precision positioning technology and the microscopic coating technology cultivated through repair devices

## Providing products and services that contribute to disaster mitigation and disaster prevention

Development of N<sup>3</sup> (N-Cube), a Container Type Transportable Independent Power Supply that generates power with natural energy: wind, water, and solar light

Provided as a useful power generation solution in the event of a disaster



"N3 (N-cube)" supported the disaster area of Typhoon No.15 in 2019

**By providing products and services with original technologies, Supporting Safe and Secure Living**

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# History of Corporate Governance

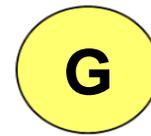


Strengthening and enhancing corporate governance is one of our top management priorities

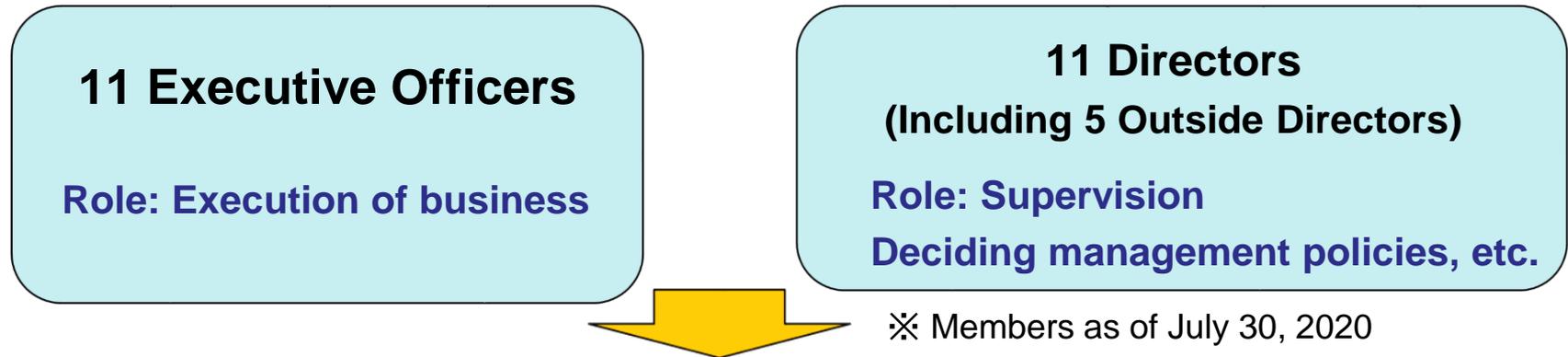
- To make management more efficient and robust
  - Prompt and accurate information disclosure
- ⇒ **Increasing Management Transparency**

	From 2000	From 2010	From 2020
<b>Organization design</b>	<b>Company with Board of Company Auditor</b> In 2004 Start of Operating Officer System		<b>In 2019</b> <b>Company with Nominating Committee, etc.</b>
<b>Outside Director</b>	In 2008 An Outside Director is appointed	In 2011 Increased to 2 members	In 2019 5 members In 2020 Woman Appointed
<b>Board of Directors</b>		In 2015 The effectiveness is assessed	In 2020 Enhancing Diversity
<b>Compliance</b>		In 2015 Establishment of a Compliance Committee	
<b>Internal Control</b>		In 2008 Establishment of Internal Audit Dept.	In 2014 Establishment of Fair Trade Promoting Department
<b>Risk Management</b>		In 2008 Establishment of Risk Management Committee	
<b>Sustainability</b>	In 2006 Establishment of CSR Committee		In 2019 Sustainability Committee
<b>Corporate Philosophy</b>	In 1990 Adoption of Corporate Philosophy		In 2018 New corporate philosophy system In 2020 Management Policy

# Management structure



Establishing a prompt decision-making structure and operational execution organization  
Improving management transparency and fairness



## [Results of transition to a Company with Nominating Committee, etc.]

- Executive Officers are responsible for business execution and Directors are dedicated to supervise
- Decrease in the number of meetings held
- To accelerate and improve the efficiency of decision-making
- Activation of discussions by Executive Officers

# Director Diversification and Balancing

In July 2020, a female Director (Outside Director) was appointed for the first time. By integrating diverse value, we will achieve sustainable improvement of corporate value.

