



NTN Report  
2024

FY2023

Make the world **NAMERAKA**



## To Our Stakeholders

The NTN Group is a precision machinery manufacturer engaged in the research and development, manufacturing, and sale of bearings and driveshafts (CVJs). Bearings, which are our main product, are essential precision components that support the rotation of machinery. They are used in every type of machinery including automobiles, aircraft, rolling stock, and a wide range of industrial machinery to support the lives of people around the world.

Since our founding in 1918, we have inherited and continued to cultivate our founders' spirit—the “Frontier Spirit” of continually challenging ourselves, and the “Coexistence and Co-prosperity Spirit” of developing together with society. For more than 100 years, we have been providing technologies to minimize energy loss by reducing friction. Various industries have been going through a period of major transformation in recent years, such as the electrification of means of mobility and the advancement of digital technology. In this respect, bearings are positioned as an energy-saving technology that will be vital to our everyday lives in the future.

With the firm conviction that our mission is to continue contributing to the development of industries and to the Earth's environment through our products and services, we aim to expand our business activities globally and realize a “NAMERAKA Society” through the practice of our corporate philosophy, “We shall contribute to international society through creating new technologies and developing new products.”

Our integrated report, “NTN Report 2024,” explains our value creation with a focus on the new Medium-term Management Plan that started from April this year. With the involvement of the entire management team including myself, we have disclosed information faithfully, setting out our main strategies for financial and non-financial activities in the integrated report and providing details of the activities undertaken by each division under the Sustainability section on NTN's corporate website.

September 2024


Director  
Representative Executive Officer, President  
CEO (Chief Executive Officer)

**Eiichi Ukai**


# Make the world “NAMERAKA”

NAMERAKA is a Japanese word meaning smooth and harmonious. Bearing technology makes every rotating part of a machine smooth. With more precise techniques, shafts rotate more smoothly and energy loss is reduced to a minimum. In other words, it is a technology for energy conservation. The technology, honed through bearings, will transform electric vehicles, robots, and even the natural energy society to be NAMERAKA.



 Corporate Philosophy and Realization of A “NAMERAKA Society”  
<https://www.ntnglobal.com/en/corporate/idea/index.html>



 Bearings, Let's Learn!  
[https://www.ntnglobal.com/en/what\\_is\\_bearing/index.html](https://www.ntnglobal.com/en/what_is_bearing/index.html)



# Structure of NTN Report 2024

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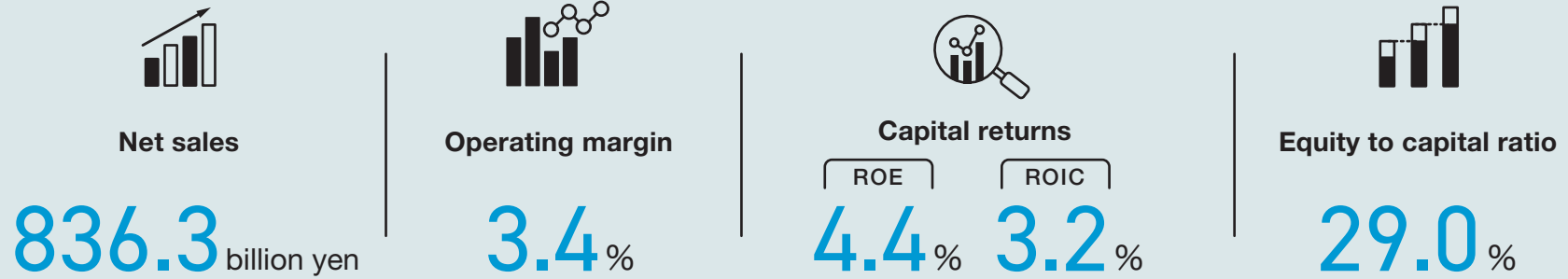
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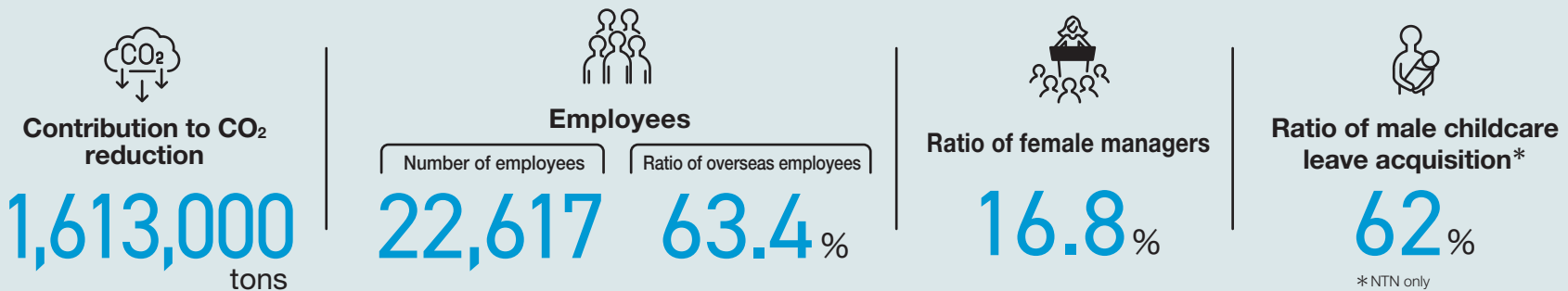
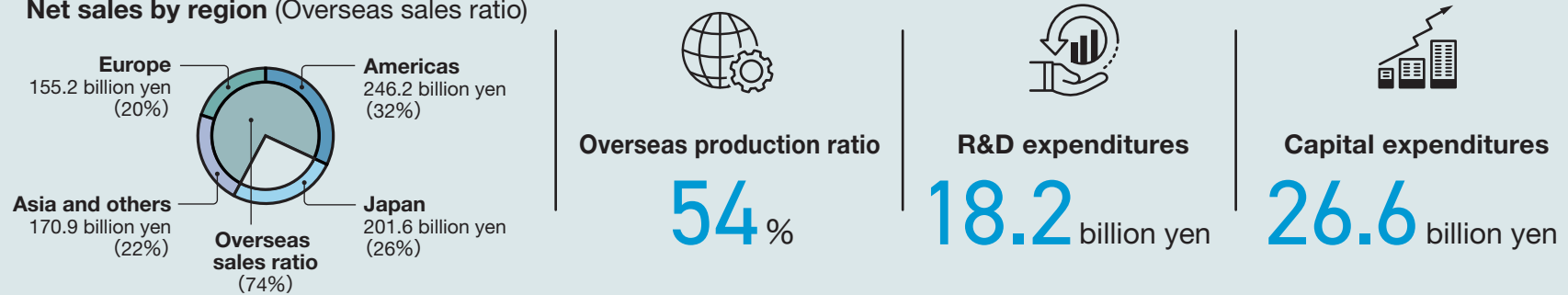
 Investors  
<https://www.ntnglobal.com/en/investors/index.html>

# NTN by the Numbers (FY2023)

At a Glance



## Net sales by region (Overseas sales ratio)



# Management Commitment



**We will revitalize NTN  
with unwavering resolve  
with new organizational  
system to achieve  
transformation of  
business structure.**

Director  
Representative Executive Officer, President  
CEO (Chief Executive Officer)

**Eiichi Ukai**

In the Medium-term Management Plan “DRIVE NTN100” Phase 2, which we have been implementing since FY2021, we advanced efforts to strengthen our financial position and build a resilient corporate structure while aiming to transform NTN’s business structure. To resolve the challenges that we have newly identified based on the outcomes of these efforts, we are now tackling “DRIVE NTN100” Final, the new Medium-term Management Plan that commenced from FY2024. We revamped our previous market-based system comprising three business headquarters to a product-based system comprising two business headquarters, and further, established a new Innovation & Business Development HQ. to create an organizational structure that can help us achieve future growth. “Final” embodies our strong determination to complete the revitalization of NTN in the next three years. Therefore, we will begin by reflecting on Phase 2 and communicating to all our stakeholders an overview of the business strategy that we will be implementing in Final.

## **■ NTN Group’s business structure to date**

NTN Group has been implementing the Medium-term Management Plan “DRIVE NTN100” Phase 2 over the three years up to FY2023. Amid the rapid deterioration of our financial position, we faced the pressing need to revitalize NTN. The issues we had identified when formulating the plan were to build a resilient corporate structure and strengthen our financial position, which would enable us to respond appropriately to changes in the management environment brought about by major changes in the automotive industry.

Looking back, NTN’s basic management policy since 2000 had been to increase profits through sales growth. Based on the policy of maintaining and expanding our global top class market share for constant velocity joints (CVJ) and axle bearings used in automobiles, we continued to achieve steady growth in both sales and profits until the Lehman Shock in 2008. However, since the Lehman Shock, we have been unable to achieve our target sales and profits, and to make matters worse, we have been confronted by intensifying cost competition since around 2015 due to the rise of competitors from emerging economies. NTN prioritizes maintaining and expanding our market share and has done so by accepting customer requests for discounts. On the other hand, in an environment of growing inflation globally, it is difficult to cover all the discounts through our own efforts to reduce costs, and our profits remain squeezed amid these difficult circumstances. Furthermore, we have faced issues in the past when we were unable to provide

## Management Commitment

adequate supply to the highly profitable aftermarket due to a need to respond suddenly to increases in production during times when the OEM market was booming.

### Outcomes and challenges of “DRIVE NTN100” Phase 2

With regard to the outcomes of “DRIVE NTN100” Phase 2, which started amid this business environment, we achieved progress in price optimization, such as passing on cost increases, in both the aftermarket and industrial machinery businesses. Furthermore, we achieved our target profit margins ahead of schedule in FY2022 due to increased demand, and realized record-high sales and operating income in both businesses. While the industrial machinery market entered a slump subsequently and profit margins declined year-on-year in FY2023, they have been surpassing the target profit margin since the second quarter. However, as for the aftermarket business, we only had sales functions and no manufacturing functions, we continued to face the challenge of being unable to supply enough products to meet demand. As the production system prioritized OEM, there had been inadequate production capacity for the aftermarket.

The automotive business had been registering operating losses until FY2022, but volume has increased since the start of FY2023 with the easing of the semiconductor shortage. Moreover, we made progress in passing on prices to cover higher costs and continued improving profit margins in each quarter. As a result, we recorded an operating income for the full year.

Looking back at the main measures we have taken, in the area of procurement reform, we have been able to reduce costs by adopting new suppliers from India and other countries, and we recognize that our challenge going forward is involving our technical and design departments in overseas expansion efforts. With regard to strengthening our aftermarket business, our challenge is to strengthen supply capacity, including the expansion of our inventory, with a view to further increasing our sales and profits. In terms of production reorganization, we are proceeding with outsourcing the production of bearings. Despite delays from the original plan, we will continue to work on structural reforms that are tailored to the markets in each region. As for accelerating the research and

development as well as commercialization of new products, we have developed and launched into the market high-performance products such as the highly efficient fixed constant velocity joint “CFJ” for automobiles, which are increasingly shifting toward electrification, but our challenge is to accelerate commercialization through the further development of new products. In the area of improving productivity through the use of digital technology, we have completed the revamp of our aging core system, and going forward, plan to promote business reform using the new IT system, the horizontal expansion of the smart factory initiatives that we rolled out at the new Wakayama Works, among other efforts. With regard to strengthening our financial position, we were able to create cash flow by reducing investment and improving profits, as well as improving our net D/E ratio and equity ratio. However, we are still midway through our journey of strengthening earning power, and we recognize that this is the biggest challenge facing our Group.

### Strategy of the new Medium-term Management Plan “DRIVE NTN100” Final

When preparing our new three-year Medium-term Management Plan “DRIVE NTN100” Final, which commences from FY2024, we first defined the long-term vision of what we want to achieve in 2035. That is to enhance corporate value by working together with our stakeholders to improve economic value along with environmental and social value, and become a company that is trusted and needed by stakeholders. In terms of economic value, we set out the goal of achieving and further improving ROE to ensure that it constantly exceeds shareholder capital cost even under conditions of economic fluctuations. As a part of the transformation of business structure that we will put in place to achieve this, we have set the targets of 40% sales ratio for the aftermarket, 60% sales ratio for OEMs, and creating and developing new businesses. As for environmental and social value, we have established the goal of achieving carbon neutrality and realizing prosperous human development.

By backcasting from here, we have compiled a list of measures to be implemented over the next three years. At the same time, we will implement measures to ensure that

we achieve our vision, incorporating the perspective of forecasting to resolve issues in Phase 2. Until now, past capital investments and other factors have caused a slump in the business as they no longer fit the current market environment, but we are determined to complete our structural reforms in the next three years.

Toward achieving that, we have resolved to undertake the reform of our organizational structure. We revised the previous market-based structure comprising three business headquarters of the aftermarket, industrial machinery, and automotive businesses, to a structure comprising two business headquarters—Bearing Business HQ. and CVJ & Axle Bearing Business HQ. We have consolidated the bearing business, which was previously distributed across three business headquarters, to strengthen our supply capacity and services from mass-produced products to aftermarket parts. With the aftermarket, industrial machinery, and automotive segments each accounting for a third of our business, improving the profit margin of automotive bearings is a pressing issue. In the future, we expect the situation for automotive bearings to become even more severe due to the reduction in demand associated with the shift from ICE to EV. Therefore, we believe that it will be vital to engage in negotiations with customers. At the same time, we will expand the stable and highly profitable aftermarket with the aim of building a corporate structure that is less



## Management Commitment



susceptible to changes in the external environment. Looking at the future outlook of the bearing business, we have primarily factored in the expansion of the aftermarket business and plan to achieve sales of 370 billion yen, operating income of 29 billion yen, and operating margin of 7.8% for FY2026.

With regard to the CVJ & Axle bearing business, we will respond to new needs that arise alongside the progress of electrification, and build a robust business foundation. In particular, to support OEM operations, we will take a step beyond the conventional business format and develop a system to secure profits while responding to requests from customers. Both CVJs and axle bearings are parts that are indispensable to EVs. EVs are equipped with motors that generate large torque instantaneously and have lower vibrations than engines, so NTN's products, which are highly rigid and durable, as well as superior in the aspects of low vibration and quietness, can provide added value. We will improve the foundation of the CVJ & Axle bearing business through structural reform, while shifting to business areas with high profit margins and reducing unprofitable businesses, with plans to achieve sales of 460 billion yen, operating income of 21 billion yen, and operating margin of 4.6% after three years. From FY2027 and beyond, we will increase the sales composition ratio of high value-added products such as CFJs for battery EVs and large, high-angle CVJs, with a view to further increasing profit margins.

### Strengthening the aftermarket and OEM

To promote transformation of business structure, we will implement the following three key measures.

The first is the expansion of the aftermarket business. In the aftermarket, brand value is a major factor in determining prices. When we conducted a comparative study of our products with those of our competitors, we found that our products were sometimes sold at lower prices than those of our competitors, even when the performance and quality were largely the same. This difference in price is precisely the difference in brand value. For example, when a customer requires a replacement part quickly after a bearing breaks down, if we can not only respond quickly without having to suspend the customer's production line, but also provide an engineering solution that will solve the problem, our brand value increases. Previously, we lacked production capacity for the aftermarket business, but with organizational changes, we will optimize our production capacity through integrated operation with OEMs. In addition, to enhance responsiveness on the supply side, we will also further promote outsourcing of production to partner manufacturers overseas. On the other hand, we will expand our "FIRST," a system for immediate delivery of popular products, holding finished goods in stock for products anticipated to have a certain level of demand per year, and developing a system to deliver them quickly around the world when an order is placed. As for engineering solutions, we will integrate OEM and aftermarket, and put in place "bearing life cycle management," a system to support and provide services from the beginning to the end of the bearing lifecycle. We also intend to work on improving our customer response capabilities while co-creating with partners, such as by strengthening relationships with distributors who have the capability to provide technical support.

If we ensure that these measures are implemented with certainty, we will be able to increase the aftermarket sales ratio from 17% of total sales in FY2023 to 20% in the next three years, and to 40% in FY2035. To address this issue, we will install a new production line for the aftermarket at Wakayama Works and expand the production of NTN brand products by our partner manufacturers. We will establish a procurement team to ascertain the cost

competitiveness, quality level, and supply capacity of each manufacturer, and to provide the necessary support.

The second key measure is to strengthen the competitiveness of the OEM business. To achieve this, we will undertake structural reforms to optimize fixed costs while adapting to the market environment and demand. Specifically, we will proceed with the reorganization of production bases in the Americas, Europe, China, and Japan to improve asset efficiency. Supporting electrification, which started in the automotive industry and is now spreading gradually to industrial machinery, is also an important issue for NTN. We will develop new products to support these market needs, propose them to customers swiftly, and launch them on the market. Some of these new products have already been adopted by customers, and we will continue with further expansion going forward to contribute to improving profits for the OEM business as a whole.

### Thoroughly implementing reforms and establishing a system for generating profits

The third key measure is the creation of new products and the development of new businesses. In conventional new product development, specialization was enhanced through the division of labor between research and development and parts design. On the other hand, marketing activities were carried out by each business division, which led to overlapping areas and issues that made it challenging to speed up commercialization.

In response to this, we established the Innovation & Business Development Headquarters in April 2024 as a new organization that serves as a one-stop shop to handle all functions leading up to the commercialization of new products. Going forward, we will speed up development by proceeding with multiple processes simultaneously. In conjunction with product development, we will also work to build in quality, cost, and delivery time by developing manufacturing technologies for mass production. Furthermore, we will collaborate with external research institutes, such as the NTN Next Generation Research Alliance Laboratories, to accelerate the discovery and utilization of cutting-edge technologies as well as human resource development. Our targets for

## Management Commitment

strengthening development include mobility module products such as ball screws for electric brakes, robotic peripheral module products such as “i-WRIST” that meet labor-saving needs, and green energy products such as “N<sup>3</sup> N-CUBE.”

Promoting value chain reform is another vital key measure. We will reduce work-in-process inventory and compress overall inventory, and improve the cash conversion cycle of the entire value chain. However, while we have to hold the necessary finished product inventory to enable swift response to customer needs, we also need to reduce work-in-process inventory across the board, including with our partner manufacturers. We will strengthen cooperative relationships in the pre- and post-processes of the supply chain, specifically with turning and forging suppliers in the upstream process and overseas logistics and warehouses in the downstream process, and expand efforts to nurture and adopt highly competitive business partners. In the manufacturing area, we will review designs and materials with ideas that are not constrained by conventional thinking, while fulfilling the specifications requested by customers, to enhance the effectiveness of cost reduction. In the aspect of logistics, we will reconstruct our network to achieve a balance between risk hedging and maintaining an appropriate level of inventory.

In the future, digital technology will also become an essential element for generating profits. We will work to reduce operational costs by enhancing the functionality of our revamped core system, make objective and swift decisions by establishing a data-driven environment, and improve operational efficiency and systems through cutting-edge digital technology. To accelerate this series of digital measures, we will focus on developing digital talent as well as reskilling to improve overall IT literacy among our employees.

### Evolution of ESG management

With regard to environmental measures, the NTN Group has established the goal of achieving carbon neutrality in Scope 1 and Scope 2 by FY2035, and in Scope 3, which covers the entire supply chain, by FY2050. In our promotion of carbon neutrality globally, we have formulated a roadmap that sets out CO<sub>2</sub> emission

reduction targets for each region, to be achieved by 2035. For example, we will reduce idle operating time observed in compressors in the manufacturing plants. In addition to switching from purchased electricity to renewable energy, we will promote the installation of solar panels at manufacturing plants and other sites through external investment.

In the social aspect, we will promote diversity; in other words, we will work to create a rewarding work environment that respects the diversity of our employees. We will also put effort into community contribution activities. Our management team visits the local sites and holds town hall meetings in person, during which they listen carefully to the problems and questions raised by many employees and engage in repeated dialogue. We believe that by clarifying what the company can and cannot do in response to requests from employees, as well as providing feedback to employees, we can build relationships of trust and at the same time, clearly demonstrate our stance of supporting the personal growth of our employees as a company.

Regarding governance, we transitioned to become a Company with a Nominating Committee, etc. in 2019, and have since been working to strengthen management oversight functions and transparency. From June 2022, a female Outside Director has been appointed as the chairperson of the Board of Directors, which oversees the executive organization. At ESG meetings, the heads of the executive and supervisory sides present explanations of the Company's efforts from their respective positions. In such ways, we engage in active dialogue with our stakeholders.

### Aiming to enhance added value to contribute to society

I always say that “a company is its people.” For NTN to continue contributing to society, it is essential that our employees create added value. This cannot be achieved through the efforts of individuals, no matter how talented the individual is, and it is necessary to organize a team and produce results from within the team. Rejuvenating the management team is also an important issue. For that reason, we are implementing the NTN Next Leader Program (NNLP). This is an educational program for young

key managers, and it is aimed at expanding the base of candidates for the next generation of managers. We place special importance on the experience of tackling global issues through one's own efforts. It is best if that experience is a successful one, but experiences of failure also provide valuable lessons for the next one. Above all, we believe that the mission of the management team is to increase opportunities for employees to take on challenges.

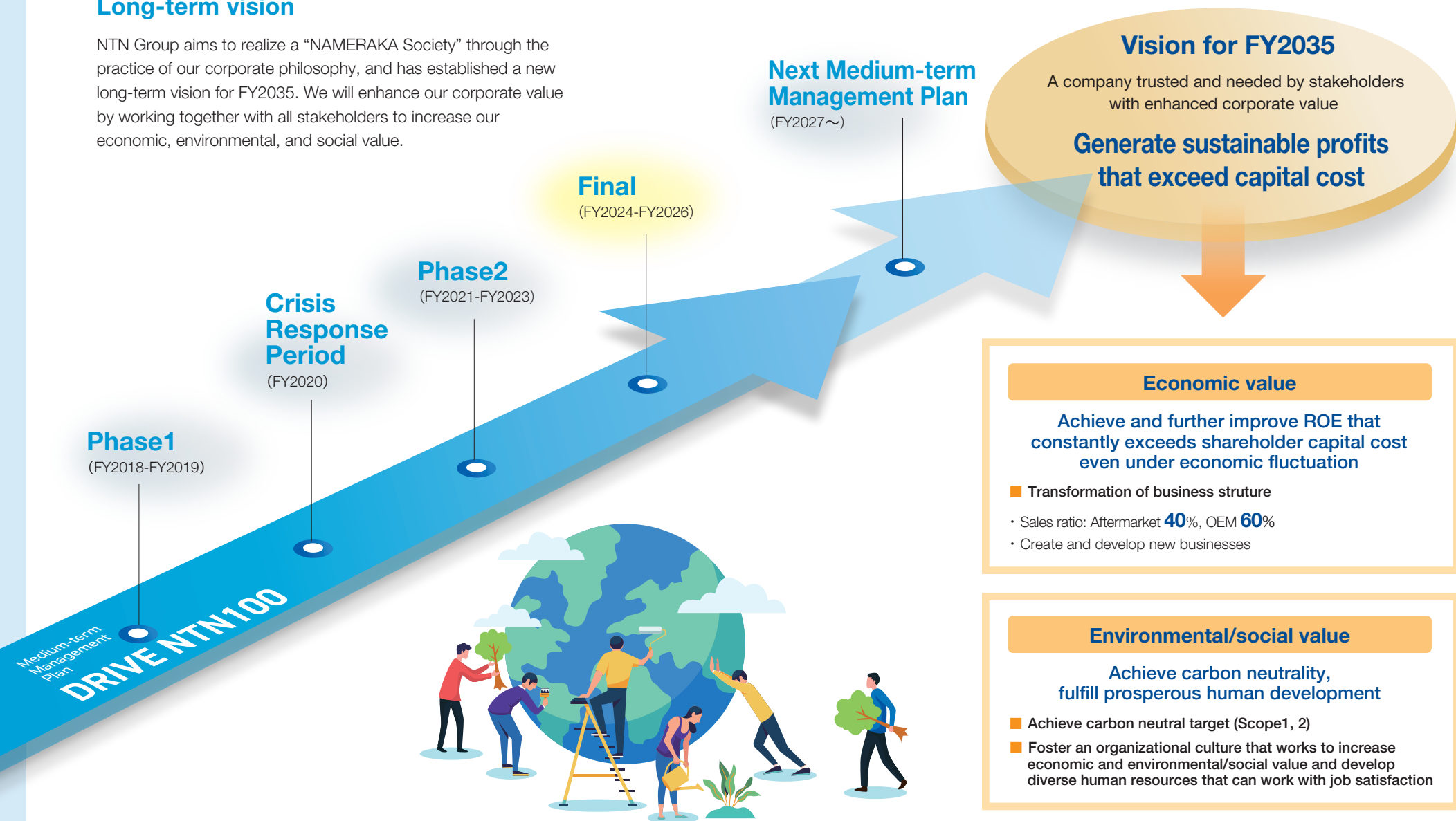
Thorough effort is made to reform the behavior of NTN Group employees, keeping in mind SQCCD, which is Safety, Quality, Compliance, Cost & Cash, and Delivery & Development. In addition, I also widely communicate my view that work is a stage, and that if both executives and employees perform their roles as actors in a positive manner, the stage will be revitalized and they will be appraised positively by stakeholders. In management, we are always conscious of capital costs and stock prices. While ROE is expected to decline in the first two years of the structural reform under our new Medium-term Management Plan “DRIVE NTN100” Final, we aim to achieve 8% by the final year and 10% as soon as possible by the time of the next Medium-term Management Plan. By sharing, within the Group, the mindset necessary to achieve continued improvements in corporate value, we aim to create economic value alongside environmental and social value, and grow as a global company that contributes to society.



# New Medium-term Management Plan (FY2024 to FY2026)

## Long-term vision

NTN Group aims to realize a “NAMERAKA Society” through the practice of our corporate philosophy, and has established a new long-term vision for FY2035. We will enhance our corporate value by working together with all stakeholders to increase our economic, environmental, and social value.



# New Medium-term Management Plan (FY2024 to FY2026)

## Review of “DRIVE NTN100” Phase 2 and positioning of new Medium-term Management Plan “DRIVE NTN100” Final

We have formulated our new three-year Medium-term Management Plan “DRIVE NTN100” Final, by back casting from our long-term vision for 2035 while at the same time forecasting by looking back on our progress to date. This new Medium-term Management Plan has been titled “DRIVE NTN100” Final to reflect our strong resolve to complete the revitalization of NTN, which was not achieved in Phase 2.

### “DRIVE NTN100” Basic Policy

#### Drive Forward Reform of Business Structure Toward a New Century

- D**igitalization (latest digital technology) x **R**esources (Management resources that NTN has developed)
- I**nnovation (development of innovative technologies, products and services)
- V**ariable cost reform (procurement reform)
- E**fficiency improvement (achievement of world-leading productivity and quality / improvement of asset efficiency)

### Next Medium-term Management Plan

(FY2027~)

#### Early achievement of 10% or higher ROE

New products sales ratio for bearing and others and CVJ/Axle:20%

### Vision for FY2035

- Achieve and improve ROE above shareholder's equity cost
- Aftermarket ratio 40%
- Achieve carbon neutrality
- Foster employee well-being

### Crisis Response Period

(FY2020)

- Ensure the health and safety of employees
- Secure business funds and ensure business continuity
- Prepare for future growth

### Phase1

(FY2018-FY2019)

- Improve profitability and investment efficiency of existing products and businesses
- Develop and commercialize new products and businesses
- Establish management system to facilitate reform of business structure

### Final

(FY2024-FY2026)

#### Achieve ROE8%

Continue enforcing the basic policy of “DRIVE NTN100” and accomplish “revitalization of NTN” by promoting structural reform and improving earning power

### Forecasting

### Phase2

(FY2021-FY2023)

- Improve profitability and investment efficiency of existing products and businesses
- Select new businesses and review the allocation of management resources
- Strengthen corporate governance

**DRIVE NTN100 Final**

### Backcasting

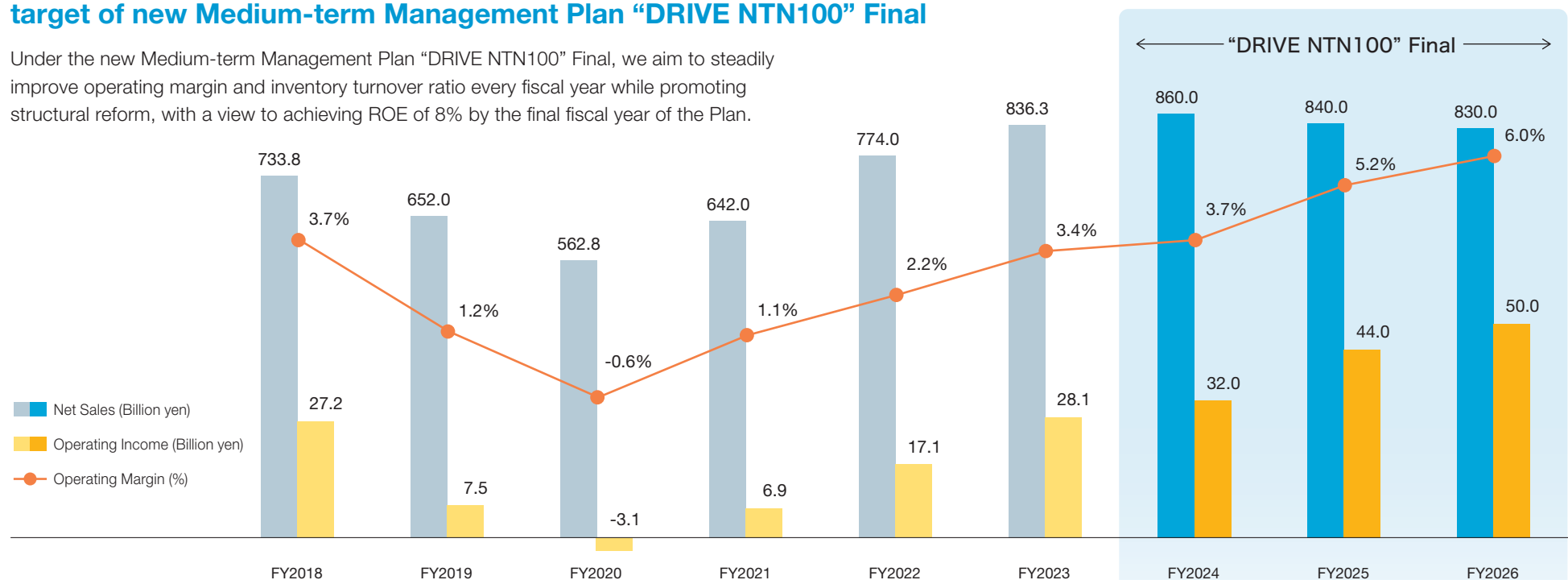
	FY2020 Results	DRIVE NTN100 Phase 2 ①	FY2023 Results ②	② - ①
Net Sales	562.8 billion	700.0 billion or more	836.3 billion	136.3 billion
Operating Income	-3.1 billion	42.0 billion or more	28.1 billion	-13.9 billion
Operating Margin	-0.6%	6% or more	3.4%	-2.6pt
FCF	18.5 billion	27.0 billion or more	40.1 billion	13.1 billion
Inventory Turnover Ratio	3.2	4.1	3.2	-0.9
Equity to Capital Ratio	20.4%	20% or more	29.0%	+9.0pt
Net D/E Ratio	1.6	1.5 or less	0.9	-0.6
ROIC	-0.4%	5% or more	3.2%	-1.8pt
ROE	-7.1%	8% or more	4.4%	-3.6pt

We have achieved the target for Improvement of financial structure. Our issue is to strengthen earning power (= to improve operating margin and reduce inventories).

## New Medium-term Management Plan (FY2024 to FY2026)

### Past management indicators and target of new Medium-term Management Plan “DRIVE NTN100” Final

Under the new Medium-term Management Plan “DRIVE NTN100” Final, we aim to steadily improve operating margin and inventory turnover ratio every fiscal year while promoting structural reform, with a view to achieving ROE of 8% by the final fiscal year of the Plan.



	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
Inventory turnover ratio (times)	3.8	3.6	3.2	3.0	3.2	3.2	3.6	4.0	4.5
Net D/E Ratio	1.2	1.9	1.6	1.4	1.2	0.9	0.9	0.8	0.7
Equity to Capital Ratio	27.4%	20.6%	20.4%	23.1%	25.4%	29.0%	27.9%	29.5%	30.0%
ROE	-2.9%	-22.8%	-7.1%	4.0%	5.0%	4.4%	2.1%	3.7%	8.0%
ROIC	3.3%	1.0%	-0.4%	0.8%	2.0%	3.2%	3.9%	5.4%	6.0%
USD (yen)	110.9	108.7	106.0	112.3	135.5	144.5	145.0	140.0	140.0
EURO (yen)	128.4	120.8	123.7	130.5	140.9	156.7	160.0	150.0	150.0

\* “Royalty” which was previously included in “non-operating income,” has been changed to be included in “net sales” effective from FY2020.

# New Medium-term Management Plan (FY2024 to FY2026)

## Key measures of new Medium-term Management Plan “DRIVE NTN100” Final

Under the new Medium-term Management Plan, DRIVE NTN100” Final, we will promote the transformation of our business structure, and with the mindset of tackling this challenge, instill firmly the “SQCCD” approach to work and the principle of “NTN Driven based on the premise of customer-first” as we work as one to promote reforms.

### Vision for FY2035

**DRIVE NTN100** *Final*

#### Transformation of business structure

**Expand aftermarket business**

**Improve competitiveness of OEM business**

**Create and develop new businesses**

📖 P.31 Strengthening the Business Model

#### Strategies to support transformation

##### Value chain reform

- Design reform, prompt commercialization
- Procurement reform, production reform, logistic reform
- Defensive quality, proactive quality and profitable quality

📖 P.43 Value Chain Reform

##### Transformation of business foundation

- Strengthen portfolio with new organizational structure
- Promote measures and strengthen follow-up using KPIs
- Generate profits by utilizing digital technology

📖 P.44 Transformation of Business Foundation

##### Evolution of ESG management

- Response toward achieving carbon neutrality and sustainability
- Human resource development and work styles that respect diversity
- Enhance governance and strengthen risk management

📖 P.45 Human Resources Strategy  
 P.51 CO-CREATION WITH STAKEHOLDERS  
 P.63 CREATION OF A SOLID GOVERNANCE STRUCTURE

#### SQCCD

Safety Quality Compliance Cost & Cash Delivery & Development

#### NTN Driven based on the premise of customer-first

The mindset to challenge the transformation of business structure

# Promises from the Management

Introducing what our Executive Officers want to achieve in the Medium-term Management Plan “DRIVE NTN 100” Final.



Executive Officer **Hideaki Miyazawa**

Reforms are sometimes accompanied by pain. We will tackle the challenge of bold reforms without fear of pain.



Executive Officer **Hiroyuki Ichikawa**

In addition to product quality, we aim to improve overall quality in all our work processes to achieve our new Medium-term Management Plan.



Executive Officer **Masayuki Kaimi**

We will walk the talk, complete the production, procurement, and logistical reforms as well as reorganization of production, and strengthen NTN's competitiveness.



Executive Officer **Yasuhiro Kawabata**

We aim to be a corporate group in which diverse employees can “grow” and “work enthusiastically” through our business activities.



Executive Officer **Shumpei Kinoshita**

If all our employees unite and join forces across different generations toward our long-term goals, we will surely be able to achieve them.

## Promises from the Management



Executive Officer **Koji Takahashi**

Realizing a “NAMERAKA Society” by utilizing new digital technologies and working efficiently on two-way communication.



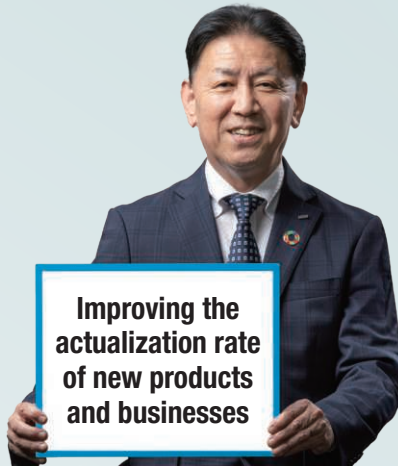
Executive Officer **Ikuya Tateoka**

By advancing structural reform in the purchasing, manufacturing, and sales fields, we aim to be the top supplier in the axle/drivetrain sector.



Executive Officer **Masayuki Tanio**

We will revitalize the new organization through new ideas and proactive action, and realize a profitable business through the integration of OEM and aftermarket operation.



Executive Officer **Yoshiyasu Nakano**

We will work to gain first-mover advantage by creating new businesses, leading to further growth of the company.



Executive Officer **Etsu Harima**

We will steadily improve our earning power and enhance asset efficiency, then achieve transformation of business structure with strong determination!

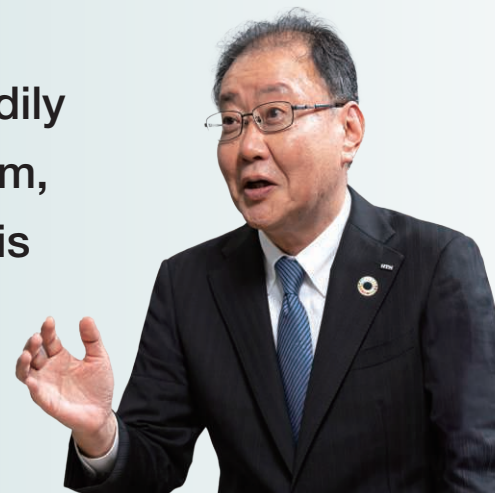


Executive Officer **Masaaki Yamamoto**

We will achieve structural reform with the strong will of “not passing on a negative legacy to the next generation,” and ensure that this intent is also handed down to the next generation.

# Message from the CFO

Enhancing our cash flow generation capability by steadily promoting various measures, including structural reform, with the aim of establishing a corporate structure that is resilient to changes in the business environment.



Executive Officer, CFO (Chief Executive Officer) **Masaaki Yamamoto**

## Reflecting on the Medium-term Management Plan “DRIVE NTN100” Phase 2

In April 2021, the NTN Group launched our Medium-term Management Plan “DRIVE NTN100” Phase 2 based on the basic policy “Drive Forward Transformation of Business Structure for the new 100 years,” with a view to improving the profitability of existing businesses and strengthening our financial position, which had deteriorated with the downturn of the management environment due to trade friction between the U.S. and China, outbreak of the COVID-19 pandemic, and other factors. However, the business environment has undergone dramatic changes such as the situation in Ukraine and the Middle East, supply chain disruptions, a slowdown of the Chinese economy, and soaring labor costs as well as raw material and energy prices worldwide, so it has also been a hectic three years spent on addressing these issues. Particularly in the automotive business, which accounts for about 70% of NTN’s sales, delays in the recovery of automotive production due to the protracted semiconductor supply shortage, as well as an increase in expenses associated with rising inflation that had to be followed by passing these increases on to sales prices, had a significant impact on the NTN Group’s results. Despite these circumstances, we achieved steady recovery of our business performance every fiscal year, and by selling idle assets and thoroughly managing finances within the Group, we achieved our Medium-term Management Plan targets in the areas of free cash flow, equity to capital ratio, and net D/E ratio. On the other hand, we were unable to achieve our initial targets set for management indicators such as operating income, inventory turnover ratio, and ROE.

## Targets and results of the previous Medium-term Management Plan

	FY2020 Results	DRIVE NTN100 Phase 2 ①	FY2023 Results②	② - ①
Net sales	562.8 billion	<b>700.0 billion or more</b>	<b>836.3 billion</b>	<b>136.3 billion</b>
Operating income	-3.1 billion	<b>42.0 billion or more</b>	<b>281 billion</b>	<b>-13.9 billion</b>
Operating margin	-0.6%	<b>6% or more</b>	<b>3.4%</b>	<b>-2.6pt</b>
FCF	18.5 billion	<b>27.0 billion or more</b>	<b>40.1 billion</b>	<b>13.1 billion</b>
Inventory turnover ratio	3.2	<b>4.1</b>	<b>3.2</b>	<b>-0.9</b>
Equity to capital ratio	20.4%	<b>20% or more</b>	<b>29.0%</b>	<b>+9.0pt</b>
Net D/E ratio	1.6	<b>1.5 or less</b>	<b>0.9</b>	<b>-0.6</b>
ROIC	-0.4%	<b>5% or more</b>	<b>3.2%</b>	<b>-1.8pt</b>
ROE	-7.1%	<b>8% or more</b>	<b>4.4%</b>	<b>-3.6pt</b>

# Message from the CFO

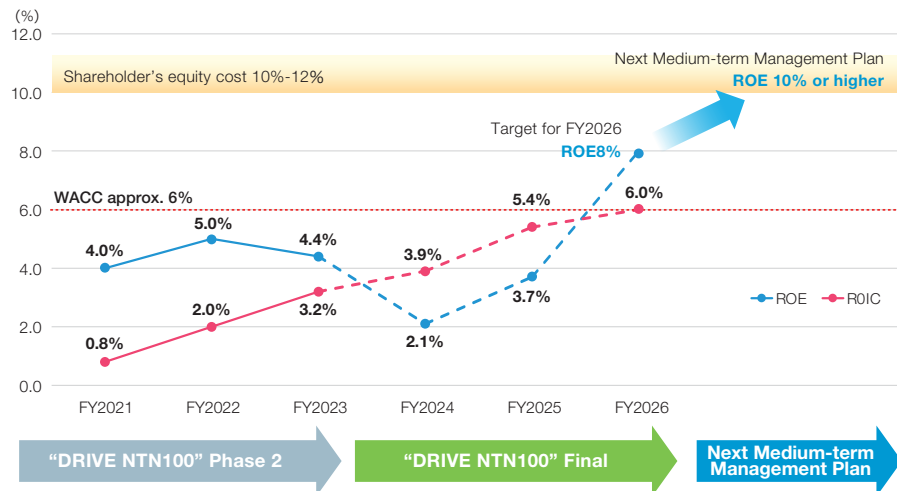
## New Medium-term Management Plan “DRIVE NTN100” Final

### Current status of capital costs, ROE, and ROIC, and future targets

Using calculations based on CAPM and interviews with the relevant parties in the capital markets, we expect shareholder capital cost to be about 10% to 12%, and WACC to be about 6%. We did not achieve our ROE and ROIC targets in the previous Medium-term Management Plan and failed to demonstrate profitability that exceeds cost of capital. As a result, our current stock price levels are sluggish and PBR remains below 1.

The greatest challenge facing the NTN Group is establishing a corporate structure that is not impacted by changes in the business environment. To that end, it is vital for us to improve our earning power (operating profit and inventory turnover ratio). In the new Medium-term Management Plan, as we reflect on the failure to achieve our targets in the previous Plan, we aim to deepen ROIC management by business segment, while at the same time advance structural reform in the first two years with a view to creating a corporate structure that is resilient to changes in the business environment. We aim to steadily improve ROIC every fiscal year to achieve 6% by FY2026. As for ROE, while it is expected to fall in the first two years as we undertake structural reform, we aim to achieve 8% by the final fiscal year of the Plan as the completion of structural reform comes into sight, and to reach 10% in the early stages of the next Medium-term Management Plan starting from FY2027.

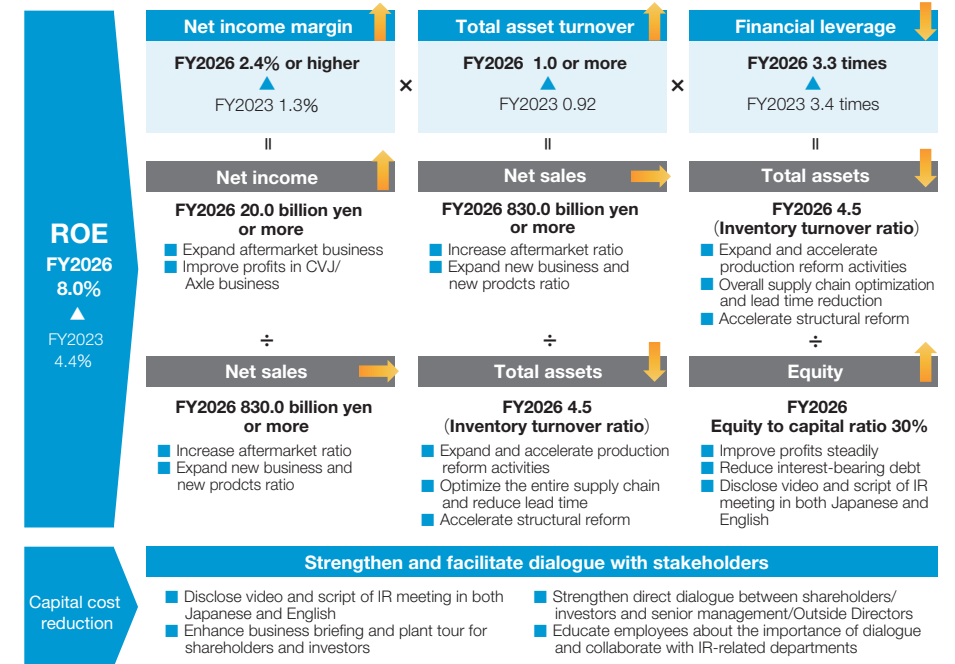
### Cost of Capital and ROE: Current Status and Future Targets



We believe that one of the reasons behind the failure to achieve our ROE and ROIC targets in the previous Medium-term Management Plan was the weak link between measures that contribute to improving ROIC and ROE, and concrete activities to that end, as well as inadequacy in the follow-up systems. Reflecting on this, we plan to steadily advance measures in the following processes: (1) Classify measures by ROE elements; (2) Set and share specific targets for each measure; (3) Incorporate target values into the activities of each department; (4) Regularly report and follow-up on activity promotion status. We will steadily advance each measure with the understanding from members of every department that their activities on a day-to-day basis will ultimately contribute to improving the company's ROE and ROIC.

In addition to creating opportunities for IR briefings and plant tours, we will also engage in dialogues with shareholders, investors, and all stakeholders, and strive to reduce cost of capital with their understanding toward NTN's activities.

### For improvement of ROE



# Message from the CFO

## Cash allocation

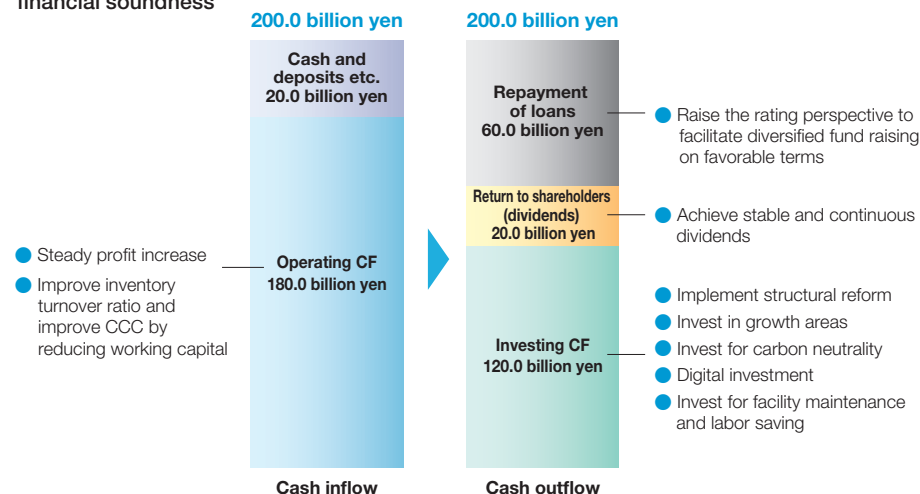
In the previous Medium-term Management Plan, we prioritized improving our financial structure and controlled investment. However, under the new Medium-term Management Plan, we plan to carry out investments that can lead to business growth, within the range of three years of depreciation, while keeping in mind the balance with the soundness of the financial structure. Our aim is to improve the NTN Group's economic value as well as environmental and social values through investments in structural reform, growth domains, carbon neutrality, and the digital field, alongside investments to save labor.

With regard to shareholder returns, based on a policy of providing stable and continuous dividends, we have established a minimum DOE of 2.5% as the guideline for the period of the new Medium-term Management Plan, and a target DOE of 4% after achieving the targets set out in the new Plan.

Our plans for cash allocation over the three years of the new Medium-term Management Plan are a total cash inflow of 200 billion yen, comprising 180 billion yen in operating CF and 20 billion yen of reduction in cash and deposits, and total cash outflow of 200 billion yen comprising a reduction of 60 billion yen in interest-bearing debt, 120 billion yen in investments, and 20 billion yen in shareholder returns (dividends).

### Cash allocation (3 years)

Aim to increase corporate value by achieving both business growth and improved financial soundness



## Outlook for FY2024

### Key points

In the business environment for FY2024, which is the first fiscal year of the new Medium-term Management Plan, we expect demand for automotives to remain relatively flat compared to the previous fiscal year, and demand for industrial machinery to recover gradually from the second half of the fiscal year. In the cost aspects, we believe that inflationary pressures will ease in comparison to the previous fiscal year, while the impact of rising shipping charges and wage increases, including our suppliers, are expected to continue. While keeping up efforts to pass on inflationary costs to sales price, we will also steadily promote a reduction in variable costs, including procurement reforms.

We will also advance structural reforms in the Europe region, where business performance remains unsatisfactory, and in the China region, where Japanese automotive manufacturers that are the main customers of NTN continue to face sluggish conditions. We factored 8 billion yen in structural reform expenditures, etc. into extraordinary loss, and forecast the following results for FY2024: net sales of 860 billion yen (up 2.8% year on year), operating income of 32 billion yen (up 13.7% year on year), ordinary income of 22 billion yen (up 10.0% year on year); extraordinary loss of 8 billion yen; and, profit attributable to owners of parent of 5 billion yen (down 52.7% year on year). We expect dividends to be 11 yen per share for the year (5.5 yen per share for both interim and year-end dividends).

### Sales will increase slightly in volume Promote profit improvement by improving selling price and cost reduction

- Automotive production will be the same level as previous year and demand recovery in industrial machinery market is expected from 2H of FY2024
- Continue to promote improving selling price for unprofitable business and inflation cost
- Increase capital expenditure within the scope of depreciation compared to previous fiscal year or before

billion yen	FY2023			FY2024		
	1H Results	2H Results	Full year Results①	Forecast②	YoY ①vs②	
Net sales	409.6	426.6	836.3	860.0	+237(2.8%) Excl. forex+237(+2.8%)	
Operating income	6.8	21.4	28.1	32.0	+3.9	
Operating margin	1.7%	5.0%	3.4%	3.7%	+0.3pt	
Ordinary income	4.9	15.1	20.0	22.0	+2.0	
Extraordinary income (loss)	(0.4)	(3.1)	(3.4)	(8.0)	(4.6)	
Profit (loss) attributable to owners of parent	4.1	6.5	10.6	5.0	(5.6)	
Exchange rate	1USD	¥140.8	¥148.1	¥144.5	¥145.0	+¥0.5
	1EURO	¥153.3	¥160.1	¥156.7	¥160.0	+¥3.3
Inventories	256.1	264.8	264.8	242.0	(22.8)	
Capital expenditures	10.5	16.1	26.6	37.0	+10.4	
FCF	24.2	16.0	40.1	24.0	(16.1)	

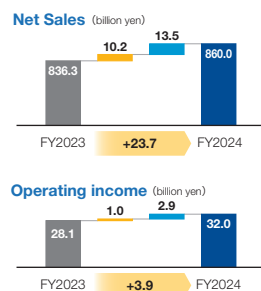
## Message from the CFO

Regarding the profit and loss forecast by business segment, net sales for bearing and others is expected to increase by 10.2 billion yen year on year to 357 billion yen, taking into account the expansion of the aftermarket business and price increases for unprofitable businesses, among other factors. Operating income from bearing and others is expected to increase by 1.0 billion yen year on year to 18.7 billion yen, due to promoting improvement of sales price, despite decline in production resulting from inventory reduction mainly in industrial machinery, and the increase in equipment maintenance and other expenditures.

As for CVJ/Axle bearings, with automotive production anticipated to remain flat compared to last year, particularly in the Americas where recovery in production associated with the resolution of the semiconductor shortage is expected to slow. However, taking into account the launch of new mass production projects and projects to increase production, and price increases in unprofitable businesses, net sales are expected to increase year on year by 13.5 billion yen to 503 billion yen. Operating income is expected to increase by 2.9 billion yen year on year to 13.3 billion yen, taking into account scale effects and reduction in variable costs.

### Sales and operating income will increase in both Bearing and others and CVJ/Axle

(billion yen)	FY2023		FY2024		YoY
	Full year Results		Full year forecast		
Net sales	Bearing and others	346.8 41.5%	<b>357.0</b> 41.5%	<b>+10.2</b>	
	CVJ and Axle	489.5 58.5%	<b>503.0</b> 58.5%	<b>+13.5</b>	
	Total	836.3 100.0%	<b>860.0</b> 100.0%	<b>+23.7</b>	
Operating income (Operating margin)	Bearing and others	17.7 5.1%	<b>18.7</b> 5.2%	<b>+1.0</b>	
	CVJ and Axle	10.4 2.1%	<b>13.3</b> 2.7%	<b>+2.9</b>	
	Total	28.1 3.4%	<b>32.0</b> 3.7%	<b>+3.9</b>	



\*Figures after the announcement of the financial results for Q1 FY2024

## Profit analysis (year on year)

### Breakdown of factors contributing to an increase in profits (15.4 billion yen)

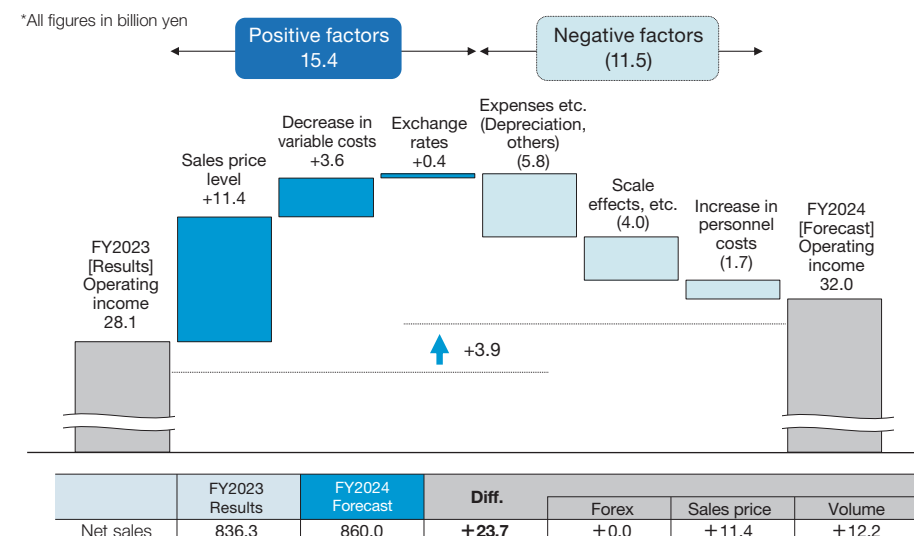
Sales price level is planned to be 11.4 billion yen in total, including price increases for unprofitable products and the passing on of inflationary costs to customers. Variable costs are projected to be 3.6 billion yen, comprising cost reduction of 10 billion yen against a cost increase of 6.4 billion yen. With the addition of the impact of exchange rates of 0.4 billion yen, these factors are expected to add 15.4 billion yen to profits.

### Breakdown of factors contributing to a decrease in profits (11.5 billion yen)

With regard to scale effects etc., while sales will increase on a volume basis, a decline in production and decline in the evaluation of inventory are expected to result in a 4 billion yen decrease in profits.

With regard to fixed costs, we plan to increase personnel costs by 1.7 billion yen, mainly due to the anticipated impact of an increase in base salaries in Japan. Expenses, etc. are projected to increase by 5.8 billion yen, primarily because of an increase in shipping charges in Japan and an increase in equipment maintenance costs. The combined effect of a decline in sales effects, etc. and increases in personnel costs and other expenditures is expected to result in a decrease in profits of 11.5 billion yen.

### Analysis of Operating Income (FY2023 Results vs FY2024 Forecast)



FY2024 marks the first fiscal year of the new Medium-term Management Plan, and we will steadily work on structural reform including reorganization of production, profitability improvement measures, and asset efficiency improvement to enhance corporate value. I ask for the continued support, guidance, and encouragement of our shareholders, investors, and all stakeholders.

# The History of Our Challenges and Development

Since the company's inception, NTN has been committed to the "Quality First" principle, and has built up trust and a track record of achievements through our high technological prowess. Going forward, NTN will continue to contribute to the international society by creating new technologies and developing new products in our aim to realize a "NAMERAKA Society."

## History of NTN

### 1918

**"Frontier Spirit" and "Coexistence and Co-prosperity Spirit" handed down since the company's founding**

**Start of the research and production of ball bearings at Nishizono Ironworks in Uchibori, Kuwana-cho, Kuwana-gun in Mie Prefecture**

Since our founding in 1918, NTN has consistently valued our founding spirit—the "Frontier Spirit" of continually challenging ourselves, and the "Coexistence and Co-prosperity Spirit" of developing alongside society. Such founding spirit is embedded in the corporate philosophy as NTN's DNA, and we have continued to inherit and pass it on more than 100 years later.

In 1918, Jiro Nishizono, a 21-year-old young engineer, founded Nishizono Ironworks in Kuwana, Mie Prefecture. Separately, Noboru Niwa, who later became the Company's first president, started his own business at the age of 22, running a machine tool business in Osaka called Tomoe Trading Co.

In 1922, Tomoe Trading Co. purchased the entire cargo of bearings from a Swedish ship that had sunk in Japan, and asked Nishizono Ironworks, with whom it conducted business dealings, to refurbish the bearings. With the profits gained from the sale of these bearings, new grinding machines were purchased, enabling the full-scale launch of bearing production. Since the start of production, the bearings had been marked with "NTN," the initials for Niwa, Tomoe, and Nishizono.



Noboru Niwa Jiro Nishizono



Bearing at the time when the business first started

### 1927

**Established NTN Mfg. Co., Ltd. with capital of 50,000 yen**

### 1937

**Company name changed to Toyo Bearing Mfg. Co., Ltd.**



Old head office building

### 1954

**First in the Japanese machinery industry to receive the Deming Prize\***

The Deming Prize is the world's most prestigious award for Total Quality Management (TQM), and NTN was the first company to receive this award in the bearing industry as well as the Japanese machinery industry. The Company was recognized for being the first in the machinery industry to introduce statistical quality control, and for its efforts in promoting company-wide quality control.



\*Deming Prize: Established by the Union of Japanese Scientists and Engineers to commemorate the achievements of Dr. Deming (the United States) who popularized statistical quality control in postwar Japan and laid the foundation for raising the quality of Japanese products to world-class standards.

1900

1910

1920

1930

1940

1950

1960

## History of Products and Services

### 1963

**Started production of driveshafts**

We formed a technical tie-up with British company, Hardy Spicer Co., Ltd., and began production of driveshafts (constant velocity joints) at Kuwana Works. This was a promising product, with demand for its use in automobiles expected to increase rapidly in the future.



Driveshaft at the start of production

### 1964

**Delivered journal bearings for the first 0 Series Shinkansen**

We have contributed to increasing the speed while reducing the weight of rolling stock by developing technologies in line with the evolution of high-speed rail and providing high-quality and highly reliable products.

Our products have been used from the first-generation 0 Series Shinkansen to the latest generation of Shinkansen trains. The journal bearings for the 0 Series Shinkansen have also been recognized as a Tribology Heritage\* by the Japanese Society of Tribologists.



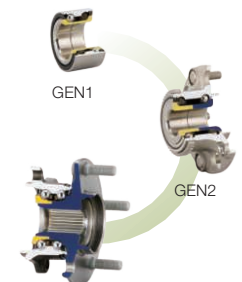
\*Tribology Heritage: Refers to tribology-related technologies and objects recognized by the Japanese Society of Tribologists as having made particularly important contributions to the development of science and technology.

### Late 1970s

**Evolution of hub bearings**

The axle bearing (GEN1), which is the predecessor of the hub bearing that NTN holds a leading global share for, was commercialized in the late 1970s. In the 1980s, GEN1 evolved to become a hub bearing (GEN2) with a knuckle and other peripheral parts integrated as a unit. It evolved further into GEN3, which integrated all the hub bolts, flange, and knuckle for easier assembly on vehicle assembly lines, and mass production of GEN3 first started in Japan around the mid-1980s.

Even today, bearing development continues to evolve, such as combination with various sensors and further improvements in ease of assembly.



GEN3

## 1960s to 1970s

### Strengthened and expanded overseas sales and local production

After 1950, there was growing momentum for the expansion of bearing exports. In 1961, we established our first overseas sales company in Düsseldorf, Germany, to create a system that can respond flexibly to local demand. On the manufacturing side, we became the first Japanese company to establish a manufacturing company in Europe (in Germany). We also established a bearing manufacturing subsidiary in the United States in the same year. Subsequently, we strengthened the local production system by establishing not only factories for finished products, but also factories for pre-production processes. Through these overseas expansion efforts, we successfully made the shift to local production, producing our products where customers around the world need them.



Mettmann Plant, Germany

## 2018

### 100th anniversary of the Company's founding

We celebrated the 100th anniversary of our founding on March 1, 2018, and on this occasion, launched the catchphrase, "Make the world NAMERAKA (smooth), NTN."

## 2023

### Toward enhancing recognition of the NTN Group in Europe

The company name, NTN-SNR ROULEMENTS S.A., was changed to NTN Europe S.A.

### Relocation of head office

The head office was relocated to Daibiru-Honkan to secure business continuity as well as the safety and security of employees in the event of a natural disaster.

## 1989

### Company name changed to NTN Corporation

In conjunction with the change of our company name, we attached new meaning to the acronym "NTN" to represent "For New Technology Network," setting it as our guiding principle toward a new future.

## 2008

### Acquired SNR ROULEMENTS as a subsidiary of NTN

To expand our business in the European market, we invested in the French company, SNR ROULEMENTS, in 2007, and acquired it as a subsidiary of NTN the following year.

## 2020

### Established "Make the world NAMERAKA" as our brand statement

We established a brand statement to communicate our commitment to realizing a sustainable "NAMERAKA Society" in a consistent manner globally.



1970

1980

1990

2000

2010

2020

## 1986

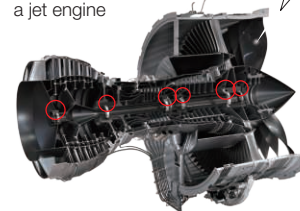
### Constructed Japan's first plant specializing in aerospace bearings

We have been producing highly functional and high-quality bearings for aerospace applications, and we are currently the only company in Japan that has been certified as a supplier of main shaft bearings by the four major jet engine manufacturers in the world.

Bearings for jet engine main shafts



Cross-sectional view of a jet engine



## From 2000 onward

### Technical service units driving around the world

At sales sites around the world, we visit customers in our fully customized, multifunctional technical service units equipped with product samples and maintenance tools, and offer technical diagnosis and technical training sessions to provide attentive support for resolving problems faced by customers. Even after delivering our products, we use our technical service units to continue supporting customers in aspects such as improving the productivity and ensuring the safe operation of their facilities. Above all, we work to resolve problems in our society by talking directly to customers around the world to identify the problems they are facing.

## 2014

### Provided bearings for the Asteroid Explorer "Hayabusa 2"

The H-IIA Launch Vehicle No. 26 mounted with the Asteroid Explorer "Hayabusa 2" and other spacecraft was launched from the Tanegashima Space Center. Our spherical plain bearings have been installed in the hinge section where Hayabusa 2 opens its solar panels in space. In this way, we contribute to the accomplishment of Hayabusa 2's mission in space.



Spherical plain bearing used in Hayabusa 2



# Fostering NTN's strengths



**Original technologies**



**Quality**



**Services**

# NTN's Three Strengths (Core Competencies)



## Original technologies

### Tribology technology

- Our strength lies in tribology technology, which we have developed through more than 100 years of research and development on bearings, as well as manufacturing technologies such as heat treatment, precision machining, and precision measurement, all of which are indispensable in the production of bearings.
- Using a wide range of materials such as resin, sintered metals, and magnetic materials, alongside sophisticated technologies such as fluid dynamic pressure technology, we develop not only rolling bearings but also sliding bearings, electrical and mechanical parts, and unit/module products combining these, which are then sold as composite material products.

### Sensing technology

- We develop and supply Multi Track Magnetic Rings and products equipped with high-resolution rotation sensors, which have been developed as an extension of NTN Europe's world-standard Active Sensor Bearing (ASB).
- We have developed monitoring services for large wind power generation devices using the Condition Monitoring System (CMS), and by providing extensive support, achieved the top market share in Japan with over 200 units installed.



## Quality

### Product quality

- We have developed a quality control system that was awarded the Deming Prize, a first among Japanese machinery manufacturers, and our high reliability is backed by a long track record of supplying products for applications that support human life, such as Shinkansen bullet trains and aerospace applications.
- We have achieved world-leading market shares for power/drivetrain products that support safe driving.

### Personnel and work quality

- We nurture human resources to pass on know-how, through events such as the Global QC Circle Convention, the NTN Technical Skills Competition, and the TQM Competition.
- We present the NTN PROUD AWARD to encourage employees to take up ESG activities.
- Through reskilling and improving AI and data literacy, we develop human resources who can contribute to resolving business issues.



## Services

### Global network

- We provide products and services to customers from around 200 locations in 34 countries worldwide.
- We fulfill local market needs in every region through our research and development system in four vantage points across the world.
- We resolve every problem faced by our customers through our technical service cars and online technology seminars.

### Problem-solving customer support capabilities

- We have the largest distributor network in Japan as well as the top domestic aftermarket share.
- We provide remote technical support services globally.
- We contribute to resolving all kinds of customer issues by providing attentive support (moving from products to solutions).

## Future direction



### Original technologies

#### Tribology technology

- Develop products that support low friction aimed at reducing electricity and fuel consumption, and high-speed rotation to meet growing needs for compact and lightweight products.

#### Sensing technology

- Respond to new market demands for CASE, such as autonomous driving and sharing.
- Develop and enhance the sophistication of AI algorithms to predict remaining useful life.
- Develop "Talking Bearing," which incorporates a sensor in the bearing to communicate any abnormalities to the user.



### Quality

#### Product quality

- Ensure stable supply of high-performance products.
- Advance quality control using IoT and AI, and roll out advancements to production divisions including suppliers.
- Secure quality of the NTN brand by introducing NTN's quality control systems to outsourced products in Japan and abroad.

#### Personnel and work quality

- Ensure that our corporate philosophy is understood by all employees around the world.
- Strengthen the development of human resources who can "think and act by themselves" toward the achievement of goals.



### Services

#### Global network

- Develop systems to promote sales in potential growth markets in the Middle East and Africa regions.
- Enhance the customer support system by utilizing virtual tools.

#### Problem-solving customer support capabilities

- Enhance the NTN brand by availability with solutions.
- Provide advanced preventative maintenance services by utilizing big data.
- Expand diagnostic report services enabled by data analytics.

## Expanding strengths across each business

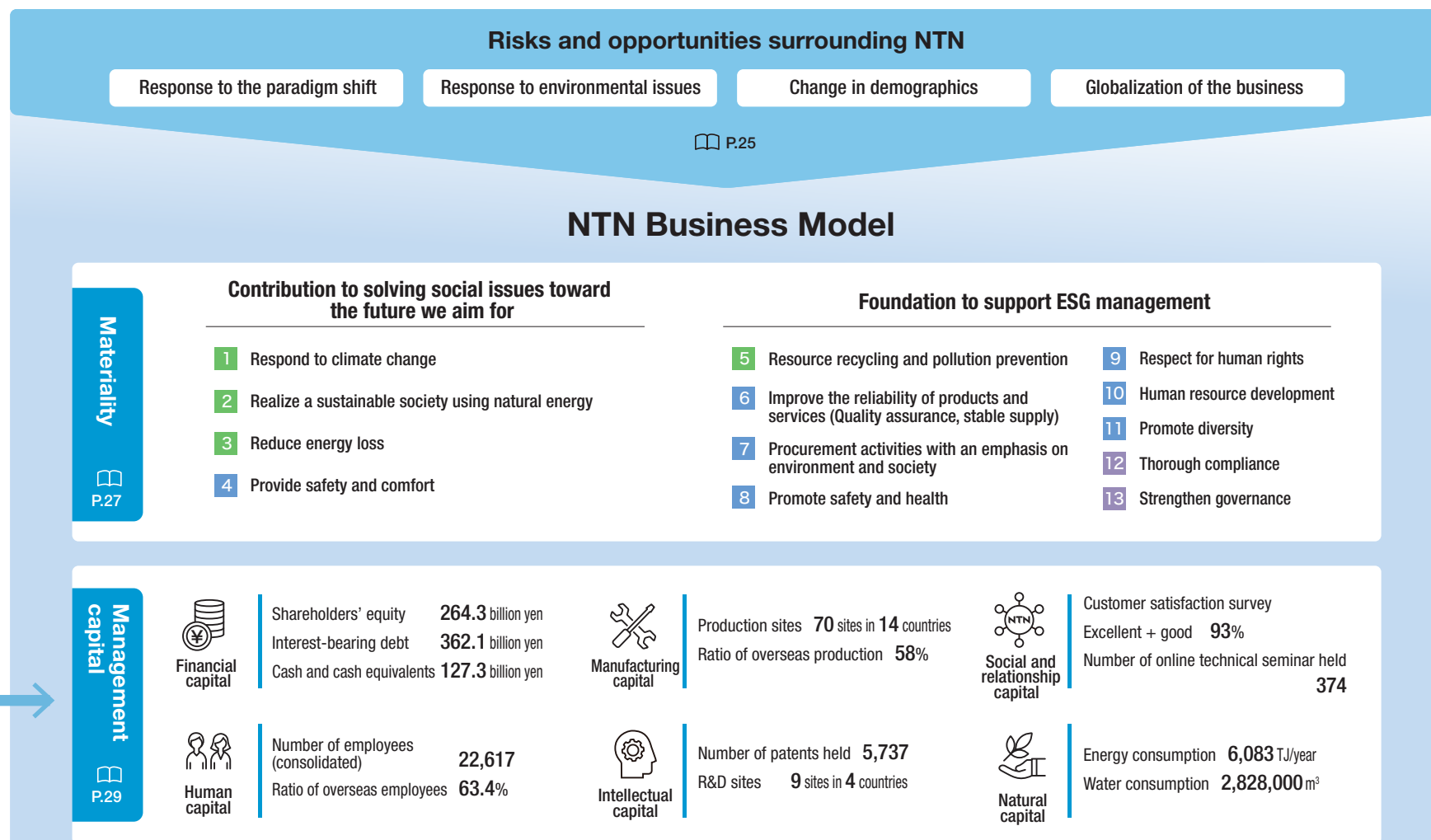
Bearing and others P.31

CVJ and Axle bearings P.35

# Value Creation Process

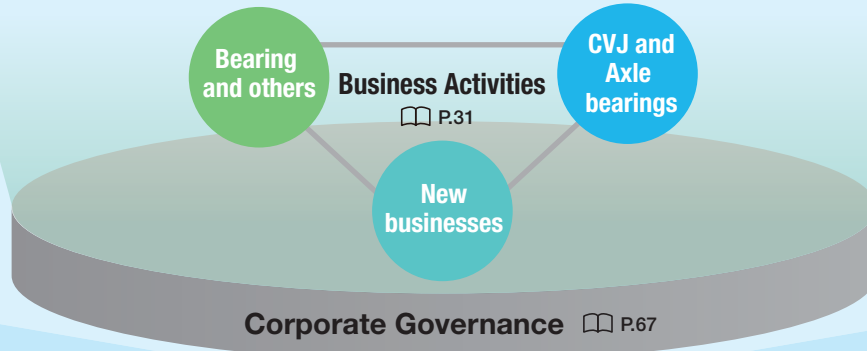
The NTN Group has identified materiality for addressing SDGs in order to solve social issues, and is conducting its business activities based on its corporate philosophy, utilizing the management capital and NTN characteristics that have been cultivated over our more than 100 years of history.

By providing products and technical services such as bearings and driveshafts and by creating environmental and social value, we aim to realize a “NAMERAKA Society” where people can easily lead a secure and fulfilling life in harmony with nature. Going forward, we will continue to promote ESG management to achieve sustainable growth and to contribute to solving social issues.



### NTN's Three Strengths P.21

### Creating Value in Each Process P.30



Strengthening management capital

Contributing to solving social issues

#### Outputs

- Environment-contributing products S-B-eco 55.7%
- Hub bearings
- Driveshafts
- High-performance products for EVs and electrification

- No.1 in Japan for the number of wind turbines monitored
- New products utilizing original technologies (i-WRIST, microscopic coating equipment, green energy products)

#### Performance targets (FY2026)

- Net sales: 830.0 billion yen
- Operating income: 50.0 billion yen
- Operating margin: 6.0%

#### Outcomes

### Make the world NAMERAKA

- Contribute to reducing CO<sub>2</sub> emissions by 1.613 million tons/year through environment-contributing products
- Contribute to the widespread adoption of next-generation mobility
- Contribute to the widespread adoption of wind power generation equipment
- Contribute to progress in labor-saving and to developments in regenerative medicine

# Realization of a NAMERAKA Society

# Risks, Opportunities, and Materiality

The Group analyzes risks and opportunities in each business environment (such as global trends on carbon neutrality, the accelerating shift to electrification to achieve carbon neutrality, labor shortages, and human rights issues, etc.), and then takes measures in line with materiality. In order to respond to the rapid changes in the external environment, we are regularly reviewing anticipated risks and opportunities.