Name	Main areas of experience required of Directors								
	Corporate management	Manufacturing	Technology and R&D	Marketing	Corporate and business planning	Finance and administration	Legal affairs, internal controls, compliance	Global experience	Experience of other industries, diversity
Hiroshi Ohkubo	●				●	●	●	●	
Hideaki Miyazawa	●	●		●	●			●	
Eiichi Ukai	●	●		●				●	
Toshinori Shiratori	●			●	●	●	●	●	
Masaki Egami			●						
Keiji Ohashi	●					●	●		
Noboru Tsuda	●				●	●	●		●
Kouji Kawahara				●		●	●		●
Ryo Kawakami							●		●
Tomonori Nishimura	●		●	●					●
Yuriya Komatsu					●	●	●	●	●

# Activity overview of Board of Directors and Committees



	Function	Number of meetings	Major Discussions
		(April 2,019 to March 2020)	
<b>Board of Directors</b>	<ul style="list-style-type: none"> <li>Decide the basic management policy</li> <li>Supervise the execution of duties of Director and Executive Officers</li> </ul>	14 times	<ul style="list-style-type: none"> <li>Future action regarding a succession plan of top management (CEO)</li> </ul>
<b>Nominating Committee</b>	<ul style="list-style-type: none"> <li>Decide candidates for Directors, which is proposed to the General Meeting of Shareholders</li> </ul>	5 times	<ul style="list-style-type: none"> <li>Standards for selection of Directors</li> <li>Skill matrix</li> <li>Standards regarding the independence of Outside Directors</li> </ul>
<b>Compensation Committee</b>	<ul style="list-style-type: none"> <li>Decide on the policy for compensation for Directors and Executive Officers, and details of compensation for individual persons</li> </ul>	4 times	<ul style="list-style-type: none"> <li>Reduction of compensation for Directors and Executive Officers</li> <li>Performance target of BIP Trust for compensation for Officers</li> </ul>
<b>Audit Committee</b>	<ul style="list-style-type: none"> <li>Audit the execution of duties of Directors and Executive Officers</li> <li>Decide on the content of a proposal regarding appointment/removal of the accounting audit, which is submitted to the General Meeting of Shareholders</li> </ul>	10 times	<ul style="list-style-type: none"> <li>Formulation of the Audit Committee's auditing standards</li> <li>Formulation of auditing policies and auditing plans</li> <li>Assessment of the selection of independent auditors</li> </ul>

※ From April to June 2019: Meeting as Compensation Advisory Committee and Board of Corporate Auditors