NTN's Business Environment		Opportunities for the Company		Risks for the Company	
Response to paradigm shift	Spread of next-generation mobility	<ul style="list-style-type: none"> <li>Expansion of sales channels due to entry of new EV manufacturers into the market</li> <li>Expansion of sales opportunities for driveshafts and hub bearings that support not only gasoline-powered vehicles and HEVs, but also the axle/drivetrain of EVs</li> <li>Increase in average selling price (ASP) due to the increase in the size of driveshafts corresponding to the output characteristics of the motor</li> </ul>	<ul style="list-style-type: none"> <li>Proposals for compact and lightweight products that utilize patented technology for driveshafts</li> <li>Growth in demand for high-performance products for EVs</li> <li>Improvement in vehicle utilization rate due to progress in ride-sharing, and potential for increased demand for parts exchanges</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in the total number of bearings used per vehicle unit</li> <li>Demand for higher product performance, such as lightweight products</li> <li>Reorganization of the automotive industry</li> </ul>	
	Electrification of industrial machinery	<ul style="list-style-type: none"> <li>Demand for high-performance products, such as products with higher efficiency</li> <li>Increased demand for high value-added products such as sensor integrated bearings</li> </ul>		<ul style="list-style-type: none"> <li>Reduced use of bearings due to electrification of internal combustion and hydraulic equipment</li> </ul>	
	Spread of AI and IoT	<ul style="list-style-type: none"> <li>Advances in labor-saving equipment</li> <li>Rising demand for bearings with sensors</li> <li>Rising demand for analysis and analytic technologies</li> </ul>	<ul style="list-style-type: none"> <li>Development of new fields</li> <li>Introduction of smart factories in-house</li> </ul>	<ul style="list-style-type: none"> <li>Difficulty in securing digital talent, for which demand is increasing</li> <li>Rationalization of distributor networks</li> <li>Enclosing demand for aftermarket through industrial IoT platforms (missed demand opportunities outside of the platforms)</li> </ul>	
Response to environmental issues	Request to reduce CO <sub>2</sub> emissions	<ul style="list-style-type: none"> <li>Increased demand for wind power generation equipment, including offshore wind turbines</li> <li>Increased demand for railways</li> <li>Increased demand for green energy products</li> </ul>	<ul style="list-style-type: none"> <li>Rising need to improve fuel efficiency (electricity consumption)</li> <li>Widespread use of next-generation mobility (related to EVs, hydrogen)</li> </ul>	<ul style="list-style-type: none"> <li>Rising procurement and energy costs</li> <li>Decreased demand for products due to decline in need for existing general-purpose machines</li> <li>Demand for carbon neutrality in business activities</li> <li>Suspension of transactions with customers and damage to corporate image in the event of failure to respond to societal demands</li> </ul>	
	Demand for energy-saving machinery	<ul style="list-style-type: none"> <li>Rising demand for energy-saving products</li> <li>Responding to new needs</li> </ul>		<ul style="list-style-type: none"> <li>Decrease in the number of parts for which bearings are used due to changes in the energy transmission format and structure of machinery</li> <li>Establishment of a new mechanical structure that does not require bearings</li> </ul>	
	Request to reduce environmental impact	<ul style="list-style-type: none"> <li>Cultivating new customers through compliance with advanced environmental standards and customers' standards</li> <li>Growing demand for quality and long lifespans products</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of environmentally-friendly business activities</li> <li>Pursuit of circular economy</li> </ul>	<ul style="list-style-type: none"> <li>Decline in corporate image and ESG ratings in the event of failure to reduce environmental impact</li> <li>Increase in costs due to expenses incurred by suppliers and a limited number of suppliers that can meet environmental standards</li> </ul>	
	Response to natural disasters	<ul style="list-style-type: none"> <li>Growing demand for emergency power sources</li> <li>Expansion of partnerships</li> </ul>	<ul style="list-style-type: none"> <li>Rising demand for labor-saving technologies</li> </ul>	<ul style="list-style-type: none"> <li>Suspension of operations due to a disaster</li> <li>Leakage of oil, chemical substance, etc. caused by a natural disaster</li> <li>Reduced scale of sales due to economic stagnation</li> <li>Crisis of business continuity</li> <li>Damage to employees' health and safety</li> <li>Supply chain disruptions</li> </ul>	
Changes in demographics	Medium- to long-term labor shortage	<ul style="list-style-type: none"> <li>Acceleration of labor-saving developments and automation of production lines</li> </ul>		<ul style="list-style-type: none"> <li>Impact of a human-dependent production system on the stability of operations</li> </ul>	
	Growth of emerging countries	<ul style="list-style-type: none"> <li>Expansion of sales opportunities due to increased demand</li> <li>Increased demand for new driveshafts due to the shift to front-wheel drive (FF) vehicles</li> <li>Growing demand for high-performance products that are compliant with environmental regulations</li> </ul>		<ul style="list-style-type: none"> <li>Entry of emerging manufacturers into the market</li> <li>Soaring procurement prices due to the entry of competitors into the market</li> <li>Supply shortage of limited materials and resources</li> </ul>	
	Issue of business succession	<ul style="list-style-type: none"> <li>Start of business transactions with new suppliers</li> </ul>		<ul style="list-style-type: none"> <li>Cessation of business among suppliers and sales distributors</li> </ul>	
Globalization of the business	Trade friction and tariffs	<ul style="list-style-type: none"> <li>Increased opportunities to supply products and services that utilize global networks</li> </ul>		<ul style="list-style-type: none"> <li>Sluggish global demand</li> <li>Supply chain disruptions due to reliance on a single country (risk of over-reliance on China, etc.)</li> <li>Downward pressure on profits due to higher tariff costs</li> <li>Rapid exchange rate fluctuations</li> </ul>	
	Prevention of child labor (human rights)	<ul style="list-style-type: none"> <li>Improvements in corporate image through proactive response to human rights issues</li> </ul>		<ul style="list-style-type: none"> <li>Disruption to the supply of parts</li> <li>Suspension of transactions with customers and damage to corporate image in the event of failure to respond to human rights issues</li> </ul>	
	Response to conflict minerals	<ul style="list-style-type: none"> <li>Improvements in corporate image through proactive response</li> </ul>		<ul style="list-style-type: none"> <li>Deterioration in quality</li> <li>Suspension of transactions with customers and damage to corporate image in the event of failure to respond to conflict minerals issues</li> </ul>	
	Rise of low-price products	<ul style="list-style-type: none"> <li>Growing demand for high-performance and highly functional products due to decline in product quality on the market</li> <li>Demonstrating competitive advantage through differentiation of products and services</li> </ul>		<ul style="list-style-type: none"> <li>Intensifying price competition due to aggressive stance by emerging manufacturers</li> <li>Loss of sales opportunities</li> <li>Brand value undermined due to lower prices</li> </ul>	

# Risks, Opportunities, and Materiality



NTN's Business Environment		Degree of urgency*	Degree of impact	Main Measures	Materiality	
Response to paradigm shift	Spread of next-generation mobility	High	Moderate	<ul style="list-style-type: none"> <li>Provide lightweight and higher efficiency driveshafts, and low-friction hub bearings</li> <li>Provide next-generation mobility modules for EVs</li> <li>Consolidate production of high-performance products for EVs (Wakayama Works)</li> </ul>	<ul style="list-style-type: none"> <li>Develop hydrogen-related products</li> <li>Promote production reforms and reorganization aimed at improving the productivity of existing products</li> <li>Strengthen the automotive aftermarket business</li> </ul>	2, 3, 4, 6
	Electrification of industrial machinery	Low	Moderate	<ul style="list-style-type: none"> <li>Strengthen development of products that support electrification, as well as high value-added products</li> <li>Provide next-generation mobility modules for industrial machinery</li> </ul>		3
	Spread of AI and IoT	High	Moderate	<ul style="list-style-type: none"> <li>Provide service solutions through CMS technology, etc.</li> <li>Develop service-oriented businesses that lead to product sales, and make the shift toward new business formats</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen CAE analysis technology</li> <li>Develop "Talking Bearing" (= use of sensors in bearings)</li> <li>Provide robotic peripheral modules such as i-WRIST in response to the problem of labor saving</li> <li>Support e-commerce developments based on the new core system</li> <li>Make smart factories a reality, including Wakayama Works</li> <li>Strengthen external collaboration</li> </ul>	2, 4
Response to environmental issues	Request to reduce CO <sub>2</sub> emissions	High	Moderate	<ul style="list-style-type: none"> <li>Increase sales of large bearings and CMS for wind power generation</li> <li>Increase sales for rolling stock</li> <li>Increase sales of green energy products</li> </ul>	<ul style="list-style-type: none"> <li>Develop lightweight and highly efficient driveshafts, and low-friction hub bearings</li> <li>Expand the range of environment-contributing products</li> <li>Promote energy-saving production equipment</li> <li>Introduce renewable energy</li> <li>Provide next-generation mobility modules</li> <li>Develop hydrogen-related products</li> </ul>	1, 2, 3
	Demand for energy-saving machinery	Low	Moderate	<ul style="list-style-type: none"> <li>Provide compact, lightweight, and low-torque products</li> <li>Develop products that utilize original technologies</li> </ul>		3
	Request to reduce environmental impact	Low	Moderate	<ul style="list-style-type: none"> <li>Select business partners that can comply with green procurement and CSR procurement standards</li> <li>Reduce environmental impact in manufacturing processes (conserve water, improve recycling rate, reduce use of hazardous substances, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Develop and provide products with long lifespans</li> <li>Impose strict controls on environmentally hazardous substances contained in products</li> </ul>	5, 6, 7
	Response to natural disasters	Low	Moderate	<ul style="list-style-type: none"> <li>Formulation of BCP and BCP training in the NTN Group</li> <li>Provide independent power supply devices that utilize renewable energy-based power generation and storage technologies</li> </ul>	<ul style="list-style-type: none"> <li>Provide robotic peripheral modules such as i-WRIST, in response to the problem of labor saving</li> <li>Promote work style reforms</li> </ul>	2, 4, 8, 10
Changes in demographics	Medium- to long-term labor shortage	Low	Moderate	<ul style="list-style-type: none"> <li>Provide robotic peripheral modules such as i-WRIST in response to the problem of labor saving</li> <li>Make smart factories a reality, including Wakayama Works</li> <li>Nurture and utilize diverse human resources</li> </ul>	<ul style="list-style-type: none"> <li>Promote production reforms and reorganization</li> <li>Promote work style reforms</li> </ul>	4, 6, 8, 10, 11
	Growth of emerging countries	Low	Moderate	<ul style="list-style-type: none"> <li>Stable supply of core products</li> </ul>	<ul style="list-style-type: none"> <li>Global production that supports optimal supply</li> <li>Realize the best mix of global and local production</li> </ul>	6
	Issue of business succession	Low	Moderate	<ul style="list-style-type: none"> <li>Business continuity support through dialogue with suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Cultivate new business partners</li> <li>Reorganize partner manufacturers and streamline the supply chain</li> </ul>	6, 7
Globalization of the business	Trade friction and tariffs	High	Moderate	<ul style="list-style-type: none"> <li>Realize the best mix of global and local procurement through procurement reform</li> </ul>		6
	Prevention of child labor (human rights)	Low	Moderate	<ul style="list-style-type: none"> <li>Promote human rights due diligence</li> <li>Globalization of compliance</li> </ul>	<ul style="list-style-type: none"> <li>Implement various training programs in accordance with the laws and regulations of each region</li> <li>Acquire new suppliers</li> <li>Acquire new talent</li> </ul>	6, 7, 9, 12
	Response to conflict minerals	Low	Moderate	<ul style="list-style-type: none"> <li>Promote human rights due diligence</li> <li>Conduct supplier CSR questionnaires</li> </ul>	<ul style="list-style-type: none"> <li>Respond to conflict mineral surveys conducted by customers</li> <li>Stable supply of adapted products</li> </ul>	6, 7, 9
	Rise of low-price products	High	Moderate	<ul style="list-style-type: none"> <li>Expand product lineup and inventory</li> <li>Develop the aftermarket business</li> </ul>	<ul style="list-style-type: none"> <li>Promote the expansion of service-oriented (solutions) businesses</li> <li>Proactive outsourcing for general-purpose products</li> <li>Integrated sales strategy for OEM and aftermarket</li> <li>Differentiation through services</li> </ul>	6

\*The level of urgency is determined by the expected occurrence of an event over a period of time, with "low" indicating long-term occurrences, and "high" indicating short-term occurrences.

# Risks, Opportunities, and Materiality

## Materiality identification process

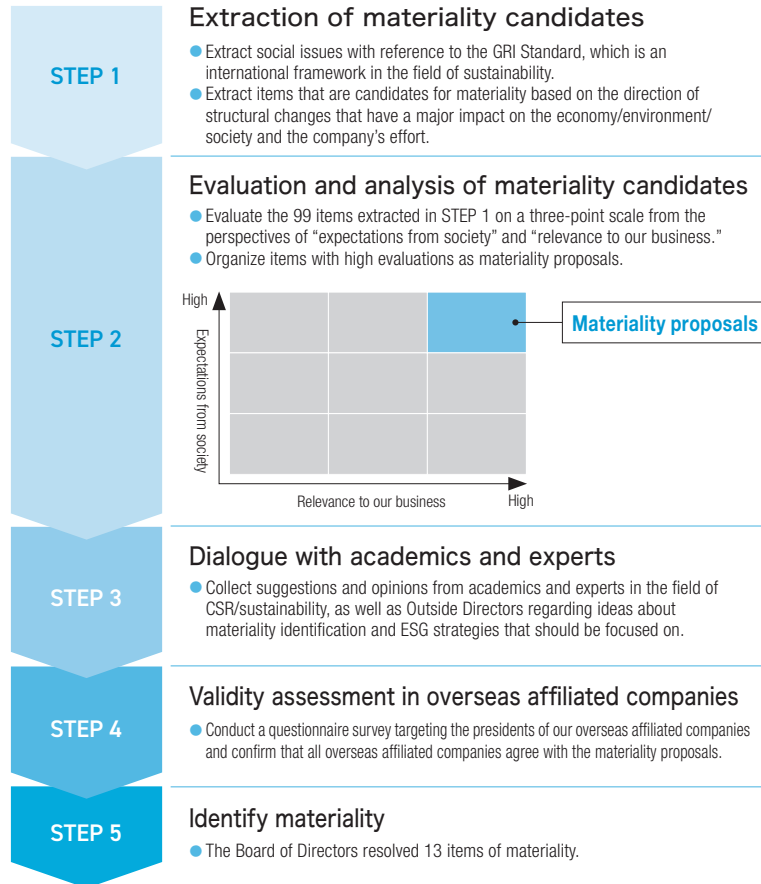
In March 2015, the NTN Group signed the United Nations Global Compact, a global framework for the international community to realize sustainable growth, and we are working toward achieving the SDGs.

In December 2020, we identified 13 items of materiality that the Group should prioritize addressing in response to the SDGs. For the materiality identified, we have formulated response measures for each fiscal year and each item, and we are driving efforts to implement these measures. Our initiatives to address our materiality are outlined in a roadmap for realizing a “NAMERAKA Society,” and progress is regularly reviewed by the Sustainability Committee, which comprises members from across the organization, and reported to the Board of Directors as appropriate.

The identified materialities are also linked to NTN’s corporate philosophy, “We shall contribute to international society through creating new technologies and developing new products.” By promoting efforts to address our materiality, we will strive to achieve sustainable growth for the Group and create environmental and social value, with the aim of realizing a “NAMERAKA Society.”



### Identification process



### Contribution to solving social issues toward the future we aim for

	Materiality	Related SDGs
Environment	1 Respond to climate change	13 Climate Action
	2 Realize a sustainable society using natural energy	7 Affordable and Clean Energy, 13 Climate Action
	3 Reduce energy loss	7 Affordable and Clean Energy, 9 Industry, Innovation and Infrastructure, 12 Responsible Consumption and Production, 13 Climate Action
Social	4 Provide safety and comfort	9 Industry, Innovation and Infrastructure, 11 Sustainable Cities and Communities

### Foundation to support ESG management

	Materiality	Related SDGs
Environment	5 Resource recycling and pollution prevention	12 Responsible Consumption and Production, 14 Life Below Water
	6 Improve the reliability of products and services (Quality assurance, stable supply)	12 Responsible Consumption and Production
	7 Procurement activities with an emphasis on environment and society	10 Reduced Inequalities, 13 Climate Action
Social	8 Promote safety and health	8 Decent Work and Economic Growth
	9 Respect for human rights	10 Reduced Inequalities
	10 Human resource development	8 Decent Work and Economic Growth
	11 Promote diversity	5 Gender Equality
Governance	12 Thorough compliance	
	13 Strengthen governance	

# Risks, Opportunities, and Materiality

## Targets for FY2024 and beyond

Materiality	Target FY	Target
Respond to climate change	FY2030	● Reduce CO <sub>2</sub> emissions in business activities (Scope 1, 2) → 50% reduction (compared to FY2018)
	FY2035	● Reduce CO <sub>2</sub> emissions in business activities (Scope 1, 2) → Achieve carbon neutrality
	FY2050	● Reduce CO <sub>2</sub> emissions in business activities (Scope 3) → Achieve carbon neutrality
Realize a sustainable society using natural energy	FY2025	● External disclosure of technologies and activity status related to renewable energy and hydrogen → Once a year or more
Reduce energy loss	FY2024	● External disclosure of technologies and activity status related to electrification and EVs → Once a year or more
Provide safety and comfort	FY2024	● External disclosure of technologies and activity status related to robot-related modules and service solutions → Once a year or more
Resource recycling and pollution prevention	FY2024	● Water consumption intensity → 3.8 m <sup>3</sup> /million yen (Global)
	FY2024	● Recycling rate → 96.0% or higher (Global)
Improve the reliability of products and services (Quality assurance, stable supply)	Continuous	● Maintain high level of customer satisfaction → 90% or more of “Excellent” and “Good” responses
	Continuous	● Maintain 100% acquisition rate for quality management system certification (ISO9001/IATF16949)
	Continuous	● Strengthen Group-wide information security measures
Procurement activities with an emphasis on environment and society	FY2024	● Revise and conduct CSR questionnaires for suppliers
Promote safety and health	Continuous	● Maintain recognition as “White 500” enterprise under the Certified KENKO Investment for Health Outstanding Organizations Recognition Program (Large Enterprise Category)
	Continuous	● Achievement of annual plan for the risk survey targeting manufacturing sites → 100%
Respect for human rights	FY2024	● Analysis and improvement based on the results of questionnaires conducted on overseas affiliates
Human resource development	FY2024	● Training hours per employee (NTN) → Year-on-year increase (FY2023 results: 11.9 hours)
Promote diversity	FY2026	● Percentage of female managers (NTN) → 5%
	FY2026	● Childcare leave acquisition rate for male employees (NTN) → 100%
Thorough compliance	Continuous	● Number of Compliance Committee held per year → 2 times
	Continuous	● Awareness of Helpline shown in Compliance Awareness Survey → 90% or higher
Strengthen governance	Continuous	● Enhance corporate governance

\*Targets marked as “Continuous” for the “Target FY” are targets that we aim to achieve every year on an ongoing basis.

Please see the NTN Group sustainability website for materiality results of FY2023 and targets for FY2024 and beyond.



<https://www.ntnglobal.com/en/csr/materiality/index.html>

# Six Forms of Capital



## Financial capital

Our financial structure provides the basis for the sustainable growth of the NTN Group, and we aim to reinforce it through the steady recovery of business performance every fiscal year, sale of idle assets, thorough financial management within the Group, and other efforts, and thereby improve our free cash flow, equity to capital ratio, and net D/E ratio.

We will boost our “earning power” by improving operating margin and reducing inventory, and fully strengthening the financial structure that underpins the transformation of our business portfolio. Furthermore, we will make active use of sustainable finance, which links the achievement of targets in sustainability activities with the terms of loans, to accelerate the execution of various measures through stable financing. We aim to achieve sustainable growth and enhance our corporate value, and at the same time, contribute to resolving social issues.



## Human capital

Based on our belief that “the company is its people,” we are striving to strengthen the basis of human capital that is indispensable to the sustainable growth of our Group, and to develop diverse human resources. We are also working to develop rewarding environments and systems to allow employees to maximize their capabilities through work, think and act independently, and continue to grow. At our overseas business sites, local employees, including the presidents of overseas subsidiaries, play an active role in management and operate the businesses in line with the management policies of the global head office.

We aim to strengthen the development of human resources who will lead the next generation, such as by reviewing our education and training systems to promote self-directed career development, respond to rapid changes in the business environment, and realize continuous enhancement to our corporate value.



## Manufacturing capital

We are promoting production reforms with a view to reducing lead time across all supply chain management (SCM) processes, from material procurement to manufacturing and sales, as well as building new production processes to reduce inventory reduction. Furthermore, as the human resources responsible for production in NTN, a “Monozukuri” (manufacturing) company, form the basis for our value creation, we are systematically nurturing the next generation through the “NTN Meister Certification” and other means, and developing a framework for passing on the knowledge and skills of expert technicians.

To further strengthen our “Monozukuri” capabilities, we will advance efforts to consolidate the functions for managing production technologies, standardize processing methods and equipment, and enhance “Monozukuri” education. In addition, we will support advanced and efficient production through the use of robots and AI, driving forward the transition to “smart factories.”



## Intellectual capital

We have research and development (R&D) bases in Japan, the Americas, Europe, and China to support global market needs. The R&D bases mutually engage in active technological and human resource exchanges and share information through a database on the design information they have researched and developed, as well as information pertaining to prototypes and experiments, production technology, and customer projects. By doing so, we are accelerating the creation of new technologies and products from a global perspective.

The NTN Group’s intellectual property is the source of our value creation, and we globally promote the appropriate protection and utilization of intellectual property rights in line with our business strategy and R&D strategy. In addition to intellectual property rights that serve to maintain and strengthen the competitiveness of our core technologies and products, we also utilize IP landscaping in new fields to create intellectual property that can help us to secure first-mover advantage.



## Social and relationship capital

We advocate approaching business activities based on our Management Policy of being “a company that is trusted and needed by communities including stakeholders,” and we have clearly established our “Stance to Stakeholders” in writing. We seek to maximize customer satisfaction and trust by providing products and services of superior quality, safety and reliability. We aim to build good partnerships with our business partners based on mutual trust and work together for mutual growth and development in a fair and free environment. In addition to respecting cultures and customs in the local communities where we conduct our business and meeting their expectations through our business activities, we also strive to realize return for shareholders through sustainable profit growth and build long-term trust relationships with shareholders through active communication.



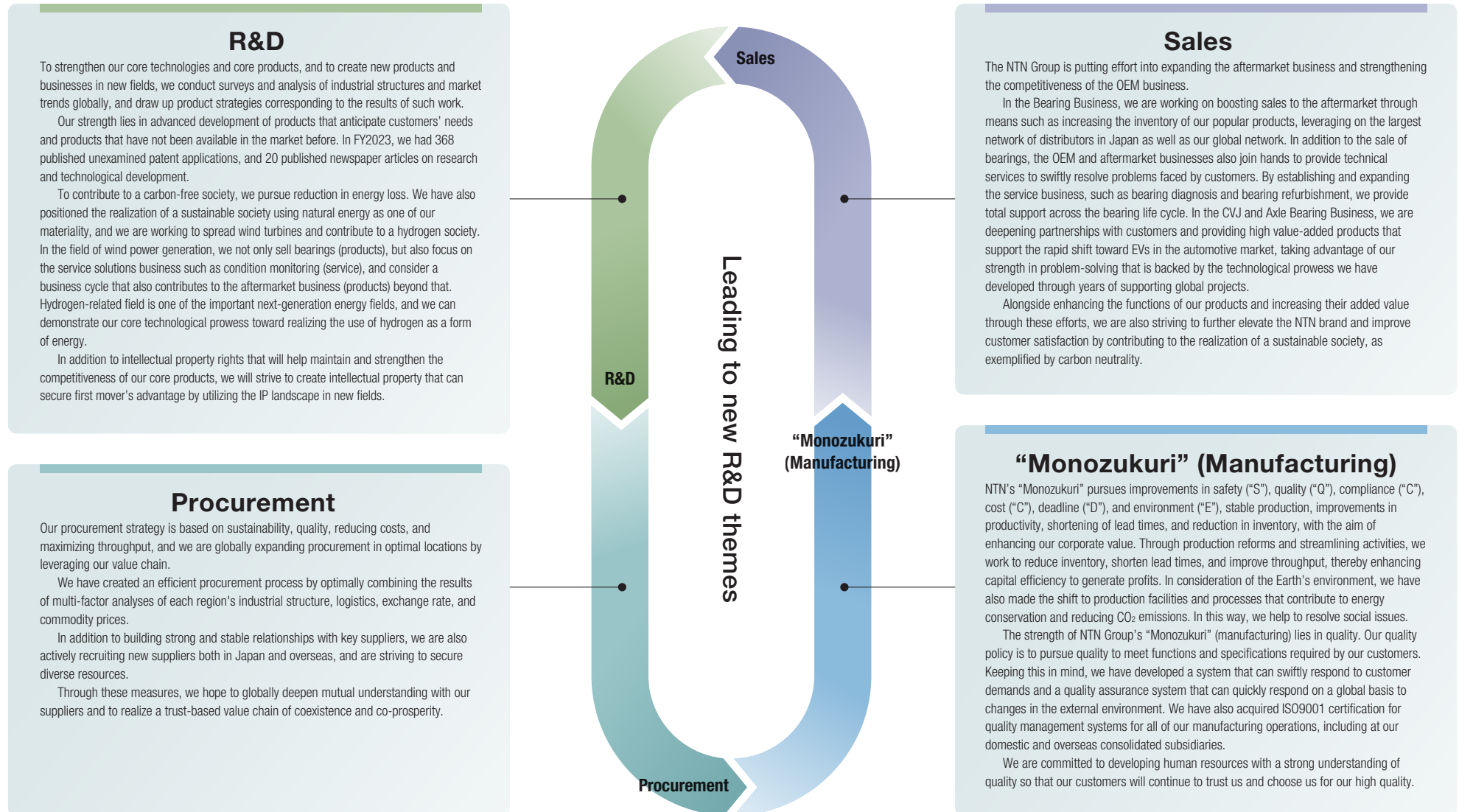
## Natural capital

We have positioned coexistence with the global environment as a top priority. In light of that, we are committed to preventing environmental pollution in our business activities and conserving natural capital. At the same time, we have established the Environment Policy of making constant efforts to contribute to the sustainable development of society through our technologies, and we engage in business activities in line with this policy. Bearings and driveshafts, our flagship products, are environmentally friendly products that help reduce energy loss, and green energy products are renewable environmentally friendly products that make use of sustainable energy sources.

We are quantifying the degree of environmental contribution of these efforts, and will continue working to develop and supply products that further aid the environment. In addition to managing and reducing the chemical substances used in our products and manufacturing processes within our business activities, we also put effort into conserving biodiversity and engaging in environmental contribution activities in local communities.

# Creating Value in Each Process

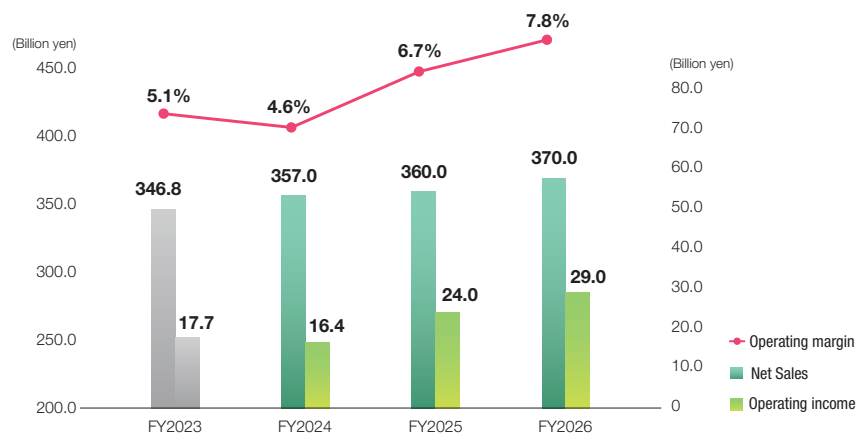
The NTN Group promotes initiatives in line with our materiality for responding to the SDGs, by leveraging our strengths in the respective processes of R&D, procurement, “Monozukuri” (manufacturing), and sales. In conducting our business activities based on our corporate philosophy, “We shall contribute to international society through creating new technologies and developing new products,” we create value in the value chain, leading to sustainable growth.



# Strengthening the Business Model

## Bearing and others

### Performance targets



### Overview

By consolidating the bearing business, in which the automotive, industrial machinery, and aftermarket segments had previously been handled separately, and by maximizing the usage of management resources, we are working to further expand the aftermarket business, flexibly respond to electrification needs, and shorten development times.

In the aftermarket segment, we are expanding inventories for our popular products and meeting a wide range of requests for immediate delivery via external purchasing, expanded production outsourcing, and optimally allocating and increasing production capacity through integrated OEM and aftermarket operations. In order to attend to customer problems and quickly resolve them, we will also provide engineering solutions such as bearing diagnosis and analysis services, technical training services, and bearing refurbishment services.




In the OEM segment, we are providing products that contribute to reducing environmental impact and factory automation and labor saving for a wide range of industries, including automobiles, construction machinery, agricultural machinery, gearboxes, aerospace, wind turbines, machine tools, and rolling stock. In response to electrification, we will develop new high-value-added products that respond to changes in the market environment, and will quickly bring them to market.

### Main products and services

Remote technical support services	NTN Portable Vibroscope	Technical training / maintenance tools		
Mining machinery	Metal industry equipment	Paper-making machinery	Food processing machinery	Cement equipment
Construction machinery	Agricultural machinery	Gearboxes	Aerospace	Machine tools
Wind turbine	Rolling stock	Automobiles		

# Strengthening the Business Model **Bearing and others**

## Strategies of “DRIVE NTN100” Final

<b>Business target</b>	<b>Market environment</b>																			
FY2026 <b>Operating margin 7.8%</b>	<table border="0"> <tr> <td><b>Aftermarket</b></td> <td>(Industrial machinery) Expanding demand in the aftermarket due to economic expansion in emerging countries (Automotive) Increase in the number of vehicles on the road due to global population growth and longer vehicle life</td> </tr> <tr> <td><b>Construction machinery</b></td> <td>Earthquake reconstruction projects, stable growth associated with infrastructure development and progress in automation and electrification</td> </tr> <tr> <td><b>Agricultural machinery</b></td> <td>Population growth in emerging countries, and electrification and automation by labor shortages and aging populations in Japan, U.S. and Europe</td> </tr> <tr> <td><b>Gear box</b></td> <td>Growth in the robot market due to labor-saving measures to address labor shortages</td> </tr> </table>	<b>Aftermarket</b>	(Industrial machinery) Expanding demand in the aftermarket due to economic expansion in emerging countries (Automotive) Increase in the number of vehicles on the road due to global population growth and longer vehicle life	<b>Construction machinery</b>	Earthquake reconstruction projects, stable growth associated with infrastructure development and progress in automation and electrification	<b>Agricultural machinery</b>	Population growth in emerging countries, and electrification and automation by labor shortages and aging populations in Japan, U.S. and Europe	<b>Gear box</b>	Growth in the robot market due to labor-saving measures to address labor shortages	<table border="0"> <tr> <td><b>Aerospace</b></td> <td>Growing passenger demand, and increasing communication satellite services to stimulate the space industry</td> </tr> <tr> <td><b>Machine tool</b></td> <td>Energy savings through automation and enhanced efficiency using IoT</td> </tr> <tr> <td><b>Wind turbine</b></td> <td>Increasing wind power generation to achieve a carbon neutral society</td> </tr> <tr> <td><b>Rolling stock</b></td> <td>Infrastructure development in emerging countries due to economic growth and addressing environmental issues</td> </tr> <tr> <td><b>Automobile</b></td> <td>Decrease in engine vehicles and expansion of electric vehicles, especially BEVs</td> </tr> </table>	<b>Aerospace</b>	Growing passenger demand, and increasing communication satellite services to stimulate the space industry	<b>Machine tool</b>	Energy savings through automation and enhanced efficiency using IoT	<b>Wind turbine</b>	Increasing wind power generation to achieve a carbon neutral society	<b>Rolling stock</b>	Infrastructure development in emerging countries due to economic growth and addressing environmental issues	<b>Automobile</b>	Decrease in engine vehicles and expansion of electric vehicles, especially BEVs
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<ol style="list-style-type: none"> <li>① Expand aftermarket business</li> <li>② Improve profits in bearing OEM business</li> <li>③ Develop products for electrification and strengthen market competitiveness by reviewing application standards and design criteria</li> <li>④ Enlarge service solutions</li> </ol>																				
<b>Main strategy</b>																				
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## Trends by Region

### Japan

After the COVID-19 pandemic, demand has grown in sectors such as automotive, construction machinery, and aerospace, on the back of a recovery from the slump in demand due to a shortage of semiconductors. In addition, we plan to increase aftermarket sales by expanding the inventory of popular products. We will reorganize and consolidate production, improve production efficiency, and strengthen competitiveness.

### Americas

Against the backdrop of resource prices trending upward, we expect an increase in demand for construction machinery following the completion of inventory adjustments. For the Central and South American market where growth is anticipated, we aim to explore MRO projects and increase aftermarket sales by expanding our product line-up.

### Europe

We aim to explore MRO projects by strengthening technical services, and to expand aftermarket sales to the Middle East and Africa regions where future growth is anticipated. With expectations of a shrinking ICE market for automobiles, we will focus on high-value-added products targeted at the shift toward electrification.

### Asia and others

We aim to strengthen price competitiveness by utilizing LCC products and win new aftermarket projects that take advantage of our bearing diagnosis and analysis services. We will respond to the growth in demand for the aftermarket of rolling stock, driven by the increase of travelers in China. We will also accelerate the development and market launch of electrification products for the expanding Chinese EV market.

**Message from Executive Officer in charge of business**



## Competing in a market where we can secure competitive advantage

Executive Officer

**Etsu Harima**

### Paradigm shift in the bearing business

NTN's bearing business has continued to grow alongside the development of the automotive industry. This automotive industry is now facing a once-in-a-century transformation with the shift from ICE vehicles to EV. While the need for some parts will increase with the shift to EV, the need for others will inevitably decrease. Although bearings will always be required, a significant decrease in the number of bearings used is unavoidable. There will be a decline in demand for needle roller bearings and tapered roller bearings, while it will be necessary to enhance the competitive advantage, including cost competitiveness, of ball bearings, which will continue to be needed. Going forward, NTN will be called upon to develop a production and sales system that can respond to a series of paradigm shifts. To achieve this, we have undertaken bold business structure reforms and built a new organizational structure. Among these numerous changes, attention should be placed on motorcycles, as every manufacturer has assessed

that rapid electrification of motorcycles will be a difficult task. For this reason, we will focus on increasing our market share for motorcycle bearings, including our share of aftermarket sales, in India and other parts of Asia.

Until now, a significant proportion of bearings for both the automotive and industrial machinery markets have been produced in Japan. In light of future developments, we should consider establishing an efficient system that can handle all processes in an integrated manner, from production to sales. One of the key issues in the bearing business is improving profit margins in OEMs, which requires cost reduction and productivity improvement. To reduce costs, it is necessary to consider procuring parts from global sources. At the same time, it is vital to change our policy so that we do not compete on the same level as manufacturers in emerging countries who will compete on the basis of cost alone.

When considering the optimal allocation of limited resources, we should compete in OEM markets with strong growth potential, and where we can secure a competitive advantage.

To that end, we will carefully select markets where we can win in the aspects of quality, cost, and delivery (QCD). In doing so, an important criterion for making decisions is whether the market is one in which our customers can continue to succeed.

To make the right decisions, we have established a new Business Strategy Unit, which will carefully deliberate on our "STP" marketing strategy (in other words, segmentation, targeting and positioning). Based on classification by region and by the customer's industry, we will strive to provide bearings that can support the competitive advantage of customers who are maintaining their global competitiveness. At the same time, we will take the bold step of retreating from battles that involve competing with specialized manufacturers of special bearings and competitors who compete solely on the basis of cost.

### Focusing on the aftermarket where we can secure profits

Another important issue in the bearing business is the expansion of the aftermarket business. Bearings account for just under half of NTN's sales of approximately 800 billion yen. Looking at the breakdown of bearing sales by market, the automotive, industrial machinery, and aftermarket each accounted for roughly one-third of our bearing sales. However, our previous business structure had leaned heavily toward the automotive sector; furthermore, if we were to categorize our business into OEM and aftermarket, it had also been heavily biased toward OEM. As a result, the aftermarket tended to take a back seat.

Since about 10 years ago, NTN has recognized the need to strengthen the aftermarket, and has been advancing efforts to

## Strengthening the Business Model **Bearing and others**

do so. Unlike OEMs, which require stringent responses with regard to supply volume, price, and delivery time, the aftermarket has the advantage of being able to secure a certain level of profits with little fluctuation in demand. The aftermarket is characterized by the ability to generate consistent profits as long as products are manufactured consistently. However, under the previous system, we gave priority to responding to OEMs and therefore had to respond flexibly to sudden requests from customers to increase production. Consequently, we had to put the brakes on supplying to the aftermarket, which has strong demand, and sales opportunities were lost. Therefore, improving supply capacity became an issue that needed to be resolved for the aftermarket.

Going forward, we will increase our inventory of standard products listed in the catalogue for “FIRST,” a system for immediate delivery of popular products. Based on statistical analysis, we have improved production lines at NTN Mie Corporation and Wakayama Works, which was newly established last year, to ensure that we do not run out of best-selling products. Furthermore, for parts that NTN is unable to supply on our own, we will accept OEM supplies through production outsourcing. In such cases, we will carefully select and work together with manufacturers who are able to maintain reliable quality. Some competitors were early players in making the shift to a strategy that emphasizes the aftermarket, and some have already expanded their aftermarket composition to about 40% of sales. We have set the target of achieving an annual growth rate of 6% for the aftermarket, and aim to expand it to 40% of total sales in FY2035.

### **Differentiation through the provision of solutions in the industrial machinery sector**

In the industrial machinery sector, bearings with customizations

in both size and shape are generally used for full operation, 24 hours a day. Since a broken bearing will put a stop to the production line, we have until now been working to establish a system that can respond by providing immediate replacements whenever possible. Going one step further, we are also advancing efforts to create a system that monitors the status of equipment and provides replacement parts just before the bearing breaks down. To enhance our series of engineering services, it is important to strengthen “bearing life cycle management.” With this in mind, we provide total support for the process, starting with bearing selection, delivery, use, monitoring, analysis, and replacement, to operation and maintenance.

For example, we already provide “Wind Doctor” for wind power generation, as well as services to measure the operational data of industrial machinery and facilities that use our “Talking Bearings,” and analysis and diagnostic support services for measurement data obtained through the “NTN Portable Vibroscope.” Going forward, we will continue to differentiate ourselves by leveraging our strength in sensing technology to provide “bearings that do not stop working and will not stop operations.”

With regard to our policies for each area in the industrial machinery sector, we will strive to secure profits while maintaining a high market share for construction machinery and agricultural machinery. We also provide high value-added products for machine tools that cannot be replaced by other companies. Particularly with regard to industrial robots, for which demand is growing due to the increasing need for labor-saving, we will provide high-precision bearings that cannot be imitated by other companies. Meanwhile, backed by the Chinese government's policy, China is accelerating domestic production of bearings for rolling stock and wind power generation, for which China is the main market, but

significant growth can be expected in the future. NTN aims to expand sales by leveraging our strengths of higher reliability and performance. In this way, we aim to improve our operating margin by providing added value that is unique to our Company.

### **Be passionate about work and overcome obstacles**

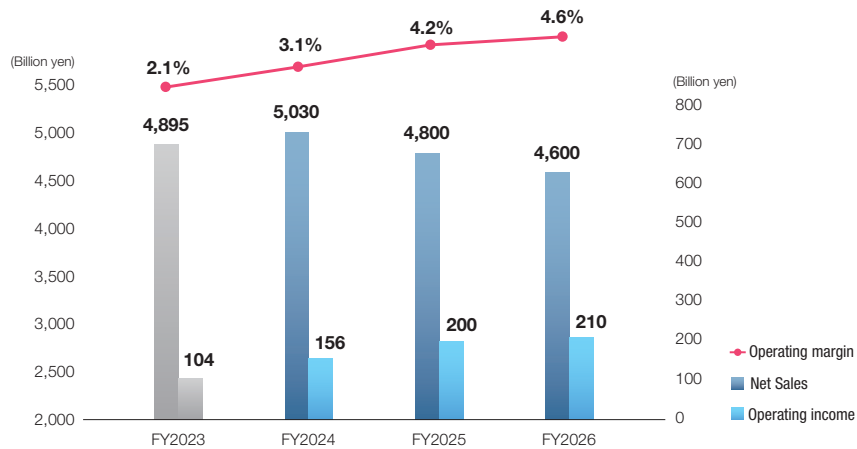
We recognize that changing the mindset of employees is also an important issue in the organizational restructuring process. In town hall meetings held to improve communication with employees, I emphasize the following four points. The first is the call to break down organizational barriers. The barriers that need to be broken down are the conventional barrier that lies between automotives and industrial machinery departments, and the barrier between production, sales, and technology. I would like to ask everyone to break down these barriers and work as one to pursue overall sales and profit improvement. The second request is for an attitude of always thinking about profits. Rather than simply pursuing sales, we constantly aim to transform into a group that is conscious of profits. Thirdly, we will place emphasis on efficiency and speed, taking into account limited resources. The fourth point is a request, particularly to the younger generation, to take actions that look ahead to the next 10 years, that is, 2035.

NTN's workforce has become more diverse than before. In light of this situation, we will put every effort into creating an organization where everyone takes interest in their work. A prerequisite for taking interest in work is an environment that allows everyone to be passionate about their work. We will create an environment where everyone can increase their motivation, and we will strive to achieve our goals through these efforts.

# Strengthening the Business Model

## CVJ and Axle bearings

### Performance targets



### Overview

With the ongoing shifts toward electrification and EVs in the automotive market, there is growing demand for hub bearings and driveshafts, which are the flagship products of the CVJ and Axle bearing business, that can help to extend the range of electric vehicles and offer strong control performance.

NTN, as a specialist in power/drivetrain systems, develops and supplies high-performance products that meet world-leading standards in low-friction performance, lightweight and compact properties, durability, and quietness, in response to rapidly growing needs for CASE (“Connected” cars, “Autonomous/Automated” driving, “Shared,” and “Electric”). By doing so, we contribute to the Earth’s environment by improving the fuel (electricity) efficiency of automobiles and reducing CO<sub>2</sub> emissions.

We are also boosting supply to the aftermarket by expanding our line-up of products to include automotive aftermarket parts, with a focus on corner modules, in addition to OEM products.

By supporting customers across the globe from product development to aftermarket services, we contribute to creating a safe, secure, and comfortable future for people, cars, and societies.

### Main products and services

#### Hub bearings

Bearings that allow tires to rotate smoothly, and support the weight of the vehicle.



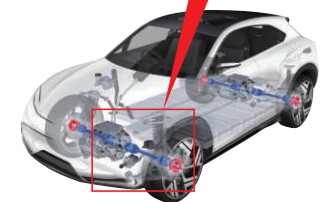
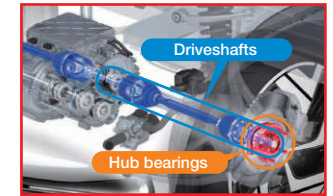
64% reduction in rotational friction  
“Low Friction Hub Bearing V”

#### Driveshafts

Products that transmit the driving force of engines and motors to tires.



The world’s highest level of efficiency during transmitting torque  
High Efficiency Fixed Type CVJ “CFJ”



Hub bearings



Low Friction Hub Bearing

Development of products with even lower friction



Roller type (GEN3 HUR)



Driveshafts



Hub joint module



Compact Lightweight Rear Driveshaft R Series



High Efficiency Fixed Type CVJ “CFJ”

Fixed type CVJ



Shudderless Sliding Type CVJ “PTJ”

Sliding type CVJ

## Strategies of “DRIVE NTN100” Final

### Business target

FY2026 **Operating margin 4.6%**

### Policy

- ① Pass-on price and set selling prices appropriately
- ② Improve profit margin of existing projects by value chain reform
- ③ Ensure profits and return on investment expected when receiving new orders
- ④ Respond to EV market needs

### Main strategy

#### Improve profits of OEM business

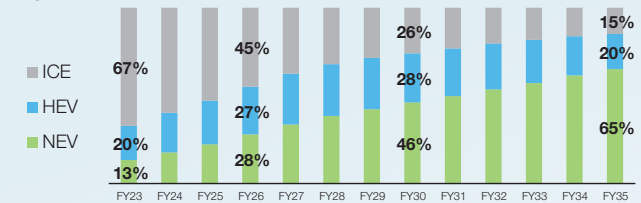
- Improve asset efficiency by reorganization of production bases in the Americas, Europe, China and Japan
- Improve unprofitable businesses and adjust prices in line with market conditions
- Deepen partnerships with customers based on problem-solving and proposal capabilities
- Procurement reform, design reform, and cost reduction by design not trapped in the conventional design concepts and reviewing materials
- Maximize profits by expanding external purchasing, and restructuring supply chain of parts and finished products
- Develop new products that meet market needs and bring them to market speedily

### Market environment

- Automotive markets will expand moderately, while weakness in Japan and Europe
- HEVs will peak out around 2028
- NEVs will constantly grow in ratio



- Expansion of the automotive aftermarket based on an increase in the number of vehicles on the road due to global population growth and longer vehicle life



#### Expand aftermarket business

- Strengthen supply capability
  - Develop alternative products and outsource production
  - Expand product lineup through external purchasing
  - Enhance axle and CVJ-related kit products
- Relocate aftermarket headquarter functions to Europe and establish sales expansion system

## Trends by Region

### Japan

We will build strong partnerships with customers, founded on NTN's product development capabilities and high quality. We aim to increase profits and develop win-win relations with our customers by taking on in-house CVJ production, engaging in joint development from the early stages of automotive development, and building the cost structure of our products.

### Americas

To address cost increases associated with the recent rising inflation, we will promote ambitious SCM reforms and advance production reorganization in North America. In addition, we will make the shift to large-scale products that leverage the strengths of NTN's products, and work to improve our business mix.

### Europe

Although recovery in demand is slow in the European market, we will advance with production reforms with a view to the future shift to EVs, while also promoting reviews of SCM. At the same time, we will actively promote environmentally friendly products to meet customers' needs. In tandem with these efforts, we will vigorously promote portfolio reform with a focus on downsizing or withdrawing from unprofitable businesses.

### Asia and others

With a focus on the high-growth markets of India and ASEAN, we will enhance customer satisfaction and expand the business by strengthening our ability to respond to the local markets, including local production. We will also enhance overall cost competitiveness through the global expansion of LCC suppliers from the respective regions.

**Message from Executive Officer in charge of business**



## Competing with exceptional added value

Executive Officer

**Hideaki Miyazawa**

### Restructuring for greater precision in formulating strategies

In the recent organizational restructuring, we made a significant shift from the previous market-based system to one that is product-based. This is because we considered it easier to implement more appropriate strengthening measures nimbly in a product-based organization than in a market-based organization, in light of our goal to enhance product competitiveness and increase profits. Until now, we have competed within the top classes with CVJs and axle bearings alone accounting for about 80% of total sales in the automotive business. Therefore, we will be able to operate the business more efficiently with an organization that specializes in these areas.

Understanding the situation swiftly and accurately across all processes from production to sales, as well as sharing the pertinent information, is another reason behind the restructuring. For example, bearings for automotives, industrial machinery, and

the aftermarket had all been produced in the same manufacturing plant. For this reason, it had been difficult to understand, in real time, the production status of products for each market at a specific point in time. With manufacturers in emerging countries catching up, the competitive environment is only becoming more intense. In order to enhance product competitiveness amid this environment, it is necessary to fully utilize the supply chain management system that our company has built over time. To that end, having precise understanding of, and sharing information on, the current situation became a prerequisite.

Moreover, in a market-based system, the emphasis was placed on fulfilling our supply responsibilities for OEM. When demand fluctuated, we had to put top priority on responding based on the terms of the OEM contract. This in turn affected the aftermarket, and we remained in a situation where we were unable to allocate resources to the highly profitable aftermarket in the way we desired.

The automotive-related aftermarket including CVJs and axle bearings is basically concentrated in Europe and the U.S., so we will consolidate the aftermarket business in our consolidated subsidiary, NTN Europe S.A., which is well-versed in this market, and move our headquarters from Japan to France. Regarding our response to aftermarket needs under the new system, we will provide not only NTN's products, but also products outsourced from other companies to meet customer needs. We will enhance customer satisfaction by packaging these with our original products, and appeal to our customers through the sense of security that they can obtain any products they ask us for. This will be positioned as our selling point.

### Leveraging the shift to EVs to take a big leap forward

The shift to EVs provides a powerful tailwind to the CVJ and Axle bearing business. There are three main reasons for this. Firstly, the shift to EVs will see a dramatic increase in the number of four-wheel drive vehicles, meaning that the number of CVJs installed in each EV will increase. As a result, total demand will increase.

Secondly, it is necessary to address the weight increase that accompanies the shift to EV. Since EVs are loaded with batteries, the increase in weight per vehicle is significantly greater than that for ICE vehicles of the same size. Therefore, in order to improve electrical efficiency (fuel efficiency), it is necessary to reduce the weight of all parts other than the battery. On the other hand, due to the nature of the motor in EVs, a large torque is generated the instant the driver steps on the accelerator. Accordingly, drivetrain parts need to be sufficiently rigid to withstand the large torque. In other words, we need to address the contradictory issues of

## Strengthening the Business Model **CVJ and Axle bearings**

pursuing weight reduction for both CVJs and axle bearings, while at the same time increasing their rigidity. Building up technological capabilities is vital to resolving this problem. We aim to achieve the highest level of efficiency, weight reduction, and compactness, and at the same time, realize high rigidity. NTN aims to compete in an area where manufacturers that come after us cannot catch up easily.

Thirdly, both CVJs and axle bearings are essential drivetrain parts, and NTN has the unique capability of providing technology and proposing services on a modular basis. Our ability to present integrated proposals for solutions in the drivetrain system is a unique value proposition that our competitors cannot easily imitate.

Taking advantage of these tailwinds, NTN will go one step further to work closely with customers and provide unique added value such as problem-solving proposals and quick responses. Providing both price and value benefits allows us to receive fair compensation and increase profit margins. Therefore, in our three-year plan "DRIVE NTN100" Final, which extends from FY2024 to FY2026, we do not anticipate an increase in sales. Rather, it is a plan for improving sales contents and increasing both the profit margin and amount of operating profit through cost improvement activities.

### **Positioning and utilizing changes in customer mindset as a tailwind**

As the automotive industry is constantly looking ahead and moving, the sourcing activity in the customer up to 2026 is almost concluded for NTN. Our challenges going forward will be developments from 2027 and beyond, which will fall within the scope of our next Medium-term Management Plan that looks

ahead to 2035.

What we need to think about is how to best allocate limited resources. Until now, we have competed in all regions where the automotive industry is expanding, but going forward, we will clearly narrow down our segments and targets to enhance our business value. The Business Strategy Unit was established to draft strategies, and it will prioritize the allocation of resources after determining areas in which the Company has a winning advantage.

Our goal for 2035 is to be a leading manufacturer in the power/drivetrain system. However, we aim to be the dominant leader not in terms of sales volume, but in the aspects of problem-solving ability, proposal capability, and speed of response. In implementing our strategy, we cannot overlook dynamic changes on the customers. In the past, the basic stance of customers with regard to OEM had been to place orders with the supplier that offered the lowest prices through competition. However, in recent years, some customers have shifted to the mindset of selecting certain partners and entrusting the development to them. In response to this trend, our Company can propose a package that covers multiple vehicle models, which enables us to provide greater economies of scale than if we were to compete for each vehicle model. The premise behind this is the relationship of trust that we have fostered with our customers, including communication among the top management. For such customers, we will prioritize allocating resources to further enhance their satisfaction.

As a part of this, we are also considering undertaking bold reform of our supply chain, which will allow us to source what we need from the optimal regions. At the same time, we will also develop a supply chain system that takes into account the current global situation, including currency fluctuations and geopolitical risks.

### **Bringing happiness to our customers**

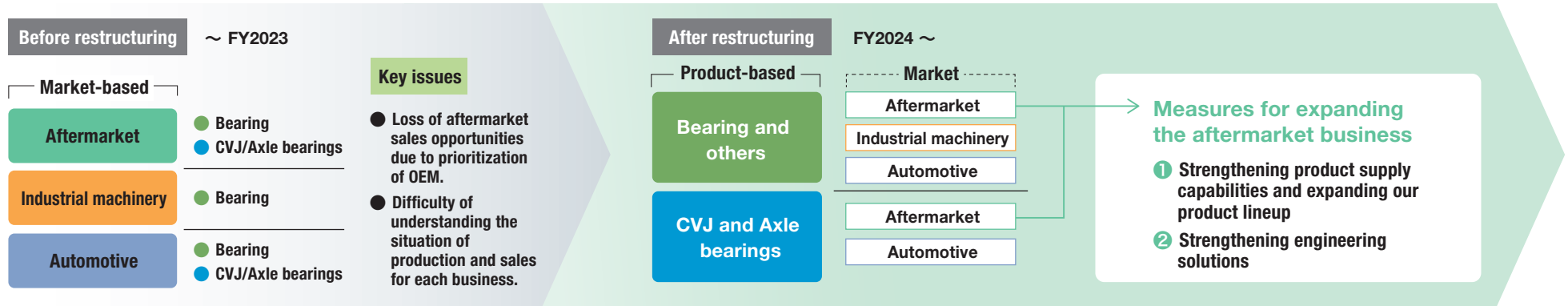
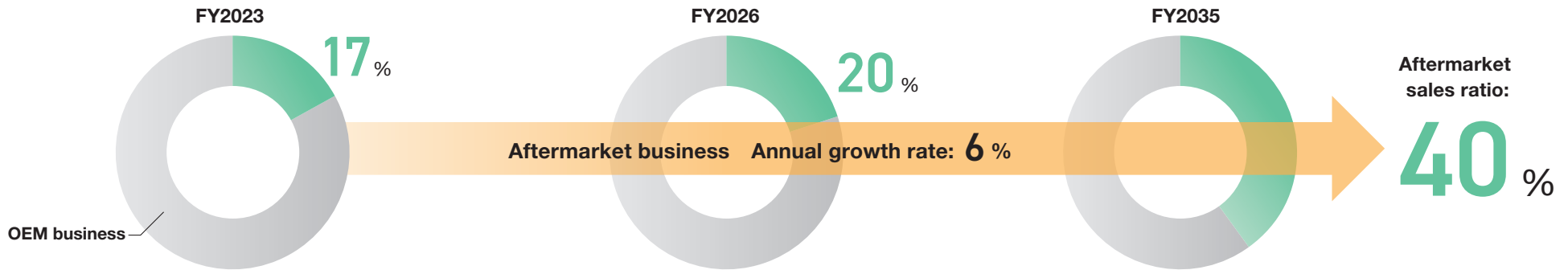
Looking back, our previous automotive business had been in the red for four consecutive fiscal years until 2023. In the OEM business, there was a limit to the cost reduction activities that we could continue implementing along the existing path. Using the analogy of mountain climbing, we had decided which mountain to aim for, but faced the problem of how to ascend it. Our goal of becoming the global top manufacturer in the drivetrain field by 2035 remains unchanged, but we have changed the way of getting there, shifting from our previous scale-oriented system to focusing on product quality. We are already beginning to see results from the steady activities we have been implementing based on this change in policy, refining the value we provide and gaining recognition from customers.

Going forward, we will continue to hone our uniquely differentiated value. The foundation for this is the technological development capabilities we have cultivated over the years, which we will continue to develop further. We want customers to recognize the value that only NTN can provide, rather than focus solely on the price. Customers are always faced with challenges, some of which they cannot solve on their own. As a specialized manufacturer, we will solve these challenges quickly. If a sample is requested, we will deliver it the next day, and if a customer requests drawings first thing the next morning, we will deliver them by the same afternoon. We will realize a system that can respond to such requests.

At town hall meetings, I tell employees to always ask themselves, "What kind of happiness can we bring to our customers?" The results of employees' efforts to answer this question are steadily emerging.

# Expansion of the aftermarket business

NTN has established the goal of increasing the sales ratio of the aftermarket business to 40% by FY2035, with a view to achieving ROE that constantly exceeds shareholder capital cost, as well as enhancing corporate value. To achieve this goal, effective from April 1, 2024, we have restructured the organization from a market-based to a product-based one. Then, we are working toward the aims of generating profits of consolidating the bearing business, strengthening services and supply capabilities and the integration of aftermarket and OEM.



## 1 Strengthening product supply capabilities and expanding our product lineup

In order to strengthen our supply capabilities, NTN has already been outsourcing production to overseas partner manufacturers. Furthermore, through the organizational restructuring implemented in April this year, we will be working to expand the inventory of our popular products by integrating aftermarket and OEM operations and optimizing the allocation of production capabilities.

This will enable us to establish a structure that can provide the necessary parts quickly without having to suspend customers' machinery or factory operations.

## 2 Strengthening engineering solutions

With regard to engineering solutions, we will integrate OEM and aftermarket operation to establish a structure that supports and services bearings through their entire life cycle. This will allow customers to receive consistent support and get the best product's performance.

Especially in the automotive aftermarket business, we work on product expansion. We will strive to expand our business on a global scale by boosting marketing activities in emerging markets such as China, ASEAN, Middle East, and Africa, not only in Europe and Americas.

# Products that demonstrate their strengths in the shift to EVs

It is said that demand for bearings will decrease by approximately 30% as a result of the shift to EVs. On the other hand, the demand for hub bearings will not decline significantly due to vehicle structure, and those for driveshafts tend to increase. NTN views this shift to EVs as an opportunity for growth. This section features NTN products that demonstrate their strengths in the shift to EVs.

## Hub bearings



64% reduction in rotational friction  
"Low Friction Hub Bearing V"

The basic structure of a vehicle that remains unchanged even with the shift to EVs is the axle/drivetrain. The hub bearing, which is NTN's flagship product, is the part that connects the chassis to the tires, rotate the tires and supports the weight of vehicle, so demand will not decline significantly. We aim to contribute to improving the range of EVs by working on reducing bearing weight and improving low-friction design to provide quality hub bearings.

## Driveshafts



The world's highest level of efficiency during transmitting torque  
High Efficiency Fixed Type CVJ "CFJ"

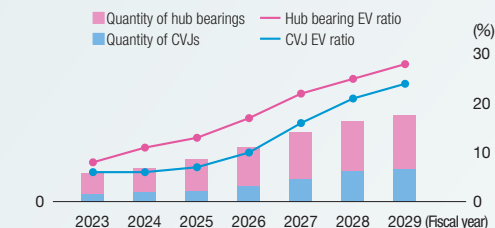
The driveshaft is the part that transmits a vehicle's engine driving force (torque) to the tires at a constant velocity. Many EVs have them installed on both the front and rear wheels, which increases the number of driveshafts installed. NTN's products reduce torque loss and maintain high performance while realizing a lightweight design.

Sales to the automotive industry account for approx. 70% of our total sales. In particular, hub bearings and driveshafts play an important role in our sales to the automotive industry, accounting for approx. 35% and 45% of sales, respectively. These products are highly regarded and have established a leading position in terms of global market share.

As the EV share in automotive market increases dramatically, an important goal for us is to increase our percentage of hub bearings and driveshafts for EVs. Currently, our sales for EVs account for approx. 10% of our total sales, but we aim to increase this to approx. 20% by 2028 through development of high-performance products with the world's highest level of light weight, compactness and low friction to contribute to improving the range of EVs. A newly established CVJ & Axle Bearing Business HQ. also aim to develop integrated products combining hub bearings and driveshafts and bring them into market.

With this growth strategy, we are aiming to maintain even greater competitiveness in the future of the automotive industry.

### Sales volume for EVs and EV ratio



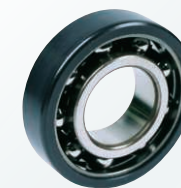
## Bearings for e-Axles

The e-Axle is a drive device that integrates the electric motor, reducer, and other devices and it is an important part in the EV. Since the device is small, lightweight and rotates at high speed, bearings used must also be small, low torque and have high rotational performance. Furthermore, as the voltage of electric power systems increases, the raceway surface becomes more susceptible to melting and damage caused by so called electrical corrosion, which occurs when sparks are generated by the current passing through a bearing, so designs and performance that can prevent this are also required.

We have successively developed high-value added new products with our unique technologies that anticipates needs for bearings in the rapidly growing e-Axle described above.



High Speed Deep Groove Ball Bearings for EVs and HEVs



Resin Mold Insulated Bearing

# Research and Development

## CTO Message



## Accelerating the process from research and development to mass production

Executive Officer

**Yoshiyasu Nakano**

### Incorporating manufacturing functions to provide a one-stop service leading up to the market launch of products

The newly established Innovation & Business Development Headquarters is an organization that combines three departments which had primarily been responsible for the development of new products. These departments had previously worked separately on exploring market needs and seeds as well as the research and development (R&D) of new products based on these outcomes, but by consolidating them into a single organization, we aim to fuse the different development perspectives of each department to create new knowledge, and to accelerate development speed. While there used to be a time lag in the selection of manufacturing plants and review of production processes in the stages from product development to mass production, the new organization is equipped with a department that is responsible for developing new production methods, vital to the development of new products, as well as a manufacturing plant that is responsible for “Monozukuri” (manufacturing). In addition, we have established a one-stop system from development to mass production, thereby accelerating the process leading up to the market launch of new

products, while at the same time building in quality and costs.

In creating new products, we believe that it is important to strengthen our market needs and seeds exploration capabilities as well as our development capabilities for elemental technologies. With regard to improving our exploration capabilities, we consider it effective to capture the intellectual property trends of other companies and conduct analyses. To that end, we have adopted the IP landscaping method, and we are promoting its use in the formulation of business strategies. As for strengthening the development of elemental technologies, we are strengthening the utilization of our NTN Next Generation Research Alliance Laboratories established at Osaka University as well as collaboration with external research institutions, and working to discover and incorporate advanced technologies.

### Aiming to contribute to carbon neutrality through the realization of a “NAMERAKA Society”

Under the new Medium-term Management Plan “DRIVE NTN100” Final, we will continue to develop and promote the six target fields identified in the previous Medium-term Management Plan (“DRIVE NTN100” Phase 2). However, we will put particular focus on development related to services and solutions, mobility

modules, and next-generation energy including hydrogen. We have established the goal of increasing the net sales ratio of the aftermarket business to 40% by 2035. To achieve this goal, we will further refine the technologies for monitoring bearing condition in the area of services and solutions, and contribute to reducing equipment maintenance periods and improving productivity by monitoring customers’ production facilities in a timely manner. With regard to mobility modules, as we anticipate growth in the demand for ball screws, especially for next-generation brakes and vehicle vibration suppression systems, we will advance the development of module products that can be applied to these purposes. Considering that it is also vital to introduce artificial intelligence (AI) for the development of services and solutions as well as module products, we will also put effort into nurturing engineers in this field. In addition to clarifying the challenges with bearings and peripheral structures in relation to hydrogen and other forms of next-generation energy, which are indispensable for the realization of carbon neutrality, we will also work on accelerating development by establishing an in-house evaluation and testing facility.

In the area of human resources development, I believe that dialogues with R&D staff and diversity management are essential. To that end, I will conduct hearings on the thoughts and difficulties faced by R&D staff, share the challenges, and promote improvements toward the creation of rewarding and worker-friendly environments. As for diversity, we will further increase the number of female developers, create development themes from female perspectives, and collaborate with overseas R&D departments to work on joint development themes.

NTN’s goal is to realize a sustainable “NAMERAKA Society.” We aim to quickly provide markets with products that can contribute to this goal, and further, to contribute to the realization of carbon neutrality. Even a bearing can help to reduce CO<sub>2</sub> emissions by minimizing energy loss. While our efforts may appear modest, we will continue to engage in activities while keeping in mind our vision of developing and providing products that contribute to society.

# Research and Development

## R&D direction

The NTN Group has, to date, honed our expertise in functions such as new product planning, development, technologies, and manufacturing, through division of labor.

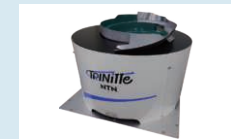
Since April this year, we have established a new organization, the Innovation & Business Development HQ, to serve as a one-stop center to cover all of these functions. By carrying out multiple processes simultaneously, we are working to strike a balance between accelerating development speed and building in our target quality, costs, and delivery timelines. Through this system, we aim to boost the development of new module products and system products, and push forward with commercialization.

### Accelerate development speed through a one-stop organization and incorporate advanced technology through external collaboration

- Accelerate product development by establishing the Innovation & Business Development HQ. in charge of ascertaining needs, product planning / development, and mass production
- Build in quality, cost and delivery through advanced manufacturing development linked to product development
- Rebuild ball screw technology and strengthen elemental technology development leading to new product creation
- Collaborate with NTN Next Generation Research Alliance Laboratory and external research institutes to discover and utilize advanced technology, and to develop human resources

### Strengthen development of new module products and system products

- Accelerate development and commercialization of mobility module products such as ball screws for electric brakes
- Accelerate product development and commercialization of robot-related module products to facilitate labor saving and carbon neutrality
- Create organizations to manage compliance with international standards for electrification, and develop human resources in fields such as electronic control development
- Expand green energy products business (NTN Green Power Stations, N<sup>3</sup> N-CUBE)



Feeder "TRINITTE" for Picking Robots



i-WRIST for visual inspection



Ball screw module for electric brakes

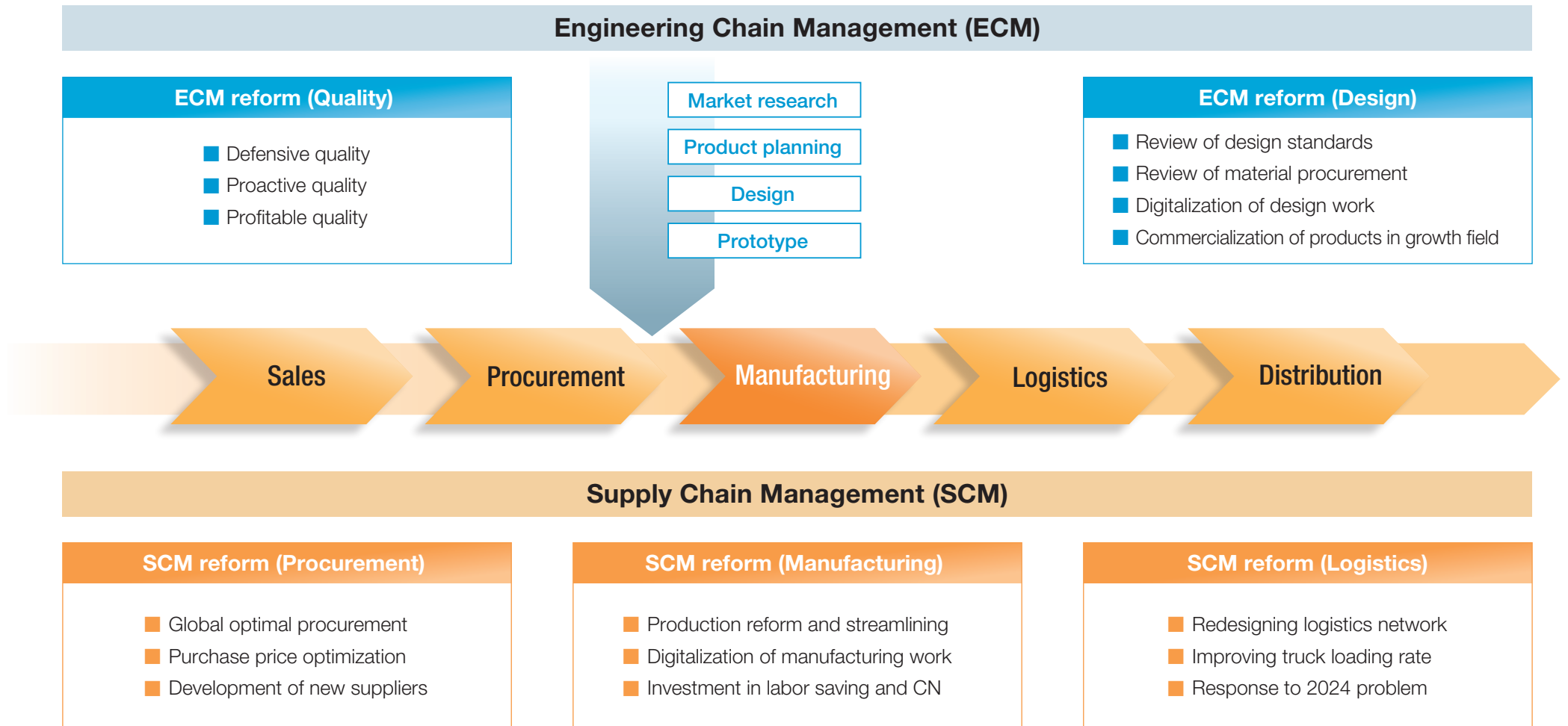


N<sup>3</sup> N-CUBE as an eco toilet

# Value Chain Reform

In addition to reforms that we have been focusing on to date in the SCM field, such as procurement and production, we will also promote reform across our entire value chain by expanding our targets to the areas of design and quality.

In the area of quality, we will develop and expand the quality management system for the NTN brand with regard to external procurement and outsourced products, which are expected to expand going forward. As for design, we will review our previous design concepts and approaches and promote manufacturing methods as well as parts and material procurement that help to reduce costs, while at the same time fulfilling the specifications required by our customers. By promoting these reforms across the entire value chain, we will support the aforementioned expansion of the aftermarket business and strengthening of the competitiveness of the OEM business.



# Transformation of Business Foundation- Generate Profits Utilizing Digital Technology

We aim to improve operational efficiency and reduce operational costs by strengthening the function of our revamped core systems in Japan, improving the data-driven environment, and using advanced digital technologies such as generative AI.

To accelerate these measures, we will put effort into developing human resources in the digital field and strengthening information security. Cyberattacks, in particular, pose a serious management risk, so we aim to boost information security from both the “hardware” and “software” aspects, including countermeasures within factories, for products, and across the entire supply chain, as well as educating employees.

## Basic policy of digital utilization

- Reduction in operational costs by enhancing the functionality of core systems
- Objective and rapid decision making by developing a data-driven environment
- Improvement of work efficiency and accuracy by utilization of advanced digital technology



Wakayama Works

### Sales and administration

- Integrate core systems globally
- Reduce lead time and costs based on data analysis
- Improve efficiency of prediction, search and documentation using AI

### Research and development

- Shorten development period by analysis system utilizing AI
- Expand abnormality detection services and condition monitoring through sensors

### Manufacturing and procurement

- Achieve automaton and labor saving in line work by expanding smart factory
- Improve productivity by smart device utilization

### Develop digital human resources

- Reskill employees to improve their digital literacy
- Secure and develop highly skilled digital human resources for utilization of advanced digital technology



### Enhance information security continuously

- Expand security measures within plants, on products and the entire supply chain
- Develop NTN-CSIRT globally and strengthen security education



# Human Resources Strategy

## Message from Executive Officer in charge of Human Resources



To realize prosperous human development, we are striving to foster an organizational culture of “enthusiasm” and building capacity

Executive Officer  
Deputy Corporate General Manager, Group Management HQ  
Human Resources Strategy Dept.  
Personnel Dept.  
General Affairs Dept.  
Legal Dept.

**Yasuhiro Kawabata**

### A personnel system that focuses on the individual

NTN Group has established “Prosperous human development” as an ESG issue. We aim to cultivate a corporate culture that enables our employees to “grow” and “work enthusiastically” through our business activities, as well as to nurture a diverse workforce that is motivated and satisfied by their work. “Work enthusiastically” is not something that is easily defined across the board. Everyone has their own priorities depending on the environment they are in and their age. We continue to strive to be a company where everyone can find their own passion for their work.

Traditionally, the company has taken the lead in forming the careers of their employees, but in future, we will look to enhance the system to enable staff to take stock of their own careers and realize their own destiny. Of course, no company can fulfill all dreams. In an environment of diverse workforce, employees will consider independently their careers and be daring. The company is there to support this. I believe that if we are to be an organization in which individuals can thrive, an essential element of our future human resources strategy must be encouraging individual autonomy and daring.

### Adoption of personnel system for managers based on work criteria

One of the six priority actions to achieve the Medium-term Management Plan starting this year is “Achieving independent growth and career autonomy.”

As a specific initiative, in April 2024 we changed the personnel system for managers from a system based on “human proficiency” criteria to a system based on “work” criteria. The concept for the system change is autonomous career formation. We are trying to eliminate seniority considerations from the personnel system and enhance the in-house recruitment system. Employees should think and decide for themselves about what they want to achieve through their work and how this can contribute to the company. This is a system that allows them to gain the necessary experience and knowledge. The result of encouraging individual autonomy and daring is the development of a system that empowers staff to realize their career dreams. I believe that the outcome will then be a virtuous cycle whereby the organization grows in parallel to the individual.

### Transforming our business structure is an opportunity to focus on improving personnel visualization and diversity

Under the previous Medium-term Management Plan, we took action to “secure stable human resources for sustained growth.” Concrete results included diversified hiring methods and the start of the “NTN Next Leader Program,” a selection-based course aiming to broaden the pool of leadership candidates and to develop talent early. Actions to increase engagement also continued with the employee engagement survey and based on the results, workplace improvement activities.