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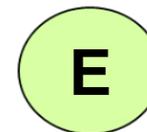
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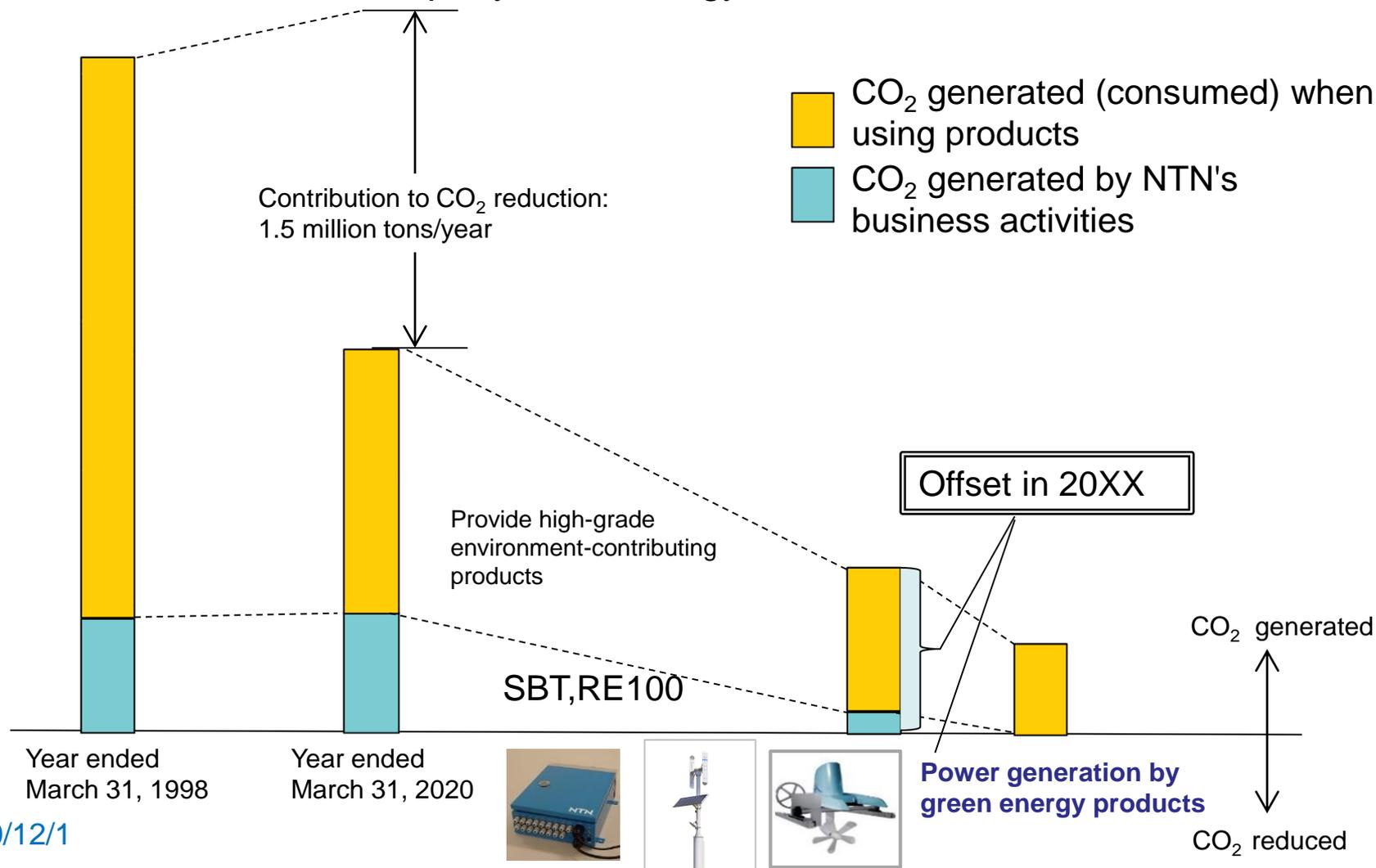
Corporate Value Promotion Dept. Manager, CSR Headquarters  
Kouhei Iguchi

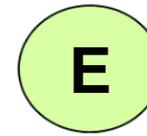
## 3. Q&A session

# Measures against climate change



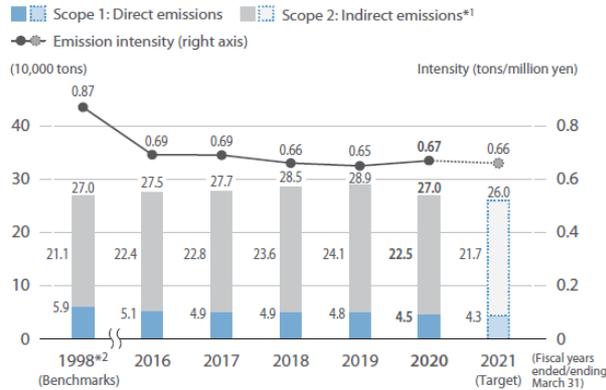
In the future, CO<sub>2</sub> emissions generated by business activities will be close to zero. At the same time, we will reduce CO<sub>2</sub> generated (consumed) when using products due to advancements in the company's technology.