Meanwhile, one challenge in the future human resources strategy is “increasing diversity.” Looking to 2035, NTN Group is targeting aftermarket sales ratio of 40% under the business portfolio transformation strategy. To achieve the strategy, we must strengthen the ability of our organization to manage business portfolio transformation. The challenge will be to identify the personnel and technical capabilities needed for each business and organization, and the visualize the potential and qualifications of each individual employee, be it their skills or their career. As the business environment becomes ever less certain, we believe that combining the characteristics, viewpoints, knowledge, skills and experience of each and every one of us will strengthen our organization. Moreover, given that NTN Group has an inverted age pyramid structure dominated by men, the nascent Medium-term Management Plan will be focused on increasing diversity.

With the keywords of “comfort and prosperity,” NTN Group has ensured the importance of people in its business activities to date. While investing in human capital may not seem to directly lead to an increase in corporate value in the short term, without people, not only will we not be able to improve the value and quality of goods, our very business would become unviable. It is clear from our track record that investing in human resources and improving their capabilities will lead to the creation of new corporate value. Rather than looking at the balance between investment costs and results from a short-term view, we should do what is required in a timely manner to achieve our vision for the next five to ten years, leading to a sustainable increase in NTN Group’s corporate value.

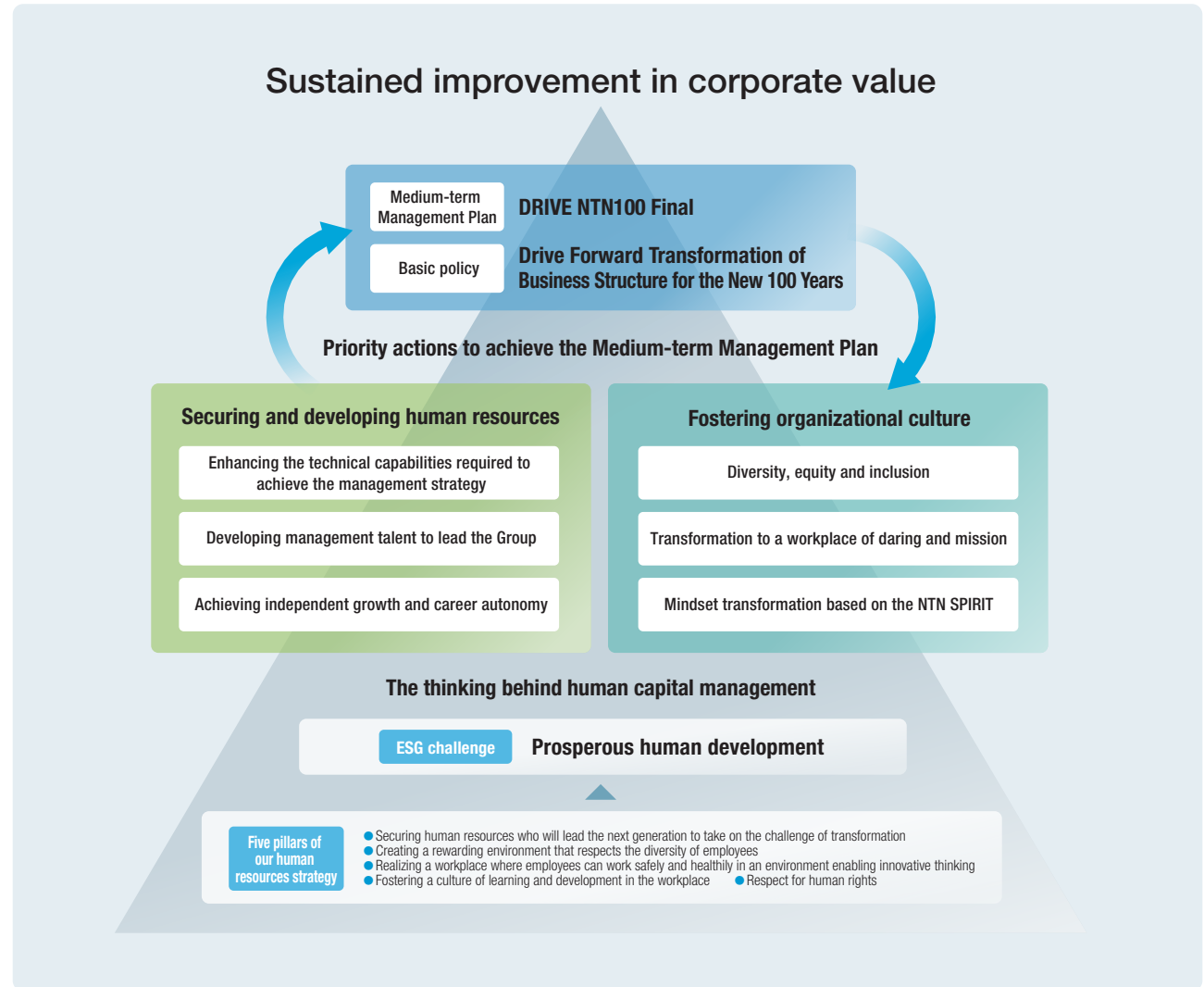
# Human Resources Strategy

## NTN's human resources strategy

NTN Group has established "Prosperous human development" as an ESG issue. We will cultivate a corporate culture that enables our employees to "grow" and "work enthusiastically" through our business activities, and we will sustainably increase our corporate value by developing our personnel systems and working environments to maximize and grow the value of our human capital. This is the practice of "human capital management," through which we intend to achieve "Prosperous human development" by fostering an organizational culture that works to resolve various societal issues and improve our economic, environmental and social value, as well as by nurturing a diverse workforce that is motivated and satisfied by their work.

The strategy for achieving "Prosperous human development" consists of five pillars: "Securing human resources who will lead the next generation to take on the challenge of transformation," "Creating a rewarding environment that respects the diversity of employees," "Fostering a culture of learning and development in the workplace," "Realizing a workplace where employees can work safely and healthily in an environment enabling innovative thinking" and "Respect for human rights."

As specific actions, we will support the change as intended by the "accelerated transformation to the business structure" policy under the Medium-term Management Plan. In order to achieve the optimal vision of the Group, the priorities of the human resources strategy have been developed from either the perspective of "Securing and developing human resources" or "Fostering organizational culture." The priorities are "Enhancing the technical capabilities required to achieve the management strategy," "Developing management talent to lead the Group," "Achieving independent growth and career autonomy," "Diversity, equity and inclusion," "Transformation to a workplace of daring and mission" and "Mindset transformation based on the NTN SPIRIT," and we are progressing work on each priority.



# Human Resources Strategy

## Priority actions

The priorities for action to achieve the Medium-term Management Plan, based on the five pillars of the human resources strategy, are as follows.

### Securing and developing human resources

#### Enhancing the technical capabilities required to achieve the management strategy

To transform our business structure (business portfolio transformation), drastic and proactive initiatives are vital, as are bold moves into new markets, so the organizational capabilities and human resources required to achieve the strategy are also changing. If we are to fulfil the Medium-term Management Plan policy of transforming the business structure and the strategy to achieve this, it is important to secure the necessary organizational capabilities. This is ongoing, with capacity building, assigning the right people to the right posts, and strengthening the recruiting structure, combined with securing more diverse external personnel.

As a specific initiative, in April 2024 we changed the personnel system for managers from a system based on human proficiency criteria to a system based on work criteria in order to promote the active participation of diverse human resources regardless of age and gender, as well as to support those who offer their expertise and uniqueness to contribute to the business. In the aim of promoting diverse talent and securing and developing professionals with a high level of technical expertise, we have also set up courses for each of these so that both management personnel (heads of organizations) who are responsible for running teams and personnel who hone their expertise in specific fields and areas can best succeed in their careers.

Looking ahead, by embedding this new human resources system and working to establish personnel system and structure enabling younger staff to improve their technical capabilities will gain us better organizational capacity, because

employees will be able to take steps to increase their technical capacity themselves and take on the challenge of entering new fields.

#### Developing management talent to lead the Group

In order to achieve our management plan in such uncertain times, it is vital that NTN Group methodically develop managers who can lead us forward. In addition to forming a talent pool of leadership candidates who can achieve results, with the top executive and the Personnel Department joining forces to develop these leaders, we are pursuing manager development from a long-term perspective by running a managerial development program for managers, including young business leaders.

As a specific initiative, our “NTN Next Leader Program” selects young managers and systematically teaches them a curriculum to imbue the necessary thinking and knowledge for business leadership.

In future, we will methodically develop management talent and rapidly appoint them to posts by defining the necessary skills and establishing an early selection system that applies to candidates from age 30.

#### Achieving independent growth and career autonomy

Through growth based on independent career plans and career development, and by supporting employees to fulfil their career plans, we can achieve sustained growth of both our employees and the organization.

As a specific initiative, in April 2024 we adopted a personnel system for managers based on work criteria. By thoroughly eliminating seniority considerations from our personnel management, promotions can be achieved by stepping up performance at work. We also overhauled our in-house recruitment system as a way for each employee to fulfil their vision for their career. In future, we will establish a system that

encourages the autonomy of each employee and enables them to realize their desired careers by bedding in the in-house recruitment system, enhancing measures to support career autonomy such as career training and career counseling, strengthening human resource development programs, and strengthening our understanding of employees’ career intentions through the self-reporting system, which will lead to the growth of our employees and the organization.

### Fostering organizational culture

#### Diversity, equity and inclusion

We are working toward “creating a rewarding environment that respects the diversity of employees” in which every individual can express their talents to the greatest extent possible. This is because our organization is made up people with diverse technical specialties and experience and by turning those differences into a strength, taking on diverse perspectives and theories, we can realize innovation and new value creation on a daily basis.

As a specific initiative, in order to recruit people with diverse technical specialties and experience, we are expanding our mid-career hiring. The ratio of mid-career hires was 6.7% in FY2021, growing to 21.3% in FY2023.

In future, mid-career recruitment will expand further. We will develop the conditions and the system for proactive hiring to responsible posts in Japan and abroad. We are working to create an environment where the characteristics and values of each employee are recognized and respected, where each employee can be adventurous and display the full extent of their talent.

# Human Resources Strategy

## Transformation to a workplace of daring and mission

Under difficult conditions, maintaining or improving our competitive advantage requires the creation of even more unique value. Rather than resting on the laurels of past successes or relying on precedent, we believe it is vital to create a workplace culture that empowers a brave attitude informed by constant new ideas.

As a specific initiative, we have boosted incentives for reaching necessary targets. This has been done by fostering motivation - incorporating challenging targets and timely follow-up in the target management system - under the new

management personnel system, as well as by adjusting the mechanism for performance evaluation and benefits.

In future, we will become an organization that rewards daring and initiative to motivate employees, by ensuring a new target management system and evaluation system, as well as by developing new mechanisms for managing corporate performance and performance evaluation.

## Mindset transformation based on the NTN SPIRIT

To achieve the long-term strategy, we have to lure exceptional talent and for this, fostering a company culture of strong

engagement is very important.

By sharing “the NTN SPIRIT” with all employees that clearly states the mindset and actions to be pursued, the vision for the company, what it exists for, employees can find more meaning in their work. This increases the number of employees thinking for themselves and taking the initiative. Creating serious attempts for transformation in this way will not only lead to increased corporate value, but also the growth of employees, a sense of unity in the organization and lead to increased engagement.

As a specific initiative, town hall meetings are held on a regular basis to align the mission of the company and the value of its existence with the personal values of employees through employee-management dialogue. A staff engagement survey is also conducted to monitor the situation of employees and the workplace, identify any issues, with a view to improving the workplace and personnel measures.

In future, we will listen to the views of employees through means such as workplace improvement activities based on the results of the staff engagement survey. Employees will be proud to work for NTN and we will boost motivation and engagement by ensuring our corporate philosophy reaches all corners of the company. Further, to progress these priority actions to achieve the Medium-term Management Plan, it is essential that employees’ mental and physical health and safety is protected. We aim to “Realize a workplace where employees can work safely and healthily in an environment enabling innovative thinking,” based on the basic stance that the health and safety of NTN Group employees is the most important value of all to be respected in all business activities, as the basis of our business.

Please see the NTN Group sustainability website for specific initiatives related to our human resources strategy.



<https://www.ntnglobal.com/en/csr/sc/employee.html>

	Priority actions to achieve the Medium-term Management Plan	Indicator	Actual results (FY2023)	Target	Vision
Securing and developing human resources	Enhancing the technical capabilities required to achieve the management strategy	● No. of expert course participants	6	—*	Gaining organizational capacity by securing highly expert employees
	Developing management talent to lead the Group	● No. of succession plan candidates	24	30 FY2026	Methodical development of management talent from a younger age and prompt appointment to posts
	Achieving independent growth and career autonomy	● Training hours per employee ● Training expenditure per employee	11.9 hours/year 19,180 yen/year	Year-on-year growth	Sustained growth of both employees and the organization through individual autonomy of employees
Fostering organizational culture	Diversity, equity and inclusion	● Percentage of female managers	4.5%	5% FY2026	An organization in which the differing characteristics and values of each employee are recognized and respected, and where each employee can display the full extent of their talent
		● Childcare leave acquisition rate for male employees	62%	100% FY2026	
		● Percentage of mid-career hires	21.3%	30% FY2026	
	Transformation to a workplace of bravery and mission	● Employment rate of persons with disabilities	2.57% <small>(legal minimum employment rate 2.3%)</small>	At least at level of the statutory employment rate at the time	
		● Scores related to “challenge” and “transformation” in Employee Engagement Surveys	40-70% positive response rate for each question	80% positive response rate for each question FY2026	
Mindset transformation based on the NTN SPIRIT	● Scores related to “corporate philosophy” and “collaboration” in Employee Engagement Surveys	20-60% positive response rate for each question	80% positive response rate for each question FY2026	An organization in which employees are proud to work for NTN, motivated and engaged	

\*As this measure has only recently been adopted, the target is to be established in due course.

# Strengthening communication with employees: Holding town hall meetings

In FY2023, President Ukai and the Executive Officers visited the divisions they are responsible for in order to deepen communication. To this end, they listened first-hand to the opinions, requests, and problems of employees working at the respective domestic and overseas business sites, and also explained the company's vision and the efforts being put forth to achieve it. We have continued this initiative both in Japan and overseas in FY2024.



Europe & Africa region



China

- Business sites in Europe, Americas, China, South Korea, India, and ASEAN

25 locations, 779 people



Americas



India

- Japan: Head office and various engineering, manufacturing, and sales sites

42 locations, 2,308 people



ASEAN



South Korea



## Strengthening communication with employees: Holding town hall meetings

### Contents of dialogues at the town hall meetings (excerpt)

#### Theme: Future approach to business



What are the differences between NTN and the European companies with the top share in the bearing market? What should we do to close this gap?

##### Response from the Executive Officers

The top companies have changed course with the aim of shifting away from being OEM-oriented to becoming the price leader in the aftermarket. Although they have similar product technology and quality as NTN, they take a different approach to business. It is also important for us to practice "NTN Driven," which is the approach of proactively enhancing corporate value while responding to the needs of our customers.

📖 P.9 New Medium-term Management Plan

#### Theme: Transformation of portfolio



The policy is to focus on the aftermarket, but how will we make the shift away from the previous OEM-oriented approach?

##### Response from the Executive Officers

While placing emphasis on OEM projects that generate profits, we are considering how to expand sales for the aftermarket, including creating a system. We hope to tap into everyone's knowledge, and with your support, push forward to achieve an aftermarket ratio of 40% in FY2035.

📖 P.9 New Medium-term Management Plan

#### Theme: Direction of new businesses



NTN has achieved growth to date through the bearing business. Specifically, what are some of the new businesses that can allow our company to make the most of our strengths going forward?

##### Response from the Executive Officers

We will accelerate our response to the electrification of vehicles, such as the enhancement of ball screw technology, while leveraging the bearing technology that we have built up over more than 100 years. With the world moving toward carbon neutrality, we believe that our hydrogen-related technologies can also be applied to the development of hydrogen as an alternative fuel, a trend that is currently drawing much attention.

📖 P.41 Research and Development

#### Theme: Human resources strategy



We face the challenges of an aging workforce and labor shortage. Please tell us about the company's human resources strategy for the medium- to long-term.

##### Response from the Executive Officers

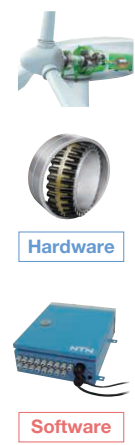




We believe that "the company is its people". The workplace offers opportunity for personal growth, so it is important for a company to support its employees to achieve such growth. We consider personnel affairs based on respect for the values and individuality of every person. Starting this year, we have also made changes to the personnel system for employees in managerial positions and above. We aim to pursue a human resources strategy that is fitting for the era that we live in.

📖 P.45 Human Resources Strategy

# Roadmap for realizing a “NAMERAKA Society”

In December 2021, we formulated a roadmap for realizing a “NAMERAKA Society” as an overview of our management to ensure that our Group continues to grow as a company that contributes to society. The roadmap shows the Group’s approach to materiality, envisioning the period from the 2020s to the 2050s.

## Contribution to solving social issues toward the future we aim for

ESG Issues	Environment					Social		
	Realize carbon neutrality	Contribute to carbon-free society			Contribute to prosperous lives			
Materiality	Respond to climate change	Realize a sustainable society using natural energy	Reduce energy loss			Provide safety and comfort		
Initiatives	Reduce CO <sub>2</sub> emissions in business activities	Contribute to spread of wind turbine and hydrogen society	Save energy for EVs and electrification (core products)	Save energy for EVs and electrification (new areas)	Increase efficiency of manufacturing equipment	Bearing refurbish business	Robot-related	Disaster mitigation and disaster prevention
2020s	<p>Visualize and improve electric power at production plants</p> <p>Promote the introduction of natural energy generation and purchase of renewable electricity</p> <p>Introduce internal carbon pricing</p>	<p>Contribute to the spread of wind turbine use with hardware and software</p>  <p>Hardware</p> <p>Software</p>	<p>Propose CO<sub>2</sub> reduction by high efficiency and low friction of core products (CVT, hub bearing, and bearing)</p>  <p>Driveshaft that transmits driving force</p> <p>Hub bearing that supports the wheel</p>	<p>Propose CO<sub>2</sub> reduction by multi-functional</p>  <p>eHUB</p> <p>Contribute to fuel efficiency of HV such as drive assist and power regeneration during deceleration</p> <p>sHUB</p> <p>Contribute to stable vehicle driving and improved fuel efficiency Adaptation to avoidance behavior of self-driving cars</p>	<p>Contribute to reducing wasteful electricity consumption</p>  <p>Talking bearing</p> <p>Wi-Fi</p> <p>NTN Portable Vibroscope</p> <p>Condition Monitoring System</p>	<p>Contribute to reducing CO<sub>2</sub> emissions in the</p>  <p>Extra-large bearing for paper mill application</p> <p>Spindle for machine tool</p>	<p>Establish robot-related modules to compensate for labor shortage due to the declining working-age population</p>  <p>Wrist joint module i-WRIST</p> <p>Visual inspection</p>	<p>Provide independent power supply equipment that contributes to the preparation for natural disasters</p>  <p>Green Power Station</p> <p>N³ N-CUBE</p>
2030s	<p>Scope1 and 2</p> <p>★FY2030</p> <p>▲50%</p> <p>(compared to FY2018)</p>							

Scope1 and 2

★FY2035  
Carbon  
neutrality

Scope3

★FY2050  
Carbon  
neutrality

Contribute to hydrogen society



Product realization of further  
environment-contributing products



module products utilizing core technology



by increasing the operating rate of manufacturing facilities through IoT and sensing



entire supply chain by reusing used bearing



Propose solutions for automation, efficiency, and labor saving at production sites

Realization of a “NAMERAKA Society”

Foundation to support ESG management

ESG issues	Environment / Environmental protection	Social / Sustainable supply chain	Social / Prosperous human development	Governance
Materiality	Resource recycling and pollution prevention 	Improve the reliability of products and services (Quality assurance and stable supply) 	Promote safety and health 	Thorough compliance 
		Procurement activities with an emphasis on environment and society 	Respect for human rights 	Promote diversity 

# NTN's Goal of a Carbon-neutral Society

## Environment-contributing product

### Development of environment-contributing product

We continue unwavering efforts to realize its corporate philosophy by developing and providing higher-grade products that contribute to the environment while quantifying the degree of environmental contribution of our main products, such as bearings and drive shafts, and green energy products.

### Definition of environment-contributing product

#### Classification and grades of NTN products and their definition

Using products with a performance level around the level in 1997 as our benchmark, NTN classifies environment-contributing products in five grades from S- to D-eco, based on environmental factor standards that are prescribed for each product.

Classification	Grade	Definition
Environment-contributing product	● S-eco(Super eco)*	Products are classified according to environmental factor standards specified for different products in line with technology standards across the world.
	● A-eco(Advanced eco)	
	● B-eco(Brilliant eco)	
	● C-eco(Creative eco)	
	● D-eco(Diffused eco)	Products that help to reduce energy loss of finished products at the same performance level as that of around 1997

\*Green energy products fall under the S-eco category.

#### Calculation methods for environmental factors and eco-efficiency

To quantify products' environmental friendliness, NTN adopted environmental factors and eco-efficiency that are defined in formula ① and ② as follows.

$$\text{Environmental factors} = \frac{\text{Eco-efficiency of developed products}}{\text{Eco-efficiency of benchmark products}^1} \dots \textcircled{1}$$

$$\text{Eco-efficiency} = \frac{\text{Product value}^2}{\text{Environmental impact}^3} \dots \textcircled{2}$$

\*1 D-eco product (Products that help to reduce energy loss of finished products at the same performance level as that of around 1997)

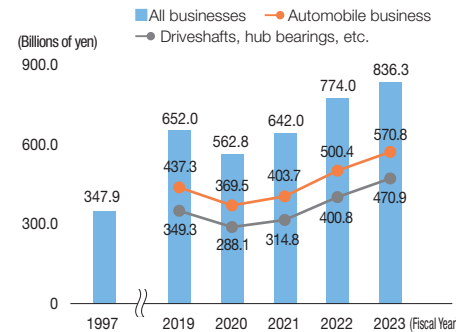
\*2 Values are quantified by using the QFD method (including CO<sub>2</sub> reduction contribution of finished products)

\*3 From the perspective of evaluating contribution toward measures against climate change, environmental impact is calculated as CO<sub>2</sub> emissions generated throughout the process of raw materials mining to production (using the LCI calculation tool by the Japan Auto Parts Industries Association)

### Trend in achievements and forecasts

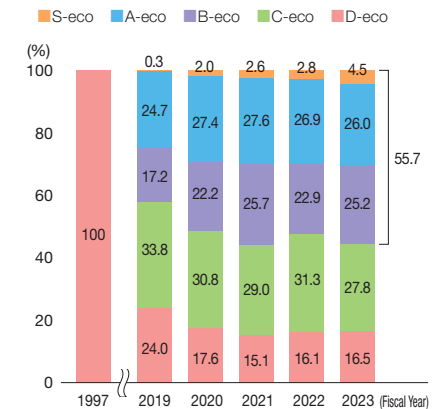
Driveshafts and hub bearings, which are NTN's flagship products that account for approximately 50% of our net sales, as well as green energy products, contributed to CO<sub>2</sub> reduction of 1,613 thousand tons in FY2023. Sales of environment-contributing products ranked from S- to B-eco grades, which are the results of our development efforts in recent years, accounted for 55.7% of total net sales in FY2023.

#### Trend in net sales\*

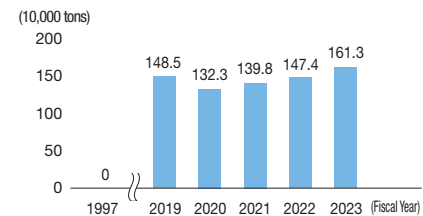


\*In FY2019, royalties are included in net sales for all businesses only.

#### Trend in composition of environment-contributing products by grade (driveshafts and hub bearings)



#### Contribution to CO<sub>2</sub> reduction\*



Calculation standard  
JAPIA LCI Calculation Guidelines by Japan Auto Parts Industries Association  
(Consumer Use-phase LCI calculation tool)

\*Applicable to S to C-eco products

# NTN's Goal of a Carbon-neutral Society

## Carbon neutrality

### Carbon neutrality roadmap

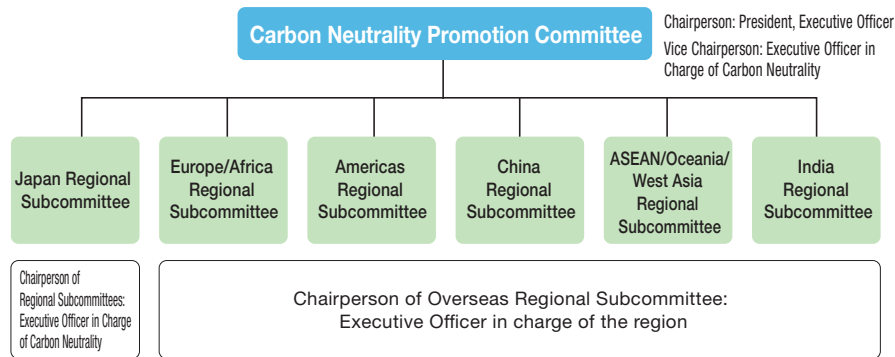
The NTN Group has set a goal to achieve carbon neutrality across the entire supply chain by the fiscal year 2050, in order to mitigate climate change and ensure the continuity and growth of our business. To achieve this goal, we are first focusing on reducing CO<sub>2</sub> emissions within our group, with plans to gradually decarbonize by the target years of 2030 and 2035.

We have developed a Carbon Neutral Roadmap, which serves as an indicator for our carbon neutrality activities, and we are monitoring our progress based on this roadmap.

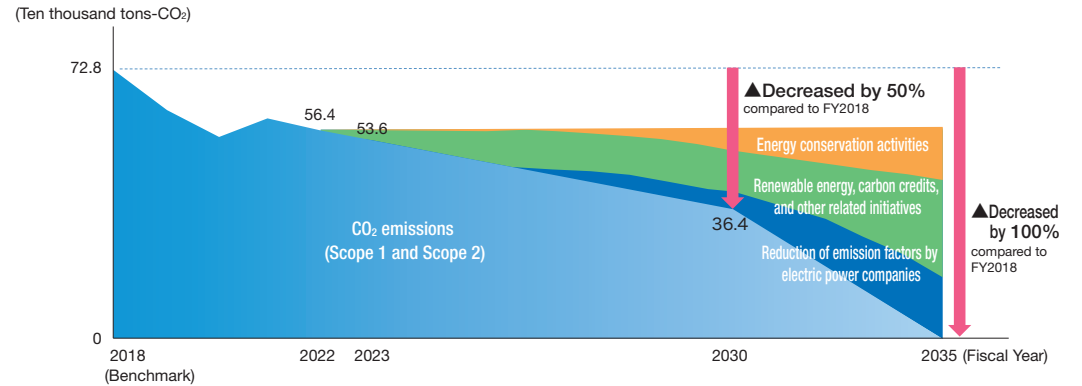
\*The NTN Group calculates and reports only CO<sub>2</sub> emissions from energy sources among the GHG emissions.

### Promotion system

We have established a system to promote carbon neutrality activities globally. In April 2023, we launched the Carbon Neutral Strategy Promotion Department. By July, we set up the Carbon Neutral Promotion Committee and regional subcommittees composed of members from various global regions, thereby establishing a global promotion system.



### NTN global CO<sub>2</sub> emission reduction roadmap (by reduction activity)



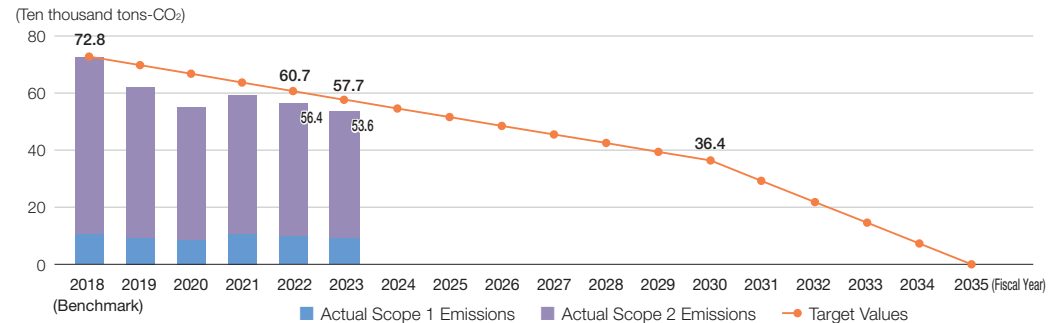
### Emission reduction achievements

We aim to reduce CO<sub>2</sub> emissions (Scope 1 and Scope 2) by 50% compared to the fiscal year 2018 by the fiscal year 2030, and to achieve carbon neutrality by the fiscal year 2035.

The results for the fiscal year 2023 are as follows: Scope 1: 90,943 tons (Japan: 50,591 tons, overseas: 40,352 tons), Scope 2: 445,425 tons (Japan: 219,669 tons, overseas: 225,756 tons).

For Scope 2, emissions for Japanese sites are calculated using the market-based method, while emissions for overseas sites are calculated using the location-based method.

### CO<sub>2</sub> emissions (Scope 1 and Scope 2)



# NTN's Goal of a Carbon-neutral Society

## Operation of internal carbon pricing (ICP) system

ICP is a mechanism necessary to achieve carbon neutrality, and it has been introduced as an investment decision indicator for selecting economically efficient and low CO<sub>2</sub> emission equipment since April 1, 2023.

## Participation in the GX League

In line with the direction of our carbon neutrality activities, we are participating in the "GX League Basic Concept" led by the Ministry of Economy, Trade and Industry. This participation will accelerate our activities and, through collaboration with other participating companies and organizations, contribute to the decarbonization of society as a whole and the creation of new economic growth opportunities.



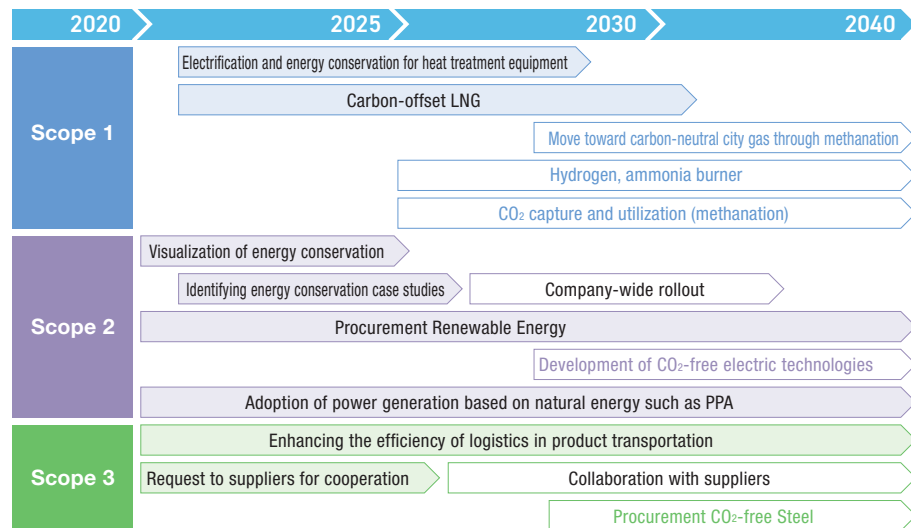
## Sustainability linked loan

To accelerate our efforts towards achieving a sustainable society through financing linked to sustainability activities, we signed a Sustainability-linked Loan agreement with Norinchukin Bank, Meiji Yasuda Life Insurance Company, and The Chugoku Bank, Ltd. in the fiscal year 2023.

## Reduction measures for each scope

The roadmap provides an overview of the initiatives for reducing emissions under each scope. Alongside with promoting the activities for improving CO<sub>2</sub> emission reductions internally, such as electrification, energy conservation, and adoption of power generation based on natural energy, we will also accelerate activities in partnership with external organizations.

### Promote our own initiatives while accelerating activities through external collaboration



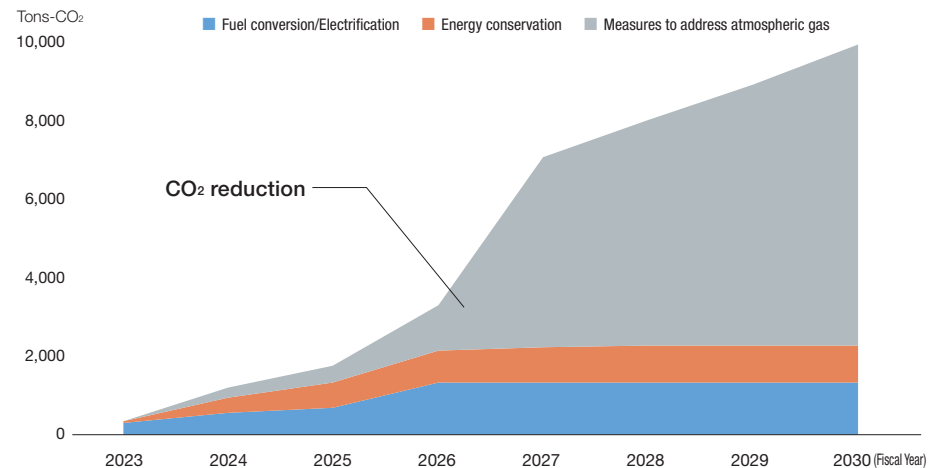
\*Shaded items are in progress, and items shown in colored fonts are initiatives by external organizations

## Scope 1

### Energy-saving measures for heat treatment equipment

To reduce CO<sub>2</sub> emissions from heat treatment facilities, we are promoting three measures: fuel conversion and electrification, energy conservation, and atmospheric gas control. All newly introduced heat treatment furnaces since 2017 are electric furnaces. Additionally, high-efficiency insulation materials have been introduced to minimize heat loss from the outer walls of the heat treatment furnaces, thereby reducing fuel consumption. Furthermore, we are reducing CO<sub>2</sub> emissions through atmospheric gas countermeasures in furnaces dedicated to ordinary quenching.

#### Overview of Initiatives for Heat Treatment Equipment (Japan)



# NTN's Goal of a Carbon-neutral Society

## Scope 2

### Visualization of electricity in production plants, and improvements to energy conservation

We are visualizing the electricity used in processing within manufacturing blocks and lines, prioritizing and promoting energy-saving measures. Relevant departments are participating in the consideration of specifications for a system to visualize electricity and air consumption at the manufacturing block level in each factory, as well as the factory's internal network. Effective energy-saving measures are being databased and deployed to Japan and overseas sites.

### Energy visualization system (development concept)



## Scope 3

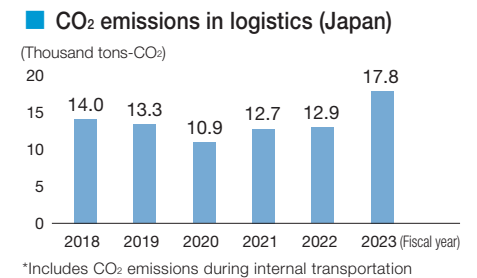
### Partnership with suppliers, and enhancing logistical efficiency

We have set a goal to achieve carbon neutrality, including supply chain emissions, by the fiscal year 2050. To achieve this goal, it is essential to procure CO<sub>2</sub>-free steel, involve suppliers in carbon neutrality activities, and reduce CO<sub>2</sub> emissions during product transportation.

Therefore, we are advancing the collection and consideration of procurement-related information, promoting activities for collaboration with suppliers on carbon neutrality initiatives, and improving logistics efficiency.

### Specific initiatives for collaboration with suppliers and logistics optimization

- Procurement of CO<sub>2</sub>-free steel materials
  - Gathering information and promoting reviews
- Requesting suppliers to work toward carbon neutrality
  - Sharing the background behind our efforts to achieve carbon neutrality as well as our targets
  - Introducing examples of energy conservation practices
  - Planned regular surveys on CO<sub>2</sub> emissions data and the status of energy conservation initiatives
- Enhancing efficiency during product transportation
  - Reducing transportation distances by optimizing distribution routes
  - Enhancing loading efficiency by expanding the use of modular packaging
  - Reducing the number of containers by increasing loading ratio on export containers
  - Reuse and recycling (repair) of wooden pallets



Please see the NTN Group sustainability website for information aligned with the TCFD (Task Force on Climate-related Financial Disclosures).

<https://www.ntnglobal.com/en/csr/tcf.html>



Please see the NTN Group sustainability website for specific initiatives related to our response to climate change.

<https://www.ntnglobal.com/en/csr/idea/carbon-neutrality.html>

# Respect for Human Rights

## Basic approach to human rights

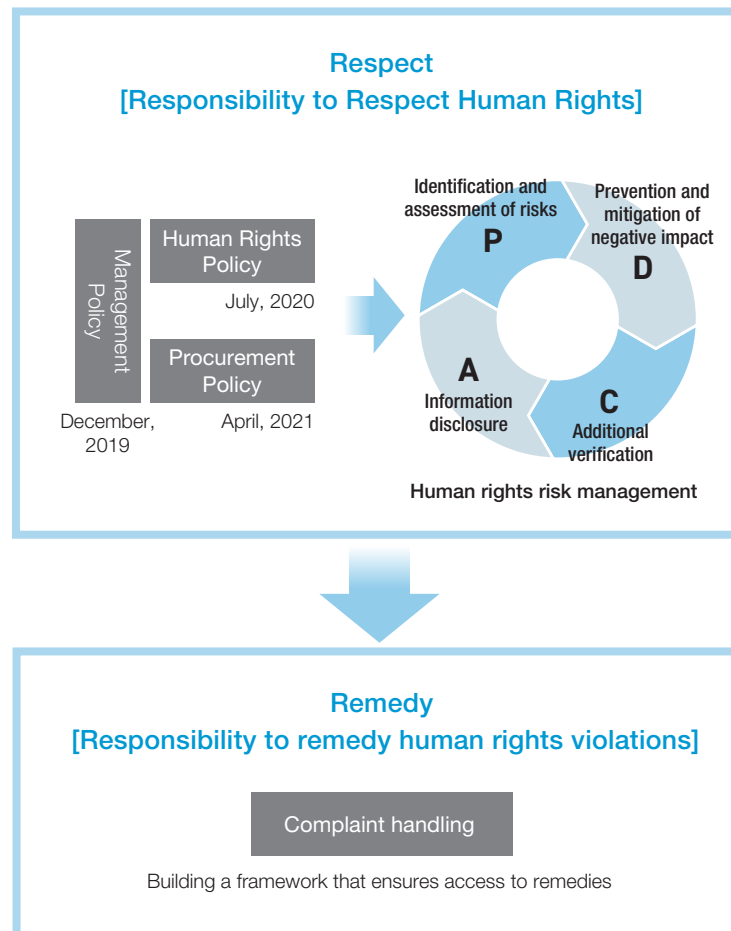
The Group believes that in order to contribute to a sustainable society and continue to be a “company needed by society,” it is essential to fulfill our corporate responsibilities relating to respect for human rights and to earn the trust of society. Accordingly, we have included “respect for human rights” in our Management Policy. In addition, we have established a Human Rights Policy, which stipulates that we will not violate any form of human rights. We are also committed to awareness-raising activities related to respect for human rights and work environment development so that varied employees of the Group can all work safely and comfortably.

## Human rights due diligence

Based on the two perspectives of “respect” and “remedy” set forth in the United Nations Guiding Principles on Business and Human Rights, The NTN Group prioritizes “responding to human rights risks in employees,” “responding to human rights risks in the supply chain,” and “building a framework that ensures access to remedy.” In order to ascertain the actual situation about negative human rights impacts, such as forced labor, child labor and abuse of employees’ freedom and rights, in our business activities, we conducted a human rights questionnaire for our 44 overseas affiliates and received answers from all of them. As a result of the questionnaire analysis in FY2023, we conclude that the possibility of risk occurrence is low, as most of the overseas affiliates have the policy and framework for protecting human rights and non-occurrence of incidents related to human rights violation was answered. On the contrary, around one fourth of affiliates answered that training about the human rights and confirming the status of human rights measures with their business partners were not conducted. As we recognize those two factors could lead to risk occurrence, we will work to improve those items. We will continue to conduct this questionnaire periodically and engage in human rights due diligence while identifying and resolving issues.

## Overview of human rights due diligence

United Nations Guiding Principles on Business and Human Rights



# Respect for Human Rights

## Human Rights Policy

In order to further promote human rights initiatives, a Human Rights Policy was established by resolution of the Board of Directors. It is a common set of values related to human rights shared by all Group employees that serves as the touchstone for day-to-day behaviors and business activities, as we seek to ensure that human rights are respected.

Based on the Human Rights Policy, we will take action on human rights issues – action that is becoming increasingly standardized globally as exemplified by the Sustainable Development Goals (SDGs) and the UK’s Modern Slavery Act - and fulfill our corporate responsibility for respecting human rights.

### Outline of the Human Rights Policy

1. Respect internationally-recognized human rights.
2. Do not violate the human rights of others.
3. Respond appropriately to any negative impacts that business activities may have on human rights.

## Respond to human rights risks in employees

### Sound workplace relations based on labor-management discussions

Establishing a forum where labor and management can share information with each other, NTN Group strives to share the content of each measure. Quarterly “Labor-Management Roundtable Meetings” are held in which executives provide thorough explanations about business operations and strategies, the business environment and other topics to the labor union and listen to the views of labor. In addition, labor-management committee meetings are held whenever appropriate regarding actions leading to improved employee motivation and ease of work. In very intense exchanges of opinion, the committee decides on ways to improve working conditions so that NTN Group remains an attractive place to work.

## Survey of foreign workers

We monitor the working condition of foreign workers in our group and have a system in place to enable quick response as necessary.

## Respond to human rights risks in the supply chain

### Correspond to forced labor and child labor (conflict minerals survey)

Profits from the mining of tin, tantalum, tungsten and gold (3TG) in conflict zones of the Democratic Republic of the Congo (DRC) and neighboring countries could be a source of capital for armed forces, leading to human rights abuses, illegal mining and smuggling.

In April 2016, we established our CSR Procurement Guidelines, upholding the policy of “Responsible mineral procurement,” to continuously monitor whether the raw minerals contained in the materials and components used in our products are mined from conflict zones or high-risk areas. In FY2023, we traced back up our supply chain of 226 business partners to identify the smelters, and more than 97% of those partners reported that they do not use any conflict minerals. We will continue to conduct this survey on a regular basis.

Companies listed on US stock exchanges are required to disclose any use of conflict minerals under the US Dodd-Frank Act. While NTN Group is not subject to the Dodd-Frank Act, we reply to inquiries from our customers regarding conflict minerals based on the results of the above survey, which aligns with the spirit of the Act.

# Stakeholder Dialogue

## 10th Stakeholder Dialogue

To reflect the opinions of our stakeholders in our corporate activities, NTN has been holding dialogues with academics and experts in various fields of sustainability since 2015. The 10th Dialogue was held in June this fiscal year.

“Disseminating Sustainability Information” and “Human Capital Management” were set as the themes for this Dialogue. Sysmex Corporation (hereafter, “Sysmex”), which participated as a member of the expert panel, has positioned human capital as the source of corporate value creation in its Long-term Corporate Strategy starting from FY2023, based on its corporate philosophy of “ensuring anshin” for stakeholders. Sysmex was invited to this Dialogue as it operates its business with a view to becoming a sustainable company that creates both social and economic values, and therefore offers much that NTN can learn from.

### Themes of the Dialogue

Theme 1 Disseminating Sustainability Information

Theme 2 Human Capital Management

### Experts

\*Titles omitted



**Katsuhiko Kokubu**

Professor, Graduate School of Business Administration, Kobe University



**Kyoko Kozuma**

Professor, Faculty of Business and Commerce, Kansai University



**Arisa Matsui**

Director, Human Resources Development, Human Resources, Sysmex Corporation



**Eriko Nashioka  
(Facilitator)**

Representative Director, Institute for Environmental Management Accounting, CPA.

### NTN

- Shumpei Kinoshita** Executive Officer, Deputy Corporate General Manager, Group Management Headquarters/Corporate Strategy Department/ESG Promotion Department/Carbon Neutrality Strategy Promotion Department/Internal Control Department
- Koji Takahashi** Executive Officer, Deputy Corporate General Manager, Group Management Headquarters/Corporate Communications Department/ICT Strategy Department
- Takashi Nishigaito** Manager, Corporate Strategy Department, Group Management Headquarters
- Tatsuo Nagao** Manager, Corporate Communications Department, Group Management Headquarters
- Tomohito Hayashi** Manager, Human Resources Strategy Department, Group Management Headquarters
- Tomoko Tanaka** Manager, Internal Control Department
- Tetsuya Ishimoto** Manager, ESG Promotion Department, Group Management Headquarters

\*The affiliation and titles of the attendees were current at the time of the Dialogue.



# Stakeholder Dialogue

## Theme 1 : Disseminating Sustainability Information

**Nashioka** I would like to ask for your opinions on the disclosure of sustainability information and the associated assurance issues. Professor Kokubu will first give us a general overview, followed by comments from Professor Kozuma on disclosure and assurance for Europe.

**Kokubu** With regard to the disclosure of ESG-related information, I would like to focus on how Japanese companies should respond. I believe that the greatest problem currently is that reporting standards have been established even when no activities are being implemented.

The same problem exists with regard to materiality. To begin with, the analysis of materiality was introduced for the purpose of using it as a criterion for selecting themes in the disclosure of information on CSR and the environment. Currently, however, companies become concerned if they have overlooked any important matters, and therefore misunderstand that they must include as many items as possible in their materiality.

A typical example of that is the disclosure of information on “financial impact.” Discussions had originally focused on the possibility of asset impairment when companies with a large amount of fossil fuel assets could no longer use them. However, when it comes to the issue of CO<sub>2</sub> emissions, most companies feel that it is acceptable not to disclose emissions if they are financially insignificant, even if there is a slight impact on the company’s finances. However, with the tightening of regulations, disclosing financial impacts based on assumptions that are not actually occurring in reality could be misleading rather than useful to decision makers.

Scope 3 emissions is a very problematic requirement for information disclosure. In many cases, categories 1 and 11 account for a large proportion of the emissions; in NTN’s case, however, the majority comes from parts procurement (category 1). Even so, the only way to estimate the CO<sub>2</sub> emissions of suppliers is to multiply the amount procured by the emission factor. In that case, the only way to reduce emissions is to reduce the amount procured. Meanwhile, some automotive manufacturers have adopted a method of accumulating the CO<sub>2</sub> emissions of their subsidiaries. This not only raises the question of whether it is possible to carry out the calculations accurately; even if such emissions can be calculated, no one really knows

how they should utilize such information.

In the face of this problem, both the ISSB (International Sustainability Standards Board) and SSBJ (Sustainability Standards Board of Japan) require the disclosure of Scope 3 information. While there may be some significance in calculating it internally to provide an overview of the entire supply chain, I do not think there is that much meaning to reporting it annually in financial reports. However, I believe that the “amount of contribution to avoided emissions” advocated by Keidanren (Japan Business Federation) and others is a meaningful indicator as it allows companies to gain an understanding of their actual contribution to reducing emissions.

I think that it is essentially impossible to provide third-party assurance for the analysis of materiality. Financial materiality can be assured, but when it comes to the environment and society, there are no standards for evaluating the degree of the underlying impact, such as “how many tons of CO<sub>2</sub> emissions are acceptable.” The result of addressing only CO<sub>2</sub> emissions may also give rise to the detrimental effect of the deterioration of other aspects of the environment. In theory, assurance of materiality for sustainability is no more than an assurance of the process. It is a mistake to think of it in the same way as assurance for accounting. In this sense, it is necessary to be cautious when responding to and addressing it.

**Kozuma** As a prerequisite for complying with the EU’s Corporate Sustainability Reporting Directive (CSRD), all sustainability information must be prepared on a consolidated basis. Moreover, the reporting scope basically covers the value chain. The same applies to Scope 3, and if there are difficulties in collecting data on value chain performance, disclosure must be carried out using indirect data.

NTN’s materiality evaluation uses the Global Reporting Initiative (GRI) standards as a reference, and the evaluation criteria are “expectations from society” and “relevance to the Company’s business.” The GRI standards start with “the impact the company has on the environment and society,” and evaluates actual and potential risks based on the likelihood of occurrence and severity (= how serious it is). “Severity” is assessed based on three criteria: scale, scope, and irremediable character.

In evaluating materiality, it is probably a good idea to draw up a risk map based on the value chain. However, the value chain in sustainability reporting is different from the Company’s value chain under its corporate strategy, described in NTN’s integrated

report; the former requires risk assessment and prioritization that includes direct and indirect business partners. In addition, materiality evaluation is carried out using the due diligence (DD) process. In CSRD, it is also necessary to disclose the DD process that was implemented.

Therefore, it would be a good idea to draw up a materiality evaluation map, identify where in the value chain adverse effects occur, and address and disclose management issues starting from the items with the highest priority. Furthermore, if the company obtains assurance based on the application of ISSA5000 in the future, it will need to disclose information in accordance with the standard, rather than by referring to the standard.

With regard to the medium of information disclosure, reviews are ongoing about gradually mandating the disclosure of sustainability information in security reports, using the Japanese version of ISSB’s IFRS S1 and S2 as the standard for market capitalization for prime listed companies. How about starting by considering disclosure in securities reports?

**Kokubu** Disclosure of the DD process may be necessary in some cases, but in NTN’s case, I do not think we can say that there is materiality in most cases. There may be some parts where individual issues have an impact on the environment, but if the overall impact is low, I do not think we can say that such issues are important.

As I have explained at the beginning, given that most companies hold a misperception about information disclosure, we face the difficult problem of what should be done. However, I believe that we should think about how to prevent information disclosure from becoming a mere formality.

**NTN** Having heard from Professor Kokubu and Professor Kozuma, we now understand the importance of ascertaining the need for disclosure and its scope, and that priority should be placed on establishing a system that sets its sights on the goals of disclosure.

# Stakeholder Dialogue

## Theme 2: Human Capital Management

**Kozuma** Allow me to raise a question before we begin the discussions. With regard to governance, does NTN implement initiatives that link human capital issues with officers' remuneration, for example?

**NTN** The goal management sheet for officers, which was introduced in a standardized format in FY2022, includes ESG-related targets. The sheet for FY2024 incorporates a requirement for all Executive Officers to work on diversity, beyond the constraints of their scope of responsibility, under the direction of the President. The degree of achievement against the goals is evaluated by the Compensation Committee at the end of the fiscal year, and is reflected in the remuneration for officers.

**Nashioka** Is Sysmex working on linking ESG targets with officers' remuneration?

**Matsui** ESG targets have not yet been linked to officers' remuneration. We are currently planning changes to the compensation system for officers, and we are reviewing how to link the evaluation of ESG items to remuneration as a part of these changes.

**NTN** We have heard that Sysmex has set value-added productivity as a KPI. Were there any discussions when deciding on the method for calculating value-added productivity?

**Matsui** There was much discussion about how to measure the return on investment in people. While qualitative indicators such as engagement were an option, we eventually agreed to use a unique indicator called "value-added productivity" to better visualize the impact on management.

**NTN** It is wonderful that Sysmex has established a system for quantitatively monitoring the organization, and allowing the Human Resources Department to intervene immediately when there are problems. Has the company built a global human resources database?

**Matsui** Construction of the platform has mostly been completed. Since personal information must be handled with care, we are working to establish a Group-wide data governance committee and launch a system to monitor operations based on rules. Monitoring an organization involves the governance element, and also incurs costs.

**NTN** In the EU, the General Data Protection Regulation (GDPR) is also enforced for the purpose of protecting personal information. There is indeed a need to treat personal information cautiously.

**Kokubu** When using value-added productivity, we look at two elements: the added value created from labor and the added value created from capital. In the case of Sysmex, operating margin is high,

so I think how it is distributed becomes an important issue. If the ratio of labor costs increases as added value goes up, incentives will come into play. The source of profits is human capital, and it would be good to clearly define the relationship in the respect that distribution rate increases as human capital generates more profits. Recently, in many companies, the labor distribution rate has not increased in proportion to the increase in operating margins, giving rise to problems of economic disparity. Doesn't human capital have the social responsibility of improving such problems?

Furthermore, the original purpose of human capital management is to overcome the issue that rising labor costs becomes a form of negative information to shareholders. On the other hand, the human capital management that Japanese companies refer to tends to be biased toward employing and promoting women. Of course, female employment is also a very important issue. However, the greatest challenge for female employment in Japanese companies is that such employment based on the premise of Japanese-style companies. If women were to remain in the same company for a long time, they would have to be promoted to managerial positions eventually, but whether individual female employees really desire that is a separate issue.

Incidentally, if NTN were to establish a human resources strategy to develop socially excellent human resources, regardless of gender, and to disclose this strategy to external parties, how we consider the problem of turnover, which the Human Resources Department faces, would be an important question. For example, instead of just trying to reduce turnover, allowing a certain degree of turnover would relieve employees of the pressure of having to work for the same company forever, enabling them to move freely outside the company. This is positive for society as a whole. Taking such measures may ultimately attract excellent human resources and transform the company into a progressive one. In addition to human diversity, I believe that diversifying working styles can also bring about human happiness.

**NTN** When investing in human capital, how should we interpret the return on investment when the human resources who have been trained resign? If investment in human resources covers both the aspects of investment and return on individuals, perhaps we can consider that there is also the aspect of investment and return on corporate culture.

**Kokubu** The return on corporate culture is that the company gains the ability to develop human resources so that it can recruit human resources with the same or higher caliber as those who have left. Even

if the human resources that the company has invested in leave, other employees will recognize that "this is a company that is so committed to educate its people," and this will in turn have the effect of motivating them. I think it is a good idea to look at corporate culture from a long-term perspective.

**Matsui** Our company is also exploring ways to measure the effects of investing in human resource development. One proposed approach is to divide the types of development into general development, which provides a wide range of learning opportunities, and development that has an impact on the business, and then to put greater focus on measuring the latter. This could potentially be measured by a fall in the average age of leaders, their retirement rate, and the preparation rate of potential successors to take over specific positions.

**NTN** Other than the salary an individual receives, there are other intangible rewards from education. For example, continued support from those around one is also a form of reward for an individual. It would be good if we could also measure such intangible rewards properly.

**Kokubu** In human capital management, working hours are also an important element. We hear comments such as, "I want to work more, but I cannot (due to time constraints)." While it may be difficult for some occupations, such as factory work, it may become increasingly important to allow workers to decide on the working hours as IT advances going forward.




**Matsui** There are many themes related to human capital. In addition to "measuring the effects of investment" that we discussed earlier, there are countless other challenges such as "updating organizational culture as a global corporation" and "securing and nurturing next-generation leaders." I hope to continue discussing these with everyone.

**NTN** Communication with stakeholders, such as shareholders and customers, is of course important, but two-way communication between management and employees is also important. For example, terms that are difficult for employees to understand, such as "diversity, equity, and inclusion," need to be broken down and explained in simpler terms so that each employee can understand them as issues that concern them personally. We have started holding town hall meetings and one-on-one meetings, and we will continue to refine our efforts going forward.

Thank you very much for your helpful comments and discussions today.

# Stakeholder Dialogue

## Communication with Stakeholders

Stakeholders	Stance to Stakeholders	Main Activities
 <p><b>Employees</b></p>	<p>NTN Group respects diversity, individuality and a safe and healthy workplace environment where employees can work successfully.</p>	<p><b>“NTN PROUD AWARD” as ESG Corporate Award</b>                      “NTN PROUD AWARD” is a system that encourages employees’ sustainability activities and commends outstanding initiatives linked to 13 items of materiality responding to sustainability activities identified by the Group. The system aims to promote understanding and awareness of sustainability activities among employees and fosters their motivation and engagement.</p> <p><b>Employee engagement survey</b>                      Based on the survey result, we conduct activities to improve workplace issues, activate workplace communication and work to develop an environment in which each employee has a good reliable relationship with each other.</p> <p><b>Global QC Circle Convention</b>                      We strive to improve safety, quality, and productivity on a global basis, and with the convention as a forum for international exchange, we exchange information on a variety of activities.</p>
 <p><b>Customers</b></p>	<p>NTN Group seeks to maximize customer satisfaction and trust by providing products and services of superior quality, safety and reliability.</p>	<p><b>Nationwide Distributors’ Meeting</b>                      We invite distributors from across Japan to briefing sessions on account settlement overview and aftermarket business measures to strengthen our bond with distributors.</p> <p><b>Technical service units</b>                      We run completely-tailored, multi-functional technical service units worldwide, equipped with teaching materials and exhibits to introduce our products, and hold bearing technical seminars for our customers.</p>
 <p><b>Business partners</b></p>	<p>NTN Group, in a fair and free environment, builds good partnership with its business partners and works together for mutual growth and development.</p>	<p><b>Briefing for suppliers</b>                      We share information on our globalization initiatives and the business environment surrounding our company with our business partners and have external lecturers deliver lectures targeting the business partners.</p> <p><b>Promotion of CSR procurement</b>                      Through CSR questionnaires based on the CSR Procurement Guidelines, we promote activities with our business partners to help them understand the importance of CSR procurement.</p>

Stakeholders	Stance to Stakeholders	Main Activities
 <p><b>Local communities</b></p>	<p>NTN Group respects cultures and customs in the local communities and builds long-term trust relationships by meeting their expectations through its business activities.</p>	<p><b>Activities that contribute to the local community (family tours, summer festivals, etc.)</b>                      We hold family tours and summer festivals at each business site as an opportunity to interact with employees’ families and neighboring residents.</p> <p><b>NTN Rotating School</b>                      As an environmental education program for children who will lead the next generation, mobile-type schools have been opened in various places to deepen friendships with the local community.</p> <p><b>Conservation of biodiversity</b>                      In cooperation with local residents and NPOs, we are working to protect the environment of Satoyama (village forest) areas around our business sites and to protect endangered species.</p>
 <p><b>Shareholders</b></p>	<p>NTN Group focuses on return for shareholders by sustainable profitable growth and builds long-term trust relationships with shareholders through active communications.</p>	<p><b>Shareholders’ Meeting</b>                      The Shareholders’ Meeting is a forum for communication to build long-term relationships of trust with shareholders.</p> <p><b>ESG briefing</b>                      In addition to holding results briefings for investors, we also hold ESG briefings to promote understanding of our ESG initiatives. The opinions we receive at the briefings are used to strengthen our activities and information disclosure.</p>
 <p><b>Environment</b></p>	<p>NTN Group harmonizes its business activities with nature and contributes to preserve the global environment by providing its technologies, products and services.</p>	<p><b>Reducing environmental impact in business activities</b>                      We are working to minimize harmful environmental impacts by monitoring and reducing emissions of CO<sub>2</sub> and regulated chemicals in our business activities.</p> <p><b>Sustainable use of resources</b>                      We are striving for sustainable resource utilization by reducing the use of resources such as raw materials and water, and by thoroughly implementing the 3Rs (reduce, reuse, and recycle) of waste.</p> <p><b>Developing environment-contributing product</b>                      We are contributing to the realization of a carbon-free society by developing products that help reduce energy loss in finished products and natural energy-related products.</p>

# Outside Director Dialogue



Outside Director  
**Ryo Kawakami**

Outside Director  
**Yuriya Komatsu**

Outside Director  
**Yasuo Kitani**

Every year, the NTN Report provides an opportunity for Outside Directors to discuss NTN's management and sustainability issues.

The contents of discussion is published as "Outside Director Dialogue." This year, Director Komatsu, Chairperson of the Board of Directors, Director Kawakami, who has been a director of NTN for many years, and Director Kitani, who was appointed to the Board last June, held a frank and honest talk about NTN's current situation and challenges.

## Reflecting on the Medium-term Management Plan "DRIVE NTN100" Phase 2

—The Medium-term Management Plan "DRIVE NTN100" Phase 2, aimed at achieving the revitalization of NTN, reached its final year in FY2023. Reflecting on efforts over the past three years, could you tell us your assessment?

**Kitani** Under "DRIVE NTN100" Phase 2 (hereafter "Phase 2"), which began in FY2021, we have been working on eliminating deficits, increasing profit margins, and improving our cash flow and financial position. As FY2023 marks the final fiscal year of the plan, we have reflected on our progress. Unfortunately, our conclusion does not allow us to beat the drums in victory and declare that we had done a great job.

Among the numerical targets, while we achieved our target net sales and free cash flow, we failed reach the target operating income, operating margin, inventory turnover ratio, ROIC, and ROE. In addition, challenges remain in areas such as procurement reform and new product development. With regard to reorganization of production, although we made progress in outsourcing the production of bearings, there have been delays from the initial plan.

On the other hand, I think that we performed well in the aspect of price negotiations. We adopted the approach of basically passing on all costs, including inflation costs, to selling prices, and also negotiated price increases for low-profit transactions. Although the results of negotiations currently vary depending on the region and customer, I think that we deserve recognition for achieving an operating profit in the automotive business for the full fiscal year in the final year of Phase 2.

**Komatsu** We have also heard from investors that while they have high expectations of Phase 2 even if the targets are not achieved, they wonder if the next Medium-term Management Plan will truly be able to produce results.

**Kitani** Currently, in the aspect of corporate value, as the current PER and PBR figures indicate, we do not pale in comparison with our domestic competitors. Rather, we are in a superior position.

## Outside Director Dialogue

However, there is still a large gap when compared to our overseas competitors, and further reform and evolution are necessary to close this gap. We recognize that our weakness lies in the fact that we are not physically able to make investments of significantly large amounts.

**Kawakami** I think a major factor behind the restrained investment so far is the impact of the price cartel in 2010. It is said that cartel issues cause widespread damage, and it takes decades to recover from that damage. For our company, I feel that this negative impact has finally subsided and been resolved by the end of Phase 2.

**Kitani** Indeed. Over the three years of Phase 2, we scaled down our investment cash flow to a level below depreciation expenses, and prepared a budget of just under 60 billion yen in total.

Moreover, in terms of risk, the high ratio of the automotive business used to pose a risk for NTN. However, in the most recent period, from the perspective of actual results compared against plans, the automotive business has been supporting the Company's performance, and we boast the leading market shares in the world for our flagship products (hub bearings and driveshafts). Although the industrial machinery business still contributes a high profit margin for bearings, I think it is important to improve profit margins by leveraging the technological advantages of the automotive business and promoting "selection and concentration."

### New Medium-term Management Plan "DRIVE NTN100" Final

—Could you tell us about the new Medium-term Management Plan, "DRIVE NTN100" Final, announced in May 2024?

**Komatsu** The most important point about the new Medium-term Management Plan "DRIVE NTN100" Final (hereafter, "the new Medium-term Management Plan") is that we work seriously toward completing the structural reforms aimed at improving profits and strengthening our financial position over the next three years. All

the Directors of NTN share this recognition.

To be sure, our financial and operating margin figures have improved from before, and I think that investors are appraising these positively to a certain extent. However, profit margins have not reached the level investors are looking for, and inventory turnover ratio and cash conversion cycle (CCC) have not improved. I think we need a system that can enable the hard work of our employees to generate sufficient cash flow to support sustainable growth.

To resolve these issues, under our new Medium-term Management Plan, we have restructured the organization by breaking the Company up into product-based segments and clearly defining responsibilities. This will facilitate the smooth and continuous checking of data on individual businesses and lay the groundwork for discussing the feasibility of continuing with a business. This is the first key point of the new Medium-term Management Plan.

The second key point is the full-scale implementation of reorganizing production and the completion of structural reforms in order to strengthen the competitiveness of the OEM business. We expect to achieve improvements in CCC by discontinuing products whose returns are below the cost of capital.

**Kitani** With regard to the scale of investment as I mentioned earlier, we are projecting investment cash flow of approximately 120 billion yen, which corresponds to depreciation expenses, in the new Medium-term Management Plan. This is about twice the scale of the amount in Phase 2.

In addition, a measure that was not included in Phase 2 is the incorporation of extraordinary losses into the budget. When we discontinue unpopular products that do not sell or products that are not profitable even if they do sell, it becomes necessary to reorganize production facilities or other elements, which sometimes results in extraordinary losses. This reflects our desire to improve profitability and earning power on a day-to-day basis, even if it means that we will have to overcome such pain. I think that this is very commendable, and I have high hopes that we will achieve progress in our structural reform.

**Komatsu** There are concerns that processing with structural

reforms too slowly may lead to further and deeper damage. This is why I have been saying from before that it is important to act with a sense of speed.

In this respect, the new Medium-term Management Plan has adopted "inventory level" as a criterion for personnel evaluation. It is difficult to advance measures that are not linked to personnel evaluation, so I think it is commendable that the company has made such bold changes to personnel affairs.

Furthermore, the speed at which structural reforms are carried out depends greatly on how on-site managers respond to top-down instructions. During the three years of Phase 2, President Ukai was continuously saying that we can stop selling products that are in the red. This advice finally bore fruit in the third year of Phase 2. As we transition into the new Medium-term Management Plan going forward, I will expect even faster on-site responses to the President's instructions.



**Kawakami** I agree. Moving to the subject of governance, NTN became a Company with Nominating Committee, etc. in 2019, and is now one of the few corporations in Japan that has adopted such an organizational structure.

The advantage of being a Company with Nominating Committee, etc. is that Executive Officers, rather than a board such as the Board of Directors, are responsible for decision-making on matters related to business execution. This makes it possible to undertake

## Outside Director Dialogue

policy decisions with a sense of speed.

However, the culture of business execution processes at Companies with Board of Company Auditors has long become deeply rooted, and I think that we have not yet fully exerted and leveraged the flexibility of Companies with Nominating Committee, etc.

Under the new Medium-term Management Plan, the organizational structure has been changed to a product-based structure that focuses on the Bearing Business and the CVJ & Axle Bearing Business, and the decision-making process and lines for business execution have been better and more clearly defined. This type of product-based organizational structure seems to be compatible with the organizational structure of a Company with Nominating Committee, etc. Therefore, I expect the speed of structural reform to accelerate further as we move forward.

**Kitani** Previously, the Company had a strong regional focus and faced issues with the global leadership of each business. The decision-making authority was reviewed at the same time as the organizational restructuring, and a vertical axis was firmly established, granting decision-making authority for overseas matters to the managers of the business headquarters. I believe that this will lead to improvements, and I think that it is also something that we can have high hopes for.

### Current status of governance

—Please tell us about your activities as members of the Nominating Committee, Compensation Committee, and Audit Committee at a Company with Nominating Committee, etc.



**Kitani** As the Chairperson of the Audit Committee, I have been following in the footsteps of my predecessor and advancing efforts with an exploratory approach. To date, we have conducted on-site audits at a total of 62 locations, including overseas. By identifying errors at the sites and interviewing members of the management teams, the Committee thoroughly investigates the underlying internal control issues and proposes improvement measures.

As the Chairperson of the Audit Committee, I report at the Board of Directors once every three months on various issues that we encounter on a daily basis. In response to these reports, the CEO and other Directors respond quickly and proactively, and take measures smoothly. This is very rewarding for me.

However, we feel that there are still issues with our reporting capabilities. Going forward, we will cooperate with the Internal Audit Department and the Internal Control Department to improve the accuracy of our audits and clarify priorities as we proceed with the audits. Through these activities, we hope to prevent errors on sites and improve the governance level across the entire company.

**Komatsu** The Compensation Committee discusses the compensation of Executive Officers. To date, we have held numerous discussions about the compensation system and evaluation. In FY2022 and FY2023, we performed strict and concise assessments of the performance of each Executive Officer, and proposed reviewing the contents of the compensation package for officers; that is, we proposed reviewing the ratio of fixed and performance-linked compensation, which is currently 6:4, and revising it to increase the ratio of performance-linked compensation.

I think the Compensation Committee is highly receptive to such proposals as the President gives them careful consideration. As a result, we have been able to set individual goals for each Executive Officer, and established measures to evaluate them positively or negatively against these goals.

Once the goals of the new Medium-term Management Plan have been achieved and a virtuous cycle is created, we are also proposing an increase in the weightage of performance incentives in the compensation for officers, while keeping fixed expenses at the same level.

Another challenge for this Committee is the work of verifying if the goals set by each Executive Officer are appropriate. I believe that we can resolve this issue by having the Compensation Committee check the reports presented by the Executive Officers in the future.

The indicators used to determine performance-linked compensation for Executive Officers include KPIs such as net sales, operating margin, ROIC, and inventory turnover ratio, which we believe are more advanced than those of other companies.

**Kawakami** I think that the Nominating Committee functioned effectively when President Ukai took over from former President Ohkubo in 2021. I feel that we were successful in selecting someone who was most suitable for the position after much discussion, given the difficult situation and environment that NTN was facing at the time.

The Nominating Committee recognizes that the succession plan is an issue that needs to be addressed. When considering the ideal vision for the Company in the medium- to long-term, and even 100 years from now, it is difficult to decide on the kind of people whom we wish to be our leaders, what criteria we should use to select them, and what kind of career plans would be best for that purpose. Discussions are still ongoing with regard to this issue.

While this is still currently a work in progress, we are working on having the next generation of human resources build their careers globally. While monitoring their efforts and achievements, the Committee is engaged in discussions on how the appropriate human resources should be selected.

Moreover, the perspective of strengthening governance is also important in succession planning, and NTN has positioned “strengthening governance” as one of the items in our materiality. NTN’s materiality is reviewed and checked at meetings of the Sustainability Committee held twice a year, and the results are reported to and discussed by the Board of Directors. Additionally, materiality is constantly being reviewed and improved in response to changes in the times and society.

“What is materiality?” This is a loaded question, and we should always consider whom it is material to. Currently, I do not think that we have left out any important issues among those that NTN

## Outside Director Dialogue

has identified as materiality. However, in a rapidly changing social situation, we must not forget to verify and review our materiality.



### Aspirations for the future

—**The Company has embarked on a new journey under the new Medium-term Management Plan. Could you tell us what your aspirations are for the future?**

**Kitani** I am a member of both the Audit Committee and the Nominating Committee, but I have to date been more active in the Audit Committee. I visit the sites and conduct interviews with many people. In these activities, I think that it is vital not to overlook any flaws in our internal control. Nevertheless, as a company, it is physically impossible to address all problems equally. Therefore, as a member of the Audit Committee, I aim to provide support by clarifying priorities, offering opinions, and putting effort into improving the effectiveness of the Committee.

At the same time, I think that I will be engaged in more activities as a member of the Nominating Committee going forward. I aim to contribute to the activities of the Nominating Committee by gaining thorough knowledge of the lineup of middle management executives and understanding the types of human resources present in our Company through interviews. Based on that, I wish to enhance my awareness by comparing them with the

requirements for the human resources who will serve as leaders for future generations.

**Kawakami** Generally, lawyers may often be perceived to be stepping on the brakes and stating that it is not acceptable to do this or that due to compliance. The significance behind shareholders appointing lawyers as Outside Directors of NTN is, of course, founded upon compliance. However, a company cannot be viable if it does not take any risks, regardless of the severity of the risks. I believe that there are also times when a company must take risks. While illegal, inappropriate, and irrational actions are naturally out of the question, in times when NTN must make the management decision to take risks, I hope to serve as a good navigator, clarifying what risks exist, their legal appraisal and their impact on compliance, as well as being a presence that helps to create an environment in which rational and appropriate decisions can be made.

**Komatsu** I was appointed as a Director in 2020 and have been serving as the Chairperson of the Board of Directors since 2022. Having observed the Company's Board of Directors for more than four years, I realize that the speed of management has increased considerably. However, as I mentioned earlier, many challenges remain, such as improving inventory and CCC. Various measures have been launched to achieve the goals set out in the new Medium-term Management Plan, but it is our role as Outside Directors to monitor the situation closely, investigate the causes when something cannot be achieved, and work together to think about how to achieve them. The new Medium-term Management Plan has been named "Final." I aim to fulfill my role so as to contribute to completing the Company's reform and achieving its revitalization over the next three years.

## Message from a newly appointed Director

Outside Director

**Tatsuhiko Toshita**



I have long been involved in the sales operations of steel product distribution, as well as business management both in Japan and abroad.

Most recently, as the CEO of a steel trading company, I worked on reforming the profit structure of the company by redefining the corporate philosophy, with a view of creating an organization that can adapt to the changing times and continue achieving growth.

By leveraging the knowledge and lessons drawn from the achievements as well as setbacks of these experiences, I will put utmost effort into continuing activities that contribute to enhancing NTN's corporate value sustainably, and to creating value for all its stakeholders.

Firstly, I will strive to communicate closely with the Directors, Executive Officers, and all employees, while also visiting the operational sites in person to share information and understand the actual conditions. At the same time, I hope to foster healthy and positive pressure through open-minded discussions and exchanges of opinions.

In the implementation of the Management Plan, I will be constantly mindful of the medium to long-term perspective and producing results steadily, and work with all employees to accelerate efforts in addressing the issues faced by NTN. I look forward to your continued support and cooperation.