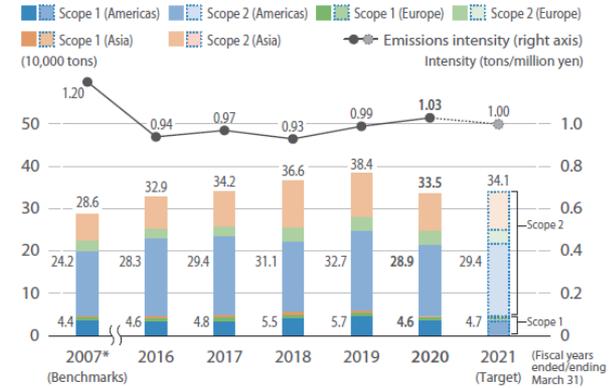


## Reducing CO<sub>2</sub> emissions and emissions intensity throughout business activities

### CO<sub>2</sub> Emissions/Emissions Intensities [Japan]

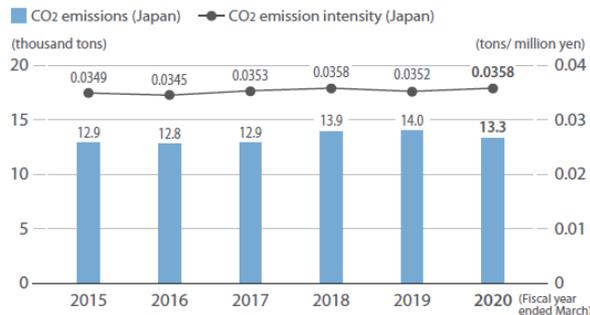


### CO<sub>2</sub> Emissions/Emissions Intensities [Overseas]



※ Supply Chain Emissions (Scope 3) for the Fiscal Year Ended March 31, 2020 are disclosed on the Company's website

### CO<sub>2</sub> Emissions and Emissions Intensity in Logistics



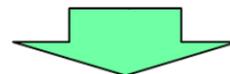
### Use of Renewable Energy



NTN-AT (Germany) switched to renewable energy-derived electricity in total

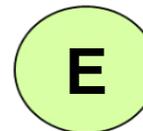


Nanjin NTN Corp. (China) installed 14,000 solar panels



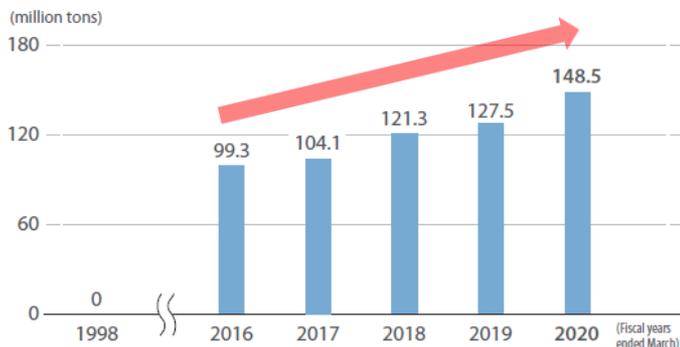
**Contribute to measures against climate change in business activities**

# Reducing CO<sub>2</sub> Emissions When Using Products



Accelerate reduction of energy losses through visualization of contribution to CO<sub>2</sub> reduction from our main products, driveshafts and hub bearings, and green energy products, and advancement of technological and development capabilities

## Contribution to CO<sub>2</sub> reduction from driveshafts and hub bearings



## Develop natural energy products



N<sup>3</sup> (N-Cube)  
at Kyonan-machi, Chiba



NTN Green Power  
Station

## Reducing energy loss through pursuit of tribological technologies



Awarded the Mobility Components Award of "CHO"  
MONODZUKURI Innovative Parts and Components Award