# Directors (as of June 25, 2024)

## Inside Directors

■ Nominating Committee Member
 ■ Compensation Committee Member
 ■ Audit Committee Member
 ★ Chairperson of each committee



**Eiichi Ukai**



Number of years as Director 7 years  
 Number of shares of the Company held 114,400 shares



**Hideaki Miyazawa**

Number of years as Director 10 years  
 Number of shares of the Company held 97,500 shares



**Masaaki Yamamoto**



Number of years as Director 2 years  
 Number of shares of the Company held 42,800 shares



**Shumpei Kinoshita**

Number of years as Director 1 years  
 Number of shares of the Company held 41,900 shares



**Masaki Egami**



Number of years as Director 3 years and 11 months  
 Number of shares of the Company held 34,800 shares



**Isao Ozako**



Number of years as Director 2 years  
 Number of shares of the Company held 39,200 shares

# Directors

## Outside Directors

■ Nominating Committee Member 
 ■ Compensation Committee Member 
 ■ Audit Committee Member 
 ★ Chairperson of each committee



**Ryo Kawakami** ■ ■

Number of years as Director 5 years  
 Number of shares of the Company held 0 shares

(Significant concurrent positions)  
 Attorney at law (Osaka Nishi Law Office, Legal Professional Corporation)



**Tomonori Nishimura** ■ ★

Number of years as Director 3 years and 11 months  
 Number of shares of the Company held 8,700 shares

(Significant concurrent positions)  
 Business Owner, NT Consul Biz.



**Yuriya Komatsu** ■

Chairperson of the Board of Directors  
 Number of years as Director 3 years and 11 months  
 Number of shares of the Company held 10,000 shares

(Significant concurrent positions)  
 Outside Director, Dream Incubator Inc.  
 Outside Director, Daicel Corporation



**Akira Murakoshi** ★ ■

Number of years as Director 2 years  
 Number of shares of the Company held 3,200 shares

(Significant concurrent positions)  
 Full-time Audit & Supervisory Board Member, Mitsubishi Corporation



**Yasuo Kitani** ■ ★

Number of years as Director 1 years  
 Number of shares of the Company held 1,400 shares



**Tatsuhiko Toshita** ■

Number of years as Director New  
 Number of shares of the Company held 0 shares

Please see the NTN Group sustainability website for past experience of each Director.

<https://www.ntnglobal.com/en/csr/governance/structure.html>

# Directors

## Attendance at Board of Directors and Committee Meetings, reasons for selection, and skills matrix

Name	Attendance at Board of Directors and Committee Meetings	Reasons for selection	Skills matrix									
			Main areas of experience required of Directors									
			Corporate management	Manufacturing	Technology and R&D	Sales	Corporate and business planning	Finance and administration	Legal affairs, internal controls, compliance	Global experience	Experience of other industries, diversity	
<b>Eiichi Ukai</b>	<b>100%</b> Board of Directors 15 times/15 times Nominating Committee 4 times/4 times Compensation Committee 5 times/5 times	Mr. Eiichi Ukai possesses operational experience in areas such as the Quality Assurance Division and the Overseas Division, and broad knowledge of the management of the Company promoting businesses globally based on these achievements, among others, and has served as President, Executive Officer of the Company since April 2021. The Company selected him as a Director with an aim to continuously improve corporate value, utilizing his experience and knowledge, etc. for management.	●	●		●				●		
<b>Hideaki Miyazawa</b>	<b>100%</b> Board of Directors 15 times/15 times	Mr. Hideaki Miyazawa possesses operational experience in areas such as the Business Division for the automotive market and the Overseas Division, and broad knowledge based on these achievements, among others. The Company selected him as a Director with an aim to continuously improve corporate value, utilizing his experience and knowledge, etc. for management.	●	●		●	●			●		
<b>Masaaki Yamamoto</b>	<b>100%</b> Board of Directors 15 times/15 times Compensation Committee 5 times/5 times	Mr. Masaaki Yamamoto possesses operational experience in areas such as the Finance Division and the Overseas Division, and broad knowledge based on these achievements, among others. The Company selected him as a Director with an aim to continuously improve corporate value, utilizing his experience and knowledge, etc. for management.					●	●	●	●		
<b>Shumpei Kinoshita</b>	<b>100%</b> Board of Directors 11 times/11 times	Mr. Shumpei Kinoshita possesses operational experience in areas such as the Overseas Division and the Finance Division, and broad knowledge based on these achievements, among others. The Company selected him as a Director with an aim to continuously improve corporate value, utilizing his experience and knowledge, etc. for management.					●	●		●		
<b>Masaki Egami</b>	<b>93.3%</b> Board of Directors 14 times/15 times	Mr. Masaki Egami possesses operational experience in areas such as the Engineering Division and Research and Development Division, and broad knowledge based on these achievements, among others. The Company selected him as a Director with an aim to continuously improve corporate value, utilizing his experience and knowledge, etc. for management.			●							
<b>Isao Ozako</b>	<b>100%</b> Board of Directors 15 times/15 times Nominating Committee 4 times/4 times Audit Committee 15 times/15 times	Mr. Isao Ozako possesses operational experience in areas such as the Manufacturing Division and the Quality Assurance Division, and broad knowledge based on these achievements, among others. The Company selected him as a Director with an aim to continuously improve corporate value, utilizing his experience and knowledge, etc. for management.	●	●						●		
<b>Ryo Kawakami</b>	<b>100%</b> Board of Directors 15 times/15 times Nominating Committee 4 times/4 times Audit Committee 15 times/15 times Compensation Committee 1 times/1 times	Although Mr. Ryo Kawakami has not been directly involved in corporate management, he possesses broad knowledge, etc. based on extensive experience as a lawyer familiar with corporate legal affairs. The Company selected him as an Outside Director with an expectation to continuously improve corporate value by conducting supervision from the viewpoint to increase transparency and fairness of management through his duties such as providing appropriate opinions on the independent standpoint from business executors.							●		●	
<b>Tomonori Nishimura</b>	<b>100%</b> Board of Directors 15 times/15 times Audit Committee 15 times/15 times Compensation Committee 5 times/5 times	Mr. Tomonori Nishimura possesses broad knowledge, etc. based on extensive experience in the management of other companies. The Company selected him as an Outside Director with an expectation to continuously improve corporate value by conducting supervision from the viewpoint to increase transparency and fairness of management through his duties such as providing appropriate opinions on the independent standpoint from business executors.	●		●	●					●	
<b>Yuriya Komatsu</b>	<b>100%</b> Board of Directors 15 times/15 times Compensation Committee 5 times/5 times	Ms. Yuriya Komatsu possesses broad knowledge, etc. based on extensive experience in the management of other companies. The Company selected her as an Outside Director with an expectation to continuously improve corporate value by conducting supervision from the viewpoint to increase transparency and fairness of management through her duties such as providing appropriate opinions on the independent standpoint from business executors.					●	●	●	●	●	
<b>Akira Murakoshi</b>	<b>100%</b> Board of Directors 15 times/15 times Nominating Committee 4 times/4 times Compensation Committee 4 times/4 times	Mr. Akira Murakoshi possesses broad knowledge etc. based on extensive experience in the management of other companies. The Company selected him as an Outside Director with an expectation to continuously improve corporate value by conducting supervision from the viewpoint to increase transparency and fairness of management through his duties such as providing appropriate opinions on the independent standpoint from business executors.	●			●	●	●	●	●	●	
<b>Yasuo Kitani</b>	<b>100%</b> Board of Directors 11 times/11 times Nominating Committee 4 times/4 times Audit Committee 10 times/10 times	Mr. Yasuo Kitani possesses extensive experience in banking over many years and broad knowledge including finance, among others. The Company selected him as an Outside Director with an expectation to continuously improve corporate value by conducting supervision from the viewpoint to increase transparency and fairness of management through his duties such as providing appropriate opinions on the independent standpoint from business executors.	●			●	●	●	●	●	●	
<b>Tatsuhiko Toshita</b>	<b>100%</b>	Mr. Tatsuhiko Toshita possesses broad knowledge, etc., based on extensive experience in the management of other companies. The Company newly selected him as an Outside Director with an expectation to improve corporate value by conducting supervision from the viewpoint to increase transparency and fairness of management through his duties such as providing appropriate opinions on the independent standpoint from business executors.	●			●	●			●	●	

# Responsibilities of Executive Officers (as of April 1, 2024)



Representative Executive Officer,  
President, Executive Officer

## Eiichi Ukai\*

CEO (Chief Executive Officer)  
Corporate General Manager,  
Group Management HQ.



Representative Executive Officer,  
Executive Officer

## Hideaki Miyazawa\*

Corporate General Manager,  
CVJ & Axle Bearing Business HQ.  
Americas Region



Executive Officer

## Hiroyuki Ichikawa

Quality HQ.  
Composite Material Product  
Division  
India Region



Executive Officer

## Masayuki Kaimi

Corporate General Manager, SCM Strategy HQ.  
[Procurement Dept., Logistics Administration  
Dept., Trade Management Dept., Production  
Strategy & Control Dept., Production Reform  
Dept., Supply & Demand Control Dept.]  
China Region  
Production Engineering HQ.



Executive Officer

## Yasuhiro Kawabata

Deputy Corporate General Manager,  
Group Management HQ.  
Human Resources Strategy Dept.  
Personnel Dept.  
General Affairs Dept.  
Legal Dept.



Executive Officer

## Shumpei Kinoshita\*

Deputy Corporate General Manager,  
Group Management HQ.  
Corporate Strategy Dept.  
ESG Promotion Dept.  
Carbon Neutrality Strategy Promotion Dept.  
Internal Control Dept.



Executive Officer

## Koji Takahashi

Deputy Corporate General Manager,  
Group Management HQ.  
Corporate Communications Dept.  
ICT Strategy Dept.



Executive Officer

## Ikuya Tateoka

Deputy Corporate General Manager,  
CVJ & Axle Bearing Business HQ.  
General Manager, Business Strategy  
Unit, CVJ & Axle Bearing Business HQ.



Executive Officer

## Masayuki Tanio

Deputy Corporate General  
Manager, Bearing Business HQ.  
General Manager,  
Business Strategy Unit,  
Bearing Business HQ.



Executive Officer

## Yoshiyasu Nakano

CTO (Chief Technology Officer)  
Research Division  
[Advanced Technology R&D Center,  
CAE R&D Center]  
Innovation & Business Development HQ.  
New Product and Business Strategy  
Planning Dept.  
Intellectual Property Strategy Dept.



Executive Officer

## Etsu Harima

Corporate General Manager,  
Bearing Business HQ.  
NTN KOREA CO., LTD.  
ASEAN, Oceania & West Asia Region



Executive Officer

## Masaaki Yamamoto\*

CFO (Chief Financial Officer)  
Deputy Corporate General Manager,  
Group Management HQ.  
Financial Strategy Dept.  
Accounting Dept.  
Europe & Africa Region

\*Executive Officer who also serves as a Director

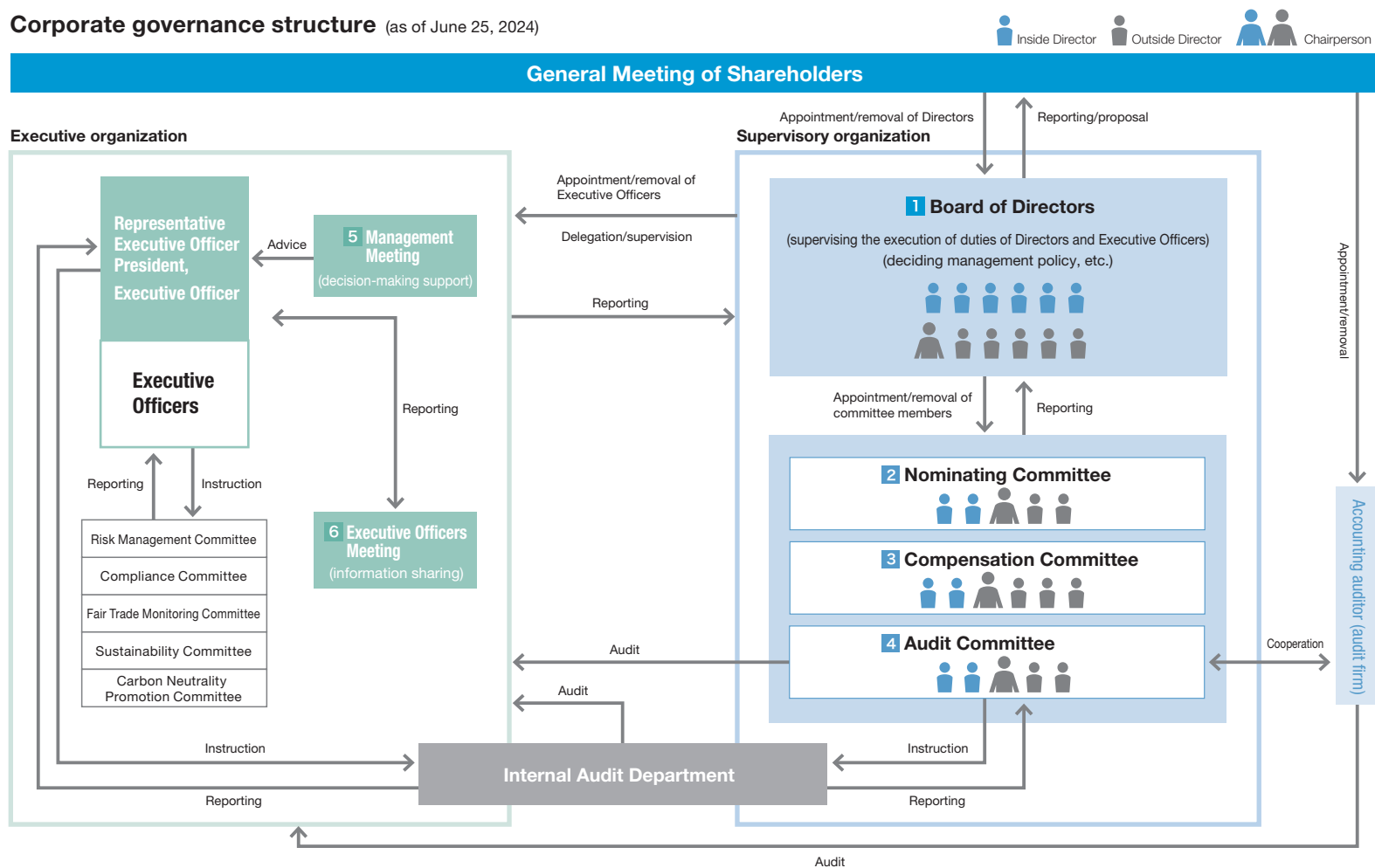
# Governance Structure

## Basic approach

NTN Group considers the strengthening and enhancement of corporate governance to be one of our top management priorities. While further improving the efficiency and soundness of our management, we are also striving to increase management transparency by rapidly disclosing accurate information to our shareholders and investors.

With the aim of creating a structure for rapid decision-making and execution, enhancing our business supervisory functions and improving the transparency and impartiality of our management, NTN Group transitioned from Company with Board of Company Auditors to Company with Nominating Committee, etc. in June 2019. Under this structure, we will work on further enhancement of corporate value over the medium- and long-term.

**Corporate governance structure** (as of June 25, 2024)



# Governance Structure

## 1 Board of Directors

The Board of Directors decides on the basic management policies and supervises the execution of duties of Directors and Executive Officers. Apart from matters stipulated by laws and regulations or the Articles of Incorporation to be resolved by the Board of Directors, the Board delegates substantial authority to Executive Officers with the aim of strengthening the supervision of management and speeding up decision-making.

The Articles of Incorporation stipulate that the term of office of a Director shall be one year, and the number of Directors shall be 15 or fewer. The Board of Directors convenes once a month in principle, but also meets flexibly as needed.

As of June 25, 2024, there are 12 Directors, of which six are Outside Directors. The Board is chaired by an Outside Director.

## 2 Nominating Committee

The Nominating Committee decides on the content of the proposal regarding appointment or removal of Directors, which is submitted to the General Meeting of Shareholders. Five members sit on the committee as of June 25, 2024, three of whom are Outside Directors. The committee is chaired by an Outside Director.

## 3 Compensation Committee

The Compensation Committee decides on the policy for determining the compensation of Directors and Executive Officers, and determines compensation for individuals. Six members sit on the committee as of June 25, 2024, four of whom are Outside Directors. The committee is chaired by an Outside Director.

## 4 Audit Committee

The Audit Committee audits the execution of duties of Directors and Executive Officers, and decides on the content of a proposal regarding appointment/removal of the accounting auditor, which is submitted to the General Meeting of Shareholders. The duties of the Audit Committee are supported by the Internal Audit Department, and its concurrently assigned staff members serve as the Audit Committee secretariat and other functions. These staff members, who have the requisite skills and experience to support the Audit Committee, are appointed by the manager of the Internal Audit Department with the approval of the Audit Committee. Decisions on matters related to transfer, disciplinary action or evaluation of these staff members require the approval of the Audit Committee.

The committee has five members as of June 25, 2024, three of whom are Outside Directors. The committee is chaired by an Outside Director.

### Members composing Board of Directors, Nominating Committee, Compensation Committee, and Audit Committee

FY2024 (As of June 25, 2024)			
Board of Directors	Nominating Committee	Compensation Committee	Audit Committee
Eiichi Ukai	○	○	
Hideaki Miyazawa			
Masaaki Yamamoto		○	
Shumpei Kinoshita			
Masaki Egami			○
Isao Ozako	○		○
Ryo Kawakami ★	○		○
Tomonori Nishimura ★		◎	○
Yuriya Komatsu ★		○	
Akira Murakoshi ★	◎	○	
Yasuo Kitani ★	○		◎
Tatsuhiko Toshita ★		○	

\*Please note that persons with ★ are Outside Directors, persons with ◎ are Chairpersons of committees, and persons with ○ are members of committees.

## 5 Management Meeting

The Management Meeting discusses important matters relating to operational execution, as the supporting body for decision-making by the President, Executive Officer. The meeting is composed of the President, Executive Officer and other Executive Officers as designated by him and held twice a month in principle.

## 6 Executive Officers Meeting

The Executive Officers Meeting is convened by the President, Executive Officer and attended by all Executive Officers. Resolutions passed by the Board of Directors are communicated and each Executive Officer reports about the status of operational execution. This meeting is held once a month in principle, sharing information among Executive Officers to make operational execution more efficient and effective.

## Executive Officers

Executive Officers are appointed by resolution of the Board of Directors. They decide on the execution of business delegated to them by the Board of Directors and execute the business. Their term of office is one year under the Articles of Incorporation. As of June 25, 2024 there are 12 Executive Officers.

### Corporate data

Organizational design	Company with Nominating Committee, etc.
No. of Directors	12
of which 6 independent Outside Directors	
Director's term of office	1 year
No. of Executive Officers	12
of which 2 have representative rights	
No. of Executive Officers who are also Directors	4
System to assist the work of the Audit Committee	yes (Internal Audit Department)
Accounting auditor	Ernst & Young ShinNihon LLC

## Governance Structure

### Governance structure timeline

2006	<ul style="list-style-type: none"> <li>CSR Committee is established</li> </ul>
2008	<ul style="list-style-type: none"> <li>Risk Management Committee is established</li> <li>An Outside Director is appointed for the first time</li> </ul>
2011	<ul style="list-style-type: none"> <li>The number of Outside Directors increases (from 1 to 2)</li> </ul>
2012	<ul style="list-style-type: none"> <li>Fair Trade Monitoring Committee is established</li> </ul>
2015	<ul style="list-style-type: none"> <li>Compliance Committee is established</li> <li>The effectiveness of the Board of Directors is assessed</li> </ul>
2016	<ul style="list-style-type: none"> <li>Compensation Advisory Committee is established</li> </ul>
2018	<ul style="list-style-type: none"> <li>New corporate philosophy system is established</li> </ul>
2019	<ul style="list-style-type: none"> <li>Transition to Company with Nominating Committee</li> <li>The number of Outside Directors increases (from 2 to 5)</li> <li>Sustainability Committee is established</li> </ul>
2020	<ul style="list-style-type: none"> <li>First woman appointed as a Director (Outside)</li> </ul>
2021	<ul style="list-style-type: none"> <li>Executive Officer hierarchy flattened</li> </ul>
2022	<ul style="list-style-type: none"> <li>ESG incorporated in the Executive Officer evaluation system</li> <li>Female Outside Director appointed as the chair of the Board of Directors</li> </ul>
2023	<ul style="list-style-type: none"> <li>Important meeting briefing held for Outside Directors</li> <li>Carbon Neutrality Promotion Committee is established</li> </ul>

### Board of Directors

#### Our approach to the Board

Directors are appointed from a wide range of fields within the Group, including manufacturing, technology, research and development, sales, and financial and administrative divisions. Outside

Directors are also appointed after taking into account aspects such as diversity and balance, their knowledge of finance, their management or legal experience. We believe that the current number of Directors is an appropriate size for the Board in terms of strengthening corporate governance and expanding our global businesses.

#### Director diversity

Of the Directors in their roles as of June 25, 2024, one (Outside Director) is female, and she chairs the Board. With experience in a different industry, she supervises management and integrates diverse values, while striving to enhance sustainable growth in our corporate value.

#### Assessment of effectiveness of the Board

Every year, the effectiveness of the Board of Directors is evaluated to improve its effectiveness. In FY2023, a self-assessment survey of Directors was conducted asking about aspects such as the role, composition and operation of the Board and operation of committees. Although the evaluation was generally positive, the issue of information-sharing with the Nominating Committee and the Board regarding CEO succession planning was mentioned. On this matter, we have decided that the Nominating Committee will work to improve its operation. We will continue to analyze and evaluate the effectiveness of the Board of Directors on a regular basis to make improvements.

### Executive Officers

#### Appointment of Executive Officers

The appointment of Executive Officers shall be determined after careful deliberation by the Board of Directors, taking into overall account whether they possess the appropriate character, insight, capabilities, experience and track record to fulfil their duties. In addition, if it becomes clear that an Executive Officer lacks the required qualifications, they shall be promptly dismissed by the Board of Directors.

#### Flattening of the hierarchy and compensation structure

On June 25, 2021, NTN Group removed the Managing Executive Officers and eliminated hierarchical relationships among Executive Officers to create one team. This was also done in order to re-activate discussions among Executive Officers, respond to issues quickly and to further enhance corporate value.

In line with the flattening of the structure, the existing system of position-specific Directors' remuneration was abolished in April 2022 and transitioned to a compensation system adapted to the responsibilities held by each Director in their field.

#### Adoption of ESG evaluation

Since April 2022, ESG factors have been set as key individual target measures for Executive Officers involved in the calculation of annual incentives (bonuses). The degree of achievement of these ESG factors is one of the evaluation indicators. Incorporating ESG factors into the evaluation system promotes active engagement by Executive Officers on ESG.

📖 P.75 Compensation Committee

# Nominating Committee

## Message from the Chair

Nominating Committee Chair  
Outside Director

**Akira Murakoshi**



The Nominating Committee selects Executive Officers and submits to the General Meeting of Shareholders, as well as recommending Executive Officers, including the Representative Executive Officer, to the Board of Directors. The committee also uses Executive Officers and internal candidates' skills matrices to monitor the succession plans of Executive Officers and Directors, and cooperates with the executive on fostering talent through work transfers in order to achieve the requisite career formation.

"DRIVE NTN100" Final, the new Medium-term Management Plan, started this fiscal year. Amid major changes in the external environment surrounding NTN Group and increased uncertainty in the outlook, it aims to enhance our corporate value and make this a company that is trusted and needed by stakeholders, and to achieve the "revitalization of NTN" by progressing structural reform and improving profitability.

In order to achieve the goals of the Medium-term Management Plan, it is necessary to achieve an optimal Board composition and a long-term plan for the development of executives, including candidates for the next President. The Nominating Committee aims to expand the pool of next-generation leadership candidates by monitoring Executive Officers' development plans and dialogue with Executive Officers.

The current leadership tended to be appointed on the basis of an emphasis on experience in the existing business model of NTN Group and execution ability. However, the new Medium-term Management Plan lists actions backcast from the relatively long-term goals of 2035. Incorporating the perspective of the Outside Directors, we are prepared to strengthen our management from a long-term view, including renewed discussion of the skill matrix required for future Directors and Executive Officers.

## Deliberations of the Nominating Committee

During FY2023, the Nominating Committee met four times. It revised part of the independence standards for Outside Directors in accordance with the Corporate Governance Code, and discussions were held regarding the structure of officers for FY2024, as well as the selection of candidates for President, Executive Officer, Representative Executive Officers, Executive Officers and Directors.

## Standards for appointment of Directors

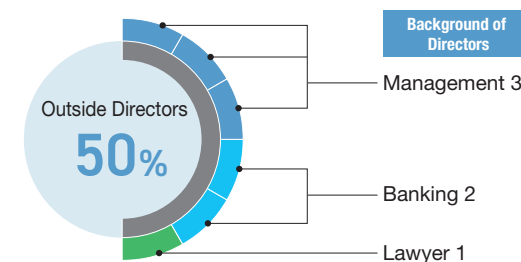
Candidate Directors, whether selected from inside or outside the Group, shall be decided upon careful deliberation by the Nominating Committee based on standards for selection of Directors as stipulated below, taking into account the diversity and balance of the Board (including gender and international experience).

- Must be in good condition both physically and mentally.
- Must have a high sense of ethics and a law-abiding spirit.
- Must be able to engage in constructive discussion from an objective viewpoint.
- Must be highly motivated to improve their abilities.
- Must have excellent decision-making skills from a company-wide and medium- to long-term perspective.
- Must have excellent foresight and insight regarding environmental and social change.
- Must have sufficient track record of performance and expertise in relevant fields (corporate manager or specialization).
- Regarding Outside Directors, (1) they must have sufficient time to accomplish their duties, (2) they must satisfy the standards regarding the independence of Outside Directors as stipulated under separate cover, (3) diversity must be ensured among the Outside Directors, and (4) they must have the requisite abilities to accomplish duties as a member of any of the three committees.

## About Outside Directors

As of June 25, 2024, the Board of Directors consists of 12 members, including six Inside Directors and six Outside Directors, a ratio of Outside Directors of 50%. We will continue to strengthen the supervision of management and improve transparency and fairness. In order to ensure appropriate corporate governance, we have also established our own standards regarding the independence of Outside Directors, stipulating qualification and independence standards for their appointment. All Outside Directors are designated as Independent Directors as defined by the rules of the Tokyo Stock Exchange, and are reported to the Exchange as such.

In order to ensure a Board environment of vibrant discussion, we have established in principle monthly seminars for Outside Directors on the content of discussions in key meetings of executive departments. Moreover, we continuously provide the information necessary for Outside Directors to effectively fulfill their roles and responsibilities by creating opportunities to deepen their understanding of our business through in-person inspection of business sites and other means.



# Compensation Committee

## Message from the Chair

Chair of Committee  
Outside Director

**Tomonori Nishimura**



The revision of the Cabinet Office Order on Disclosure of Corporate Affairs in 2019 marked the beginning of a new era for executive compensation in Japan. Nevertheless, the operation of the Compensation Committee, which has a central role in this matter, is still a work in progress. NTN Group's Compensation Committee consists of six Directors including four Outside Directors, and is chaired by an Outside Director. The role of the Chair is not only to convene meetings and lead discussion, but also to prepare the goals of each meeting and points to note in advance. It is also to constantly strengthen governance towards improving the transparency and objectivity of executive remuneration at all times. Amid rapidly changing business and social conditions, it is vital that we aim for a compensation system that can compete in the market. To maintain and enhance employee motivation, it is the challenge of the Committee to remain abreast of the latest conditions in the industry, and to continuously consider performance-linked compensation system design and the decision-making process. Depopulation is already under way in Japan and the diversity of employee recruitment and development will only gain in importance. Evolving the compensation system to adapt to globalization is a major challenge, and we hope to give the matter deep consideration.

## Deliberations of the Compensation Committee

Five meetings of the Compensation Committee were held from April 2023 to March 2024.

With the aim of improving the fairness, transparency, and objectivity of the procedures for determining the compensation of Directors and Executive Officers, as well as enhancing corporate governance, the committee resolved on matters related to executive compensation, including individual compensation.

### Compensation Committee (from April 1, 2023 to March 31, 2024)

1st meeting	<ul style="list-style-type: none"> <li>Points granted by BIP Trust for compensation of Officers</li> <li>Bonus for Executive Officers in 2023</li> </ul>
2nd meeting	<ul style="list-style-type: none"> <li>Decision on the order of replacement in the event of the Chair being unable to serve</li> <li>Director compensation</li> <li>Annual activity plan</li> </ul>
3rd meeting	<ul style="list-style-type: none"> <li>Medium- to long-term performance-linked compensation for Directors under the new Medium-term Plan</li> <li>Review of compensation levels and compensation structure of Officers</li> </ul>
4th meeting	<ul style="list-style-type: none"> <li>Executive Officer compensation</li> </ul>
5th meeting	<ul style="list-style-type: none"> <li>Executive Officer compensation</li> <li>Reference stock value of BIP Trust for compensation of Officers</li> </ul>

## Basic policy for determining compensation

The Compensation Committee, chaired by an Outside Director, shall determine the system and level of compensation for Officers and individual compensation with reference to objective data on compensation levels and trends at other companies. Executive Officers' and Directors' compensation shall be determined separately, and if a Director also serves as an Executive Officer, those compensations shall be combined.

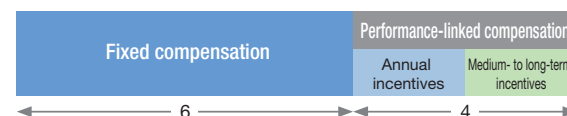
## Compensation for Directors

Compensation for a Director consists only of fixed compensation.

Fixed compensation shall be calculated by adding a supplement to basic compensation (which is determined based on any concurrent duties as an Executive Officer and whether the work is full-time or part-time), taking into account the committee(s) to which a Director belongs and their role on the committee(s).

## Compensation for Executive Officers

Compensation for Executive Officers consists of fixed compensation and performance-linked compensation, which fluctuates according to performance. The ratio of fixed compensation to performance-linked compensation is approximately 6:4 as a standard.



### Fixed compensation

Fixed compensation consists of basic compensation, compensation by responsibility and compensation by representative authority.

### Performance-linked compensation

#### Annual incentives

For Executive Officers, the Group determines whether or not to provide payment of monetary compensation and, in the case of providing such payment, the total amount. The decision reflects the performance over the previous fiscal year, based on consolidated financial results indicators, among others. Whether or not to pay an annual incentive to an Executive Officer, and in the case of payment, the amount, is determined (within the total amount of provision) with reference to the Executive Officer's progress on priority target measures. Indicators related to the calculation of bonuses are based on consolidated financial results: net sales, operating income and net profit from the perspective of focus on the achievement of earnings growth. The provision is made once a year in June as determined by the Compensation Committee.

#### Medium to long-term incentives

NTN Group shares shall be issued based on the achievement of key targets in the Medium-term Management Plan (money equivalent to the converted amount of shares shall be paid for a certain portion) as an incentive to achieve those targets and to contribute to raising shareholder value, as well as to promote the holding of NTN Group shares. Medium- to long-term performance targets include key performance indicators (consolidated operating margin, inventory turnover ratio, etc.), taking into account the Company's management policies.

# Audit Committee

## Message from the Chair

Chair of Committee  
Outside Director

**Yasuo Kitani**



Throughout the year, the Audit Committee conducts on-site audits, based on the audit plan established at the beginning of the fiscal year, at more than 60 locations across a wide range of functions, including head office divisions, manufacturing sites, and sales offices. We also conduct audits on the job performance of Executive Officers and Directors while engaging in dialogues with them as necessary. On a day-to-day basis, we attend meetings of various committees such as the Management Meeting, the Executive Officers Meeting, the Risk Management Committee and the Compliance Committee, monitoring operations from the perspective of governance. In particular, as the respective committees also serve important functions in the internal control system, we focus on and check if they are functioning properly in this regard.

Across these activities, I, as the Chairperson, place the greatest importance on investigating the underlying causes when any flaws or issues are detected, in order to find out if the problem lies with any shortcomings in the company's structure (such as the internal control system). Since everyone makes mistakes, the internal control system should be designed and set up in a way to prevent mistakes from occurring. However, it is not possible for everything to work perfectly. Therefore, we take great care to make the necessary amendments and are constantly mindful of applying the lessons learned to make improvements with a forward-looking approach.

NTN regards the flaws and issues that we find as "treasures." They provide clues on what we should improve on. With that in mind, I will continue to provide support for the development of a sustainable and good system, and the maintenance of its implementation structure.

The Audit Committee aims to contribute to the company by instilling a positive culture that can harness setbacks to fuel future growth.

## Deliberations of the Audit Committee

Major agenda items of the Audit Committee include the formulation of audit policies and plans, evaluation of the audit plans of accounting auditors, and assessment of the appointment of accounting auditors, and the assessment of the status of development and operation of the Internal Control System.

## Audit status

The Audit Committee members attend meetings of the Board of Directors and other major meetings in accordance with auditing standards, policies, and plans determined by the Audit Committee. The Audit Committee receives reports or hears from Directors, Executive Officers, employees, etc. on the status of the execution of their duties, and audits the execution of duties by Directors and Executive Officers. In addition to the Board of Directors and Executive Officers Meetings, members of the Audit Committee attend and monitor other committees which operate the internal control system – the Sustainability Committee, the Risk Management Committee, the Compliance Committee and the Fair Trade Monitoring Committee.

📖 P.77 Committees of the Executive Organization

## Internal control system

NTN Group regards risk management and compliance as one of the most important management issues. We have established the basic approach to the internal control system, the internal control policy. This policy guides the development and operation of the Group's Internal Control System. The system is under constant review in response to changing business conditions as we strive to improve the soundness and efficiency of the Group.

The Internal Control Department supervises and manages evaluation of internal controls (the internal controls reporting system) based on the Financial

Instruments and Exchange Act. It also works to develop and strengthen the internal control system under the Companies Act. Regarding challenges arising with regard to internal controls as discovered by audit, it examines the development and operational status of rules, procedures and systems from a Group-wide perspective, then aims to reinforce internal controls by correction and improvement.

## Internal audit initiatives

The Internal Audit Department, under the direct oversight of the President, Executive Officer, undertakes internal audits independently of the department under audit. The Company conducts internal audits of the status of business execution by the Group of executive organizations from the perspective of propriety and compliance with laws, regulations and internal regulations, as well as from the viewpoint of the effectiveness and efficiency of business activities.

Internal audits involve auditing each executive organization separately (operational audit) and auditing horizontally across organizations by risk and business function (thematic audit). Based on the results, advice and suggestions for improvement are provided to the department concerned. Follow-up audits are conducted to check on the implementation of improvements until they are complete.

The results of internal audits are reported to the President, Executive Officer and to the Audit Committee, as well as being shared with all Executive Officers. In addition, the Audit Committee, the Internal Audit Department and the Accounting Auditor hold regular meetings to exchange information and opinions about audit policies, plans and results in order to improve their efficiency and effectiveness.

Overseas, we have established an Administration & Internal Control Department within General Manager's Offices, which supervise each region. The Internal Audit Department and the Administration & Internal Control Departments work together while taking into account the circumstances and characteristics of the region concerned.

# Committees of the Executive Organization

## Sustainability Committee

The NTN Group has established the Sustainability Committee chaired by the Executive Officer in charge of the ESG Promotion Department (Chief Management Officer of Sustainability Activities). The Committee serves as a body that deliberates on the sustainability activities required for identifying and resolving issues with a view to realizing a “NAMERAKA Society.” Members of the Committee, comprising mainly of the heads of departments related to ESG, deliberate on the details of risks and opportunities related to sustainability as well as the initiatives to be implemented. The status of initiatives is reviewed regularly as a response measure for materiality linked to risks and opportunities. In addition, the Risk Management Committee has established a framework for reporting and deliberating on more specific countermeasures for sustainability-related risks. The details of risks and opportunities as well as the initiatives discussed by the Sustainability Committee are reported to the Board of Directors as appropriate.

## Carbon Neutrality Promotion Committee

Amid the growing importance of climate change countermeasures worldwide, NTN established the Carbon Neutrality Promotion Committee in FY2023 to promote, globally and more strongly, the realization of carbon neutrality, which the Sustainability Committee has long been working on as one of our ESG issues.

The Carbon Neutrality Promotion Committee is chaired by the President, Executive Officer, with the Executive Officer in charge of the Carbon Neutrality Strategy Promotion Department serving as the Vice Chairperson. Its members include Executive Officers and general managers responsible for each region (Japan, Europe and Africa, the Americas, China, ASEAN/Oceania/West Asia, and India). The Committee meets twice a year in principle to deliberate on action plans toward achieving the carbon neutrality target and the status of efforts.

In addition, the regional subcommittee of each region, chaired by an Executive Officer in charge, functions as the subordinate organization of the Carbon Neutrality Promotion Committee. These subcommittees meet four times a year in principle to review measures and efforts corresponding to the actual conditions in each region, and report the results of their discussions to the Carbon Neutrality Promotion Committee.

Matters deliberated on by the Carbon Neutrality Promotion Committee are reported independently or jointly with the Sustainability Committee, to the Board of Directors as appropriate.

## Risk Management Committee

NTN has established the Risk Management Committee, chaired by the Executive Officer in charge of the ESG Promotion Department (Chief Management Officer of Risk Management), for the purpose of preventing risks and minimizing damage in the event of a crisis. The committee mainly consists of the General Managers of the Promotion Departments of the risk management. The committee regularly checks activities including identification, analysis, evaluation, and treatment with regard to risks that have a major impact on the management of the NTN Group. Matters discussed at meetings of the Risk Management Committee are reported regularly to the Board of Directors.