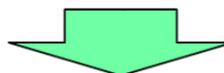
Development of "Low Friction Hub Bearing III" that reduces rotational friction by 62%



Orders received for mass production of Ultra-low Friction Sealed Ball Bearing for EV and HEV transmissions



Mass production of Wrist Joint Module "i-WRIST" that contributes to automation and labor saving at production sites



## Pursuit of Circular Economy (Recycle-Oriented Economy) through Product Recycling

**Refurbish business launched for large-size industrial bearings**

**Bearings are collected and delivered as refurbished products after repair or replacement**

Regarding large bearings with bore diameters of one meter, customer needs to use them for long periods of time, such as by replacing or repairing parts, rather than replacing the entire bearing both in Japan and abroad



Focus on expanding refurbish businesses as pursuit of the circular economy



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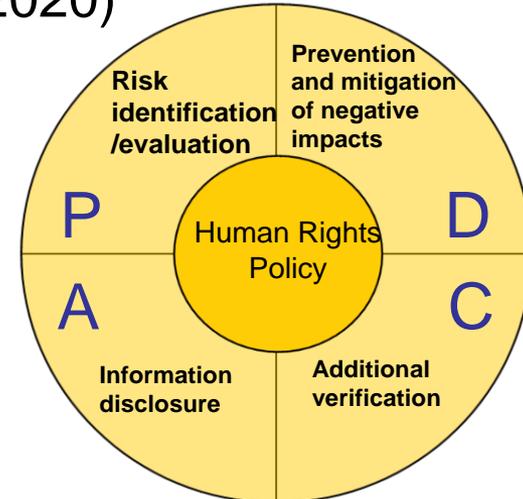
## 3. Q&A session

<p>Respect for human rights</p>	<p>Respect the dignity and rights of all people in our business activities, and call on our business partners and other parties not to infringe upon the dignity and rights of people or discriminate unjustly.</p>	
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Established the [Human Rights Policy](#) to further strengthen and promote the NTN Group's human rights initiatives.(July 2020)

**Outline of Human Rights Policy**  
 Based on the following three basic principles, we have formulated the Human Rights Policy pursuant to our Management Policy:

1. NTN will respect internationally-recognized human rights.
2. NTN will not violate the human rights of others.
3. NTN will respond appropriately to any negative impacts its business activities may have on human rights.



**Establishment of a mechanism for human rights due diligence**

<Ensuring the Safety of Employees>

Established [Safety and Health Basic Policy](#) to create a workplace environment where everyone in the NTN Group can work actively, safely and healthy (July 2020)  
 ⇒ Compatible with Crisis Response Period's priority measure “Ensure the health and safety of employees”

# Human Resource Development (Practicing the Corporate Philosophy Globally)



Human Resource Development	Promote equal opportunities in capacity building, promotion, and deployment to contribute to a sustainable society and increase the potential of all employees	
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## “Corporate Philosophy Dialog”

A workshop in which employees share experiences related to the corporate philosophy and deepen understanding and empathy of the corporate philosophy

⇒ **Approximately 250 employees/year participated in the event in Japan, and expansion to overseas bases**



In the first overseas dialog in Thailand, employees talks in home language and made presentation online to the head office (October, 2020)

## “NTN PROUD AWARD”

System to recognize the practice of the corporate philosophy for all employees in NTN Group (established in 2018)

⇒ **In the second time in 2019, 76 teams participated from around the world**



8 of the awarded teams participated in the award ceremony for the second time, and China received President Award for its efforts to transform sales activities localized to the Chinese marketplace (December, 2019)

## Ideas for practicing Corporate Philosophy → Response to Social Issues → Social Significance/Motivation

**<Example of the 1st Award Theme>**  
**Initiatives for inspection robots to replace human eyes**

- ✓ Expanded application of "parallel link high speed angle control equipment" developed by New Product Development R&D Center.
- ✓ Focus on the "eye inspection" that is struggling in the Japanese Monozukuri.
- ✓ Attach a camera at the edge of a parallel link and made trial "appearance inspection equipment."

Parallel link high speed angle control equipment  
 Camera for inspection  
 Inspection Objects

↓

- New inquiry  
To automatize visual inspection process of palm-sized parts for car air conditioners
- Project launched  
R1 Project launched to establish mass production system

**<Members>**  
 New Product Development R&D Center: project manager 1 person, regular employee 1 person  
 R1 Project: project manager 1 person, regular employee 2 persons  
 Industrial Machinery Sales Engineering Department: project manager 1 person

**<Examples of the Second Award Theme>**  
**"Ultra-low Friction Seal" Initiatives**

- ✓ Two types of transmission bearings are available: with seals or special heat treatment
- ✓ None of them does not fulfill operating life, torque, and cost at the same time
- ✓ Pursuing compatibility between low friction and long operating life
- ✓ Breaking fixed concepts and using creative ideas, ultra-low friction seal has been developed

Ball bearing with ultra-low friction seal

↓

- Prototype order received for Company A
- Response to study associations, academic societies, exhibitions, technical presentations and technical papers
- Setting life factor for the first time for seals

**<Members>**  
 Advanced Technology R&D Center: regular employee 1 person, Application Engineering Dept.: project manager 1 person, Utsunomiya Automotive Sales Office: regular employee 1 person, Automotive Testing Dept.: regular employee 1 person, Automotive Bearing Engineering Dept.: regular employee 4 persons

### Response to Social Issues

- Response to the decline in the working population by decreasing birthrate and aging population
- Technological innovation

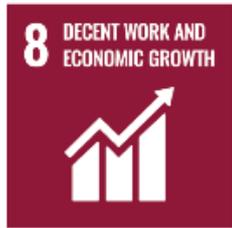
### Safety and comfort

Supporting People's lives through high quality and reliability

- Contribution to reducing CO2 emissions
- Technological Innovation

### Reducing energy loss

### SDGs



# Toward the Future

New Medium-term Management Plan (April 2021 to March 2024) will further accelerate its efforts to realize a sustainable society.

## [Challenges we will tackle in the future]

- 1) Identification of Materiality/Target Setting
- 2) Drop into business strategy

## Contributing to the achievement of SDGs

### SUSTAINABLE DEVELOPMENT GOALS

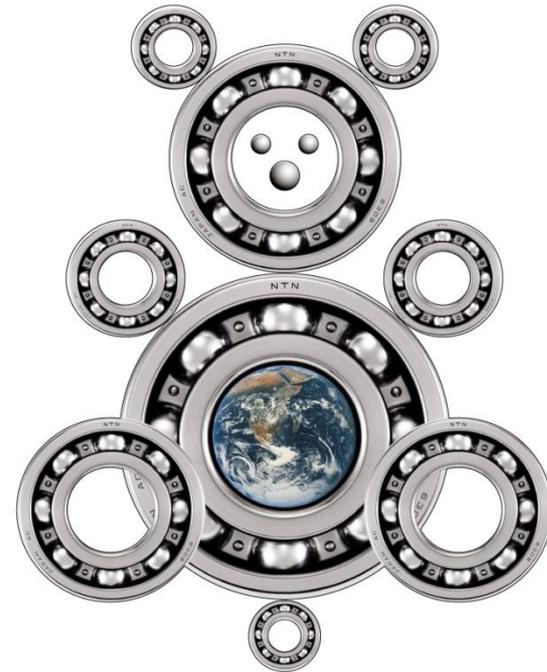


GFT supports SDGs.

**Achieving a Smooth Society**

# NTN

Make the world **NAMERAKA**



**D**igitalization, **R**esources, **I**nnovation, **V**ariable cost reformation, **E**fficiency improvement  
**NTN T**ransformation for **N**ew **100**years