Risks that are discovered through internal audits conducted by the Internal Audit Department are shared with the Internal Control Department. This allows the Group to take preventive actions and make improvements to prevent risks in a timely and appropriate manner.

## Compliance Committee

NTN has established the Compliance Committee, chaired by the Executive Officer in charge of the Legal Department (Chief Management Officer of Compliance Promotion Activities). It serves as an advisory body for compliance promotion activities, and meets twice a year in principle. Members of the Committee are comprised primarily of the heads of the related risk management departments. They discuss issues related to global compliance risks (excluding the risk of violating antimonopoly and subcontract laws), as well as action plans and results, and report to the Board of Directors. Based on the action plans discussed by the Committee, the relevant risk management promotion departments implement measures to mitigate risks in collaboration and partnership with the Compliance Promotion Activity Supervisors appointed at each domestic business site and subsidiary as well as the Administration & Internal Control Department established at each Office of the General Manager in each overseas region.

## Fair Trade Monitoring Committee

NTN has established the Fair Trade Monitoring Committee, chaired by the President, Executive Officer, to engage in activities for promoting compliance with antimonopoly and subcontract laws. The Committee meets twice a year in principle. The primary members include the Executive Officers in charge of sales and procurement departments, Outside Directors, and external lawyers. The Committee discusses the implementation plans and performance reports for compliance with antimonopoly and subcontract laws, and provides supervision and guidance on effective control for fair trade practices along with education and awareness-raising activities. The discussed matters are reported to the Board of Directors. Under the direction of the Fair Trade Monitoring Committee, the Legal Department, which oversees activities related to compliance with antimonopoly laws, conducts activities including education, guidance, and supervision of the relevant domestic departments, and also works together with the Administration & Internal Control Department of each overseas region to manage the implementation status of activities related to compliance with antimonopoly laws.

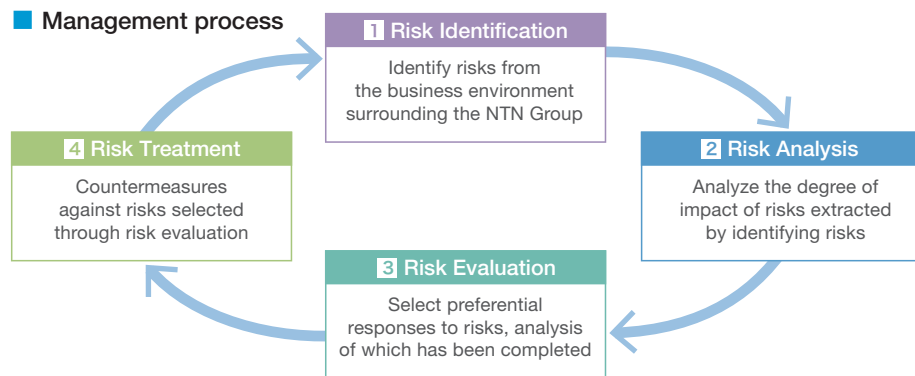
# Risk Management

## Basic approach to risk management

We have developed a Risk Management Policy that outlines our basic approach to prevention and handling of risks that may hamper the execution of the Group's business, and the Risk Management Regulations that set forth risk management organizations and their roles. Through these measures, we are promoting group-wide risk and crisis-management and BCP/BCM (Business Continuity Planning/Business Continuity Management).

To prevent risk and minimize the impact of any crises, the Risk Management Committee was established, chaired by the Executive Officer in charge of the ESG Promotion Department (who has oversight of risk management). The committee regularly checks up on the various risks surrounding NTN Group business activities including risk identification, analysis, evaluation, and treatment. The risks are classified from a comprehensive viewpoint into the 20 risk types listed below, then reduction of each risk is addressed according to its specific nature, with decisions made as to who and what department is responsible for managing the risk. The results of discussions at the Risk Management Committee are reported to the Board of Directors.

### Management process



### Relevant risks

- |  |                             |                                 |
|--|-----------------------------|---------------------------------|
| 1 Natural disasters                          | 8 Technology and R&D        | 15 Health and safety            |
| 2 Geopolitical risk                          | 9 Procurement               | 16 Environment                  |
| 3 Changing political and economic conditions | 10 Logistics                | 17 Information systems          |
| 4 Changing market conditions                 | 11 Production and inventory | 18 Finance and accounting       |
| 5 Changing working environment               | 12 Quality                  | 19 Legal affairs and compliance |
| 6 Carbon neutrality                          | 13 Marketing and sales      | 20 Others                       |
| 7 Changing legislation and regulation        | 14 Personnel and labor      |                                 |

## Structure



## Promotion of BCP/BCM

We have been developing a BCP/BCM structure designed to respond to major earthquakes in Japan and are working to strengthen our disaster response systems, including those of our group companies. We have completed the formulation of BCP to enable rapid recovery at all production sites around Japan. Development of BCM continues we are carrying out annual training (BCP drills) to assess the effectiveness of the continuity plans and management and have taken necessary advance measures.

## Strengthening the Computer Security Incident Response Team

In response to increasing risks of cyber-attack and data breaches and in view of the importance of information security today, we have established a Basic Policy of Information Security alongside our Environment Policy, Human Rights Policy, Safety and Health Basic Policy and Procurement Policy as one of the NTN Group's basic policies set forth under our Management Policy.

Please see the NTN Group sustainability website for more information on our NTN Basic Policy.

 [https://www.ntnglobal.com/en/corporate/idea/management\\_policy.html](https://www.ntnglobal.com/en/corporate/idea/management_policy.html)

# Compliance

## Basic approach to compliance

NTN believes that earning the trust of society is essential in order for the Company to contribute to the realization of a sustainable society and to continue to be a company that is needed by society. Accordingly, we place importance on compliance in our Management Policy. We perceive compliance to include not only abiding with the laws and regulations of each country, but also observing internal regulations and social norms.

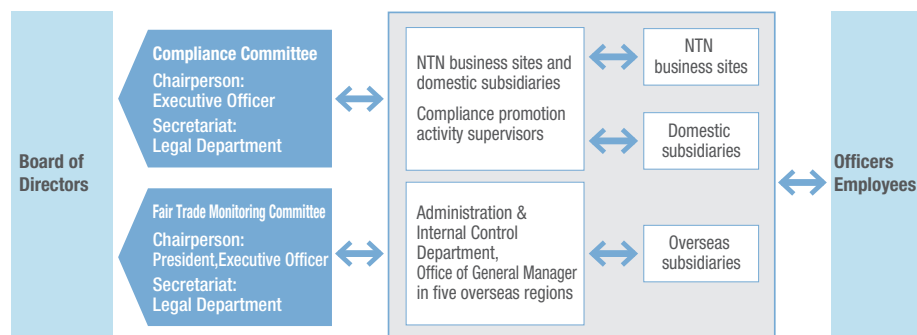
In light of that, we have established the Business Code of Conduct to serve as a behavioral guideline that officers and employees should adhere to.

## Promotion structure

NTN has established Group-wide rules and regulations regarding compliance, and has set up and operates the Compliance Committee and the Fair Trade Monitoring Committee to build a system for promoting compliance centered on the activities of these two committees.

In Japan, a Compliance Promotion Activity Supervisor is appointed at each business site and subsidiary to facilitate the implementation of compliance promotion activities. With regard to antimonopoly laws, the Legal Department is responsible for overseeing legal compliance activities in Japan, including at subsidiaries. Overseas, the action plans deliberated by each committee are implemented mainly by the Administration & Internal Control Department established in the Office of the General Manager in each region. We are working to enhance compliance activities across the Group by holding regular training sessions and sharing information and exchanging opinions on important issues.

### Structure



## Internal corporate culture survey

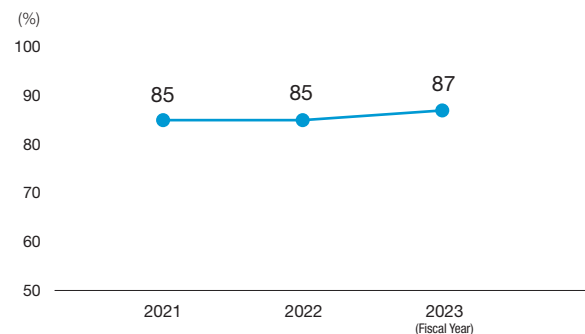
As part of our fraud prevention activities, since FY2017, the Group has been conducting surveys on employee evaluations to find out more about the attitudes of the presidents of affiliated companies and corporate culture of these companies, in relation to compliance.

It is said that there is a high probability of occurrence of fraudulent acts in a company when the Fraud Triangle of motives/pressures, opportunities, and rationalization, is established. While advancing the development of regulations, rules, and penalties, it is also important to improve the corporate culture and environment. Therefore, NTN regularly checks for changes in the organizational culture of affiliated companies through employee evaluations.

By disclosing the results of this survey to the presidents of affiliated companies, we are utilizing these results to develop a culture of “not being motivated to engage in fraudulent acts” by fostering the awareness that they are always being observed by the Company and the Head Office. At the same time, the results of the survey are also used to build good relationships with employees.

Since FY2021, we have been conducting the survey on affiliated companies with changes of presidents or other significant events, with a view to improving the effectiveness and efficiency of the survey. In FY2023, the survey was conducted on approximately 650 employees of 11 companies (two in Japan and nine overseas).

### (Average) Percentage of employees who evaluated the attitudes of the presidents of affiliated companies as “Good”



# Compliance

## Corruption prevention initiatives

With regard to bribery, we have collaborated with the Administration & Internal Control Departments of each overseas region to prepare local versions of the internal regulations, taking into account the bribery-related laws and regulations as well as social norms in Japan and each country. Based on these, training and activities to raise awareness are conducted.

NTN's internal regulations not only prohibit bribery of domestic and foreign public officials and business partners, but also prescribe rules and procedures related to the provision of property and benefits by officers and employees, as well as rules and procedures to prevent bribery through business partners. In view that there are countries which regulate the exchange of property and benefits between private companies, we have also established rules and procedures regarding the receipt of property and benefits, in order to prevent the acceptance of bribery by our officers and employees, ensure fair transactions, and prevent conflicts of interest among officers and employees. In principle, NTN's officers and employees do not accept entertainment or gifts from business partners.

In addition to regular training, we share information and exchange opinions about initiatives in Japan and each country, and conduct self-audits and internal audits every year to maintain and manage our Group-wide anti-bribery system.

Over the past decade, our Group has not been charged by authorities in any country for violating bribery-related laws, nor incurred any expenses related to such violations. Furthermore, no employee has been subjected to disciplinary action or been dismissed as a result of violating regulations related to bribery prevention.

## Antimonopoly law compliance initiatives

We perceive violations of antimonopoly laws as a risk to the entire Group. Therefore, to ensure thorough compliance with such laws, the Legal Department and the Administration & Internal Control Departments of each overseas region conduct training and awareness-raising activities on antimonopoly law compliance while ensuring that such activities are consistent with the laws and environments of each country.

In addition, officers and employees are obligated to submit advance applications and post-event reports in cases of any possible contact with competitors at exhibitions, conferences, or other events, thereby we have developed a system that allows us to grasp the circumstances of such contact. Furthermore, we strive to strengthen our compliance system by conducting self-audits and internal audits every year and requesting each department to proactively plan and implement improvement measures based on the audit results.

Going forward, we will continue to enhance the contents of training and other activities, and to realize fair and free competition by educating officers and employees.

## Helpline (Whistle-blower System)

The "Helpline" (Whistle-blower System) has been established within and outside the Company as a contact point for providing consultation services, whether named or anonymous, widely in relation to violations, or possible breach, of laws, the Business Code of Conduct, and internal regulations.

The Helpline Management Regulations stipulates that investigations must be conducted in compliance with rules such as ensuring confidentiality and prohibiting disadvantageous treatment to whistle-blowers and others supporting the investigation. In line with this, Helpline responds to consultations on various types of cases such as harassment. Helpline serves not only as a tool for reporting on misconduct, but also as a means for raising questions and expressing opinions about the Business Code of Conduct. In addition, it is used as a way of maintaining good relationships between the Company and officers, employees, and business partners. In Japan, the Helpline Management Regulations was revised in 2022 with the enforcement of the amended Whistleblower Protection Act, and we operate Helpline in accordance with the purposes of this Act, such as expanding the scope of persons eligible for protection and strengthening protection measures. In FY2023, there were 21 internal whistle-blowing cases, and consultation response rate was 100%. Overseas, internal whistle-blower systems are progressively being developed and operated in ways that are adapted to the needs and circumstances of each region.

We are working to spread awareness of the Helpline among employees through various compliance training courses and inclusion of the relevant information in the Business Code of Conduct Guidebook. According to the Compliance Awareness Survey in FY2023, Helpline awareness rate was 93.8%. Going forward, we will continue to conduct activities to raise awareness and to provide consultation services. As a company that detects misconduct early and protects employees, we will also work to create a workplace where employees can work with peace of mind.

### Structure



Please see the NTN Group sustainability website for more information on our compliance initiatives.

 <https://www.ntnglobal.com/en/csr/governance/compliance.html>

# Consolidated Financial Indicators (Past 11 Years)<sup>\*1</sup> (Fiscal Year: April 1 – March 31)

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Profit and Loss Statement</b>												
Net sales*2	(Millions of yen)	638,970	701,900	716,996	683,636	744,699	733,846	651,956	562,847	642,023	773,960	836,285
Operating income	(Millions of yen)	33,003	43,850	47,770	35,929	39,935	27,222	7,517	(3,138)	6,880	17,145	28,149
Operating margin	(%)	5.2	6.2	6.7	5.3	5.4	3.7	1.2	(0.6)	1.1	2.2	3.4
Income (loss) before income taxes	(Millions of yen)	(2,451)	37,062	26,942	14,889	26,905	2,938	(33,949)	(1,256)	17,619	10,807	16,551
Net income (loss) attributable to owner of patent	(Millions of yen)	(14,648)	23,352	15,037	2,830	20,373	(6,958)	(43,992)	(11,641)	7,341	10,367	10,568
Capital expenditures	(Millions of yen)	33,162	31,266	36,300	35,398	37,589	45,172	57,675	23,817	19,809	22,253	26,589
Depreciation and amortization	(Millions of yen)	39,315	40,391	38,277	36,629	37,505	38,926	37,306	35,478	37,898	42,048	41,803
R&D expenditures	(Millions of yen)	17,820	18,088	18,480	19,196	21,007	21,661	19,961	17,485	17,444	18,678	18,234
<b>Balance Sheet</b>												
Total assets	(Millions of yen)	848,037	856,121	794,000	797,038	839,427	840,750	757,822	836,563	855,483	869,827	910,252
Net assets	(Millions of yen)	213,368	262,559	248,504	245,050	269,759	246,404	168,378	183,751	216,425	237,425	280,822
Inventories	(Millions of yen)	166,484	184,128	178,220	171,481	179,738	194,505	182,923	176,847	214,843	239,385	264,794
Interest-bearing debt	(Millions of yen)	381,767	359,105	325,173	320,169	320,833	350,344	362,416	422,803	394,031	371,292	362,064
<b>Various Indicators</b>												
Inventory turnover ratio (Times)	(Times)	3.8	3.8	4.0	4.0	4.1	3.8	3.6	3.2	3.0	3.2	3.2
Net D/E ratio (Times)	(Times)	1.3	1.1	1.1	1.1	0.9	1.2	1.9	1.6	1.5	1.2	0.9
Net income (loss)/Average total assets (ROA)	(%)	(1.8)	2.7	1.8	0.4	2.5	(0.8)	(5.5)	(1.5)	0.9	1.2	1.2
Net income (loss)/Average shareholders' equity (ROE)	(%)	(7.3)	10.5	6.3	1.2	8.4	(2.9)	(22.8)	(7.1)	4.0	5.0	4.4
Equity to capital ratio	(%)	23.5	28.6	29.3	28.8	30.2	27.4	20.6	20.4	23.1	25.4	29.0
Return on invested capital (ROIC)	(%)	4.0	5.2	5.8	4.5	5.0	3.3	1.0	(0.4)	0.8	2.0	3.2
<b>Cash Flows</b>												
Net cash provided by (used in) operating activities	(Millions of yen)	69,058	25,120	46,247	62,387	61,799	43,224	43,749	36,473	8,956	34,219	65,103
Net cash provided by (used in) investing activities	(Millions of yen)	(34,132)	(31,293)	(33,770)	(41,218)	(48,358)	(65,614)	(61,807)	(17,938)	2,512	(13,858)	(24,970)
Net cash provided by (used in) financing activities	(Millions of yen)	6,595	(37,492)	(27,958)	(8,218)	(7,520)	20,745	7,413	54,671	(41,300)	(33,258)	(30,212)
Free cash flow	(Millions of yen)	34,926	(6,173)	12,477	21,169	13,441	(22,390)	(18,058)	18,535	11,468	20,361	40,133
<b>Per-share Data</b>												
Net assets (Yen)	(Yen)	374.68	461.21	436.97	431.66	477.17	433.32	294.00	321.04	372.70	415.64	497.83
Net income (loss)												
Net income (loss) (Yen)	(Yen)	(27.54)	43.91	28.28	5.33	38.36	(13.10)	(82.83)	(21.92)	13.83	19.53	19.91
Diluted net income (loss) (Yen)	(Yen)	-	-	-	-	-	-	-	-	-	-	18.65
Dividends	(Yen)	2.00	6.00	10.00	10.00	15.00	15.00	5.00	0.00	0.00	5.00	10.00

\*1 The Company adopted the "Partial Amendments to Accounting Standard for Tax Effect Accounting," etc. from FY2018, and as such the figures for the period from FY2014 to FY2017 are shown after being reclassified to reflect the above accounting standards. In addition, from NTN Report 2022, financial data listed in the Annual Securities Report is used.

\*2 From FY2020, "Royalty," which was previously recorded under "Non-Operating Income" are now recorded as part of "Net Sales," and as such the figures for the period from FY2016 to FY2019 are shown after being reclassified to reflect the change in presentation method.

# ESG Data (Fiscal Year: April 1 – March 31)

## Environment (E)

	Unit	2019	2020	2021	2022	2023	Scope of calculations
Energy consumption	TJ	6,326	5,783	6,623	6,456	6,083	Global
Energy consumption intensity (Energy consumption/Net sales)	GJ/million yen	9.710	10.275	10.316	8.342	7.274	Global
CO <sub>2</sub> emissions (Scope 1 and 2)	ten thousand tons	62.0	54.9	59.2	56.4	53.6	Global
CO <sub>2</sub> emissions (Scope 1)	ten thousand tons	9.3	8.6	10.6	10.1	9.1	Global
CO <sub>2</sub> emissions (Scope 2)	ten thousand tons	52.8	46.3	48.6	46.3	44.5	Global
Fuel consumption							
Gasoline	thousand liters	95.6	71.8	58.1	55.6	46.2	Global
Kerosene	thousand liters	517.4	527.4	644.3	521.4	544.0	Global
Diesel oil	thousand liters	338.6	301.5	400.0	389.9	342.5	Global
Heavy oil A	thousand liters	502.8	189.2	157.9	139.2	88.9	Global
LPG	tons	8,992.5	8,753.7	12,754.4	12,011.5	11,174.8	Global
City gas (Japan)	thousand m <sup>3</sup>	8,956.9	7,723.5	8,673.8	8,460.2	8,767.2	Japan
Natural gas (Overseas)	thousand m <sup>3</sup>	18,560.6	17,409.4	20,093.6	19,223.0	17,767.9	Overseas
Electricity purchased	GWh	1,270.3	1,144.7	1,271.6	1,253.2	1,116.5	Global
Electricity purchased (renewable energy)	GWh	0	0	0	0.1	106.2	Global
Natural energy generation	GWh	7.4	11.7	14.3	13.0	14.2	Global
Water consumption	ten thousand m <sup>3</sup>	281.1	243.0	271.5	284.1	282.8	Global
Waste generated	ten thousand tons	15.5	13.1	15.4	16.3	16.4	Global
Recycling rate	%	96.9	96.9	95.8	97.2	97.0	Global

## Governance (G)

	Unit	2019	2020	2021	2022	2023
Number of Directors	people	11	11	11	12	11
Number of Outside Directors	people	5	5	5	6	5
Number of female Directors	people	0	1	1	1	1
Number of Executive Officers	people	15	11	11	13	11
Number of Sustainability Committee held per year	times	2	4	3	3	2
Number of Carbon Neutrality Promotion Committee held per year*1	times	—	—	—	—	2
Number of Risk Management Committee held per year	times	2	4	2	2	3
Number of Compliance Committee held per year	times	2	2	2	2	2
Number of Fair Trade Monitoring Committee held per year	times	2	1	2	2	2
Awareness of Helpline shown in Compliance Awareness Survey	%	82	87	90	88	94

\*1 As the Carbon Neutrality Promotion Committee was launched in FY2023, there are no results for the periods before that.

## Social (S)

	Unit	2019	2020	2021	2022	2023	Scope of calculations
Number of employees	people	24,199	23,292	23,383	23,027	22,617	Global
Japan	people	8,718	8,735	8,579	8,419	8,285	
Americas	people	5,220	4,921	5,516	5,583	5,353	
Europe	people	5,729	5,470	5,200	5,086	5,126	
Asia and others	people	4,532	4,166	4,088	3,939	3,853	
Percentage of overseas employees	%	64.0	62.5	63.3	63.4	63.4	Global
Percentage of female employees	%	22.0	21.9	22.0	22.0	22.2	Global
Percentage of female managers							
Global	%	13.2	14.0	14.4	14.7	16.8	Global
NTN only+Domestic subsidiaries	%	3.3	3.3	3.4	4.0	4.0	Japan
NTN only	%	4.0	3.9	3.9	4.4	4.5	NTN only
Childcare leave acquisition rate for male employees	%	3	5	11	37	62	NTN only
Percentage of mid-career hires	%	9.4	8.5	6.7	19.0	21.3	NTN only
Employment rate of persons with disabilities	%	2.22	2.34	2.55	2.57	2.57	NTN only
Number of expert course participants*1	people	—	—	—	—	6	NTN only
Number of succession plan candidatesnts	people	5	8	19	19	24	Global
Training hours per employee*2	hours	—	10.6	11.6	16.2	11.9	NTN only
Training expenditure per employee*3	yen	—	—	—	—	19,180	NTN only
Scores related to “challenge” and “transformation” in Employee Engagement Surveys (positive response rate)*4							
Organization allows for learning from failures	%	—	—	58	—	50	NTN only
The workplace environment encourages new proposal methods	%	—	—	45	—	42	
I try to perform beyond expectations	%	—	—	76	—	65	
Scores related to “corporate philosophy” and “collaboration” in Employee Engagement Surveys (positive response rate)*4							
The NTN SPIRIT is practiced	%	—	—	62	—	51	NTN only
I know the meaning of my work	%	—	—	74	—	55	
There is mutual respect and collaboration among departments	%	—	—	32	—	29	
Number of participants in human rights education (total number)*2	people	—	1,097	1,213	1,354	1,443	NTN only
Percentage of people in the healthy weight range (BMI between 18.5 and 25)*5	%	—	66.1	66.0	65.4	66.0	NTN only
Percentage of high-stress employees	%	7.8	7.1	8.3	8.6	9.0	NTN only
Number of occupational accidents (resulting in lost work time)*6	incidents	3	1	3	4	2	NTN only
R&D expenditure	hundred million yen	200	175	174	187	182	Global
Percentage of R&D expenditure to net sales	%	3.1	3.1	2.7	2.4	2.2	Global

\*1 As this is a new system established in FY2023, there were no participants before that.

\*2 Performance survey commenced from FY2020.

\*3 Performance survey commenced from FY2023.

\*4 We started to conduct the Employee Engagement Survey from FY2021, and no survey was conducted in FY2022. The Employee Engagement Surveys conducted in FY2021 and FY2023 were conducted only on some employees.

\*5 Included as an item for analysis from FY2020.

\*6 The calculation period for FY2023 was from December 16, 2022 to December 15, 2023, and calculation periods prior to FY2022 were also based on this.

# Consolidated Financial Statements (FY: April 1 – March 31, 2024)

## Consolidated Balance Sheet

(In million yen)

	2022	2023
<b>Assets</b>		
Current assets		
Cash and bank deposits	111,658	130,035
Notes and accounts receivable-trade	129,760	120,554
Electronically-recorded monetary claims	6,902	7,334
Finished goods & purchased goods	116,695	136,103
Work in process	62,256	65,046
Raw materials and supplies	60,434	63,645
Short-term loans receivable	21	61
Other	42,086	41,287
Allowance for doubtful accounts	(790)	(1,140)
Total current assets	529,024	562,928
Fixed assets		
Property, plant and equipment		
Buildings and structures	247,774	264,183
Accumulated depreciation	(159,103)	(172,975)
Buildings and structures, net	88,671	91,207
Machinery, equipment and vehicles	778,061	836,397
Accumulated depreciation	(659,788)	(712,591)
Machinery, equipment and vehicles, net	118,272	123,805
Land	33,452	32,502
Construction in progress	17,424	16,356
Other	67,107	72,274
Accumulated depreciation	(60,815)	(65,078)
Other, net	6,291	7,196
Total property, plant and equipment	264,113	271,068
Intangible fixed assets		
Goodwill	1,768	1,554
Other	38,121	33,878
Total intangible fixed assets	39,890	35,432
Investments and other assets		
Investment securities	25,434	22,270
Deferred tax assets	4,219	7,336
Assets for retirement benefits	3,312	6,304
Other	4,049	5,881
Allowance for doubtful accounts	(217)	(969)
Total investments and other assets	36,799	40,823
Total fixed assets	340,802	347,324
Total assets	869,827	910,252

(In million yen)

	2022	2023
<b>Liabilities</b>		
Current liabilities		
Notes and accounts payable-trade	67,283	65,462
Electronically-recorded monetary claims	68,340	73,245
Short-term loans	161,943	125,714
Current portion of bonds payable	—	10,000
Accrued income taxes	4,307	7,148
Accrued bonuses for directors and other officers	117	116
Other	67,083	78,218
Total current liabilities	369,074	359,906
Long-term liabilities		
Bonds	80,000	70,000
Convertible-bond-type bonds with share acquisition rights	—	22,084
Long-term loans	129,349	134,264
Provision for products defect compensation	251	743
Liabilities for retirement benefits	34,862	21,577
Other	18,863	20,853
Total long-term liabilities	263,327	269,523
Total liabilities	632,402	629,430
<b>Net assets</b>		
Shareholders' equity		
Common stock	54,346	54,346
Additional paid-in capital	67,970	67,970
Retained earnings	69,166	75,770
Treasury stock	(856)	(834)
Total shareholders' equity	190,626	197,253
Accumulated other comprehensive income		
Net unrealized holding gain on other securities	1,255	211
Translation adjustments	28,079	57,533
Remeasurements of defined benefit plans	697	9,332
Total accumulated other comprehensive income	30,032	67,076
Non-controlling shareholders' equity	16,765	16,491
Total net assets	237,425	280,822
Total liabilities and net assets	869,827	910,252

\*Refer to the NTN website for management performance, financial analysis, and risk factors. <https://www.ntnglobal.com/en/investors/finance.html>

\*English financial statements have been published on the NTN website since FY2021. <https://www.ntnglobal.com/en/investors/finstatement.html>

## Consolidated Financial Statements

### Consolidated Statement of Income

(In million yen)

	2022	2023
Net sales	773,960	836,285
Cost of sales	648,047	691,008
Gross profit	125,912	145,277
Selling, general and administrative expenses	108,766	117,128
Operating income	17,145	28,149
Non-operating income		
Interest income	1,146	1,418
Dividend income	278	260
Share of profit of entities accounted for using equity method	1,459	486
Derivative transaction gains	2,035	—
Foreign exchange gains	—	1,024
Other	2,499	2,423
Total non-operating income	7,419	5,612
Non-operating expenses		
Interest expenses	5,910	8,519
Foreign exchange losses	3,378	—
Other	3,228	5,241
Total non-operating expenses	12,517	13,760
Ordinary income	12,047	20,001
Extraordinary income		
Gain on sale of tangible fixed assets	1,716	2,333
Gain on contribution of securities to retirement benefit trust	—	1,540
Gain on sales of investment securities	—	690
Total extraordinary income	1,716	4,564
Extraordinary losses		
Impairment loss	1,609	4,168
Loss on business restructuring	1,348	3,119
Loss on disaster	—	726
Total extraordinary losses	2,957	8,013
Income before income taxes and equity in earnings of affiliated companies	10,807	16,551
Income taxes - current	7,253	10,635
Income taxes - deferred	(8,307)	(6,252)
Total income taxes	(1,054)	4,383
Net income	11,861	12,168
Profit attributable to non-controlling shareholders	1,493	1,599
Profit (loss) attributable to owners of parent	10,367	10,568

### Consolidated Statement of Comprehensive Income

(In million yen)

	2022	2023
Net income	11,861	12,168
Other comprehensive income		
Net unrealized holding gain on other securities	210	(1,043)
Translation adjustments	11,307	29,437
Remeasurements of defined benefit plans	1,417	8,607
Equity in equity-method affiliates	918	1,080
Total other comprehensive income	13,853	38,081
Comprehensive income	25,715	50,250
(Breakdown)		
Comprehensive income attributable to owners of parent	24,128	47,613
Comprehensive income attributable to non-controlling shareholders	1,587	2,636

# Consolidated Financial Statements

## Statements of Changes in Shareholders' Equity

(In million yen)

2022											
	Shareholders' equity					Accumulated other comprehensive income				Minority interest	Total net assets
	Common stock	Additional paid-in capital	Retained earnings	Treasury stock	Total shareholders' equity	Valuation and translation adjustment	Translation adjustments	Accumulated accrued retirement benefits adjustments	Total accumulated other comprehensive income		
Balance on April 1, 2022	54,346	67,970	60,127	(866)	181,578	1,044	16,025	(797)	16,272	18,574	216,425
Changes during the current period											
Distribution of retained earnings			(1,329)		(1,329)						(1,329)
Profit attributable to owners of parent			10,367		10,367						10,367
Purchase of treasury stock				(0)	(0)						(0)
Sales of treasury stock				9	9						9
Net changes in items other than shareholders' equity during the period						210	12,054	1,495	13,760	(1,808)	11,951
Total changes during the period	—	—	9,038	9	9,048	210	12,054	1,495	13,760	(1,808)	20,999
Balance on March 31, 2023	54,346	67,970	69,166	(856)	190,626	1,255	28,079	697	30,032	16,765	237,425

(In million yen)

2023											
	Shareholders' equity					Accumulated other comprehensive income				Minority interest	Total net assets
	Common stock	Additional paid-in capital	Retained earnings	Treasury stock	Total shareholders' equity	Valuation and translation adjustment	Translation adjustments	Accumulated accrued retirement benefits adjustments	Total accumulated other comprehensive income		
Balance on April 1, 2023	54,346	67,970	69,166	(856)	190,626	1,255	28,079	697	30,032	16,765	237,425
Changes during the current period											
Distribution of retained earnings			(3,987)		(3,987)						(3,987)
Profit attributable to owners of parent			10,568		10,568						10,568
Changes in scope of consolidation			22		22						22
Purchase of treasury stock				(1)	(1)						(1)
Sales of treasury stock				23	23						23
Net changes in items other than shareholders' equity during the period						(1,043)	29,453	8,634	37,044	(274)	36,770
Total changes during the period	—	—	6,604	22	6,626	(1,043)	29,453	8,634	37,044	(274)	43,396
Balance on March 31, 2024	54,346	67,970	75,770	(834)	197,253	211	57,533	9,332	67,076	16,491	280,822

# Consolidated Financial Statements

## Consolidated Statements of Cash Flows

(In million yen)

	2022	2023
<b>Cash flows from operating activities</b>		
Income before income taxes and equity in earnings of affiliated companies	10,807	16,551
Depreciation and amortization	42,048	41,802
Impairment losses	1,609	4,168
Goodwill depreciation	214	214
Loss on business restructuring	1,348	3,119
Loss on disaster	—	726
Increase (decrease) in allowance for doubtful accounts	(308)	979
Increase (decrease) in accrued retirement benefits for directors and statutory auditor	88	(0)
Increase (decrease) in provision for product defect compensation	(157)	491
Increase (decrease) in liabilities in retirement benefits	(1,228)	(1,671)
Decrease (increase) in assets for retirement benefits	(1,756)	(2,964)
Interest and dividend income	(1,424)	(1,678)
Interest expenses	5,910	8,519
Foreign currency translation adjustments / foreign exchange losses (gains)	(3,519)	(8,638)
Loss (gain) on derivative transactions	(2,035)	906
Share of loss (profit) of entities accounted for using equity method	(1,459)	(486)
Loss (gain) on sale of property, plant and equipment	(1,716)	(2,333)
Loss (gain) on contribution of securities to retirement benefit trust	—	(1,540)
Loss (gain) on sale of investment securities	—	(690)
Decrease (increase) in trade receivables	1,210	18,667
Decrease (increase) in inventories	(15,044)	(3,885)
Increase (decrease) in trade payables	11,443	(2,206)
Other	(1,949)	9,079
Subtotal	44,079	79,129
Interest and dividend income received	2,575	2,288
Interest paid	(5,165)	(8,443)
Income taxes paid	(7,271)	(7,871)
Net cash provided by operating activities	34,219	65,103
<b>Cash flows from investing activities</b>		
Increase in time deposits	(2,314)	(4,834)
Decrease in time deposits	8,709	3,168
Purchases of property, plant and equipment	(19,705)	(24,725)
Proceeds from sale of property, plant and equipment	2,210	2,555
Purchase of intangible assets	(4,020)	(2,333)
Proceeds from sales of investment securities	—	1,638
Purchase of shares of subsidiaries and associates	(26)	—
Decrease (increase) in short-term loans receivable, net	39	(35)
Other	1,248	(403)
Net cash used in investing activities	(13,858)	(24,970)

(In million yen)

	2022	2023
<b>Cash flows from financing activities</b>		
Increase (decrease) in short-term loans, net	(377)	(18,440)
Proceeds from long-term loans	22,541	53,084
Repayment of long-term loans	(52,832)	(76,031)
Dividend payment	(1,329)	(3,987)
Repayment of lease payable	(3,138)	(4,059)
Proceeds from sale and leaseback	5,264	—
Proceeds from issuance of convertible-bond-type bonds with share acquisition rights	—	22,110
Other	(3,386)	(2,888)
Net cash provided by (used in) financing activities	(33,258)	(30,212)
Effect of exchange rate changes on cash and cash equivalents	2,112	6,485
Increase (decrease) in cash and cash equivalents	(10,785)	16,406
Cash and cash equivalents at beginning of the year	121,460	110,675
Increase in cash and cash equivalents resulting from inclusion of subsidiaries in consolidation	—	184
Cash and cash equivalents at end of the quarter	110,675	127,266

# Global Network (As of March 31, 2024)

● Sales ● Production ■ Production and sales ◆ R&D base ● Others

## Europe

- 30 NTN Europe S. A.
- 31 NTN TRANSMISSIONS EUROPE CREZANCY
- 32 NTN TRANSMISSIONS EUROPE
- 33 NTN Wälzlager (Deutschland) GmbH
- 34 NTN Kugellagerfabrik (Deutschland) GmbH
- 35 NTN Mettmann (Deutschland) GmbH
- 36 NTN Antriebstechnik GmbH
- 37 NTN BEARINGS (UK) LTD.
- ◆ NTN-SNR R&D Center

Six consolidated subsidiaries in addition to the Group companies

## Asia and Others

- 38 NTN BEARING-SINGAPORE (PTE) LTD.
- 39 NTN BEARING VIET NAM CO.,LTD.
- 40 NTN BEARING-MALAYSIA SDN.BHD.
- 41 NTN BEARING-THAILAND CO., LTD.
- 42 NTN MANUFACTURING (THAILAND) CO., LTD.
- 43 NTPPT CO., LTD.
- 44 PT. NTN BEARING INDONESIA
- 45 NTN BEARING INDIA PRIVATE LTD.
- 46 NTN NEI Manufacturing India Private LTD.
- 47 NTN KOREA CO., LTD.
- 48 NTN (CHINA) Investment Corporation
- 49 NANJING NTN CORP.
- 50 SHANGHAI NTN CORP
- 51 Guangzhou NTN-Yulon Drivetrain Co., Ltd.
- 52 Xiangyang NTN-Yulon Drivetrain Co., Ltd.
- 53 NTN-RAB (CHANGZHOU) CORP.
- 54 NTN CHINA LTD.
- 55 TUNG PEI INDUSTRIAL CO., LTD.
- 56 TAIWAY LTD.
- 57 NTN-DONGPAI (Shanghai) Bearing Sales Co., Ltd.
- 58 Shanghai Tung Pei Enterprise Co., Ltd.
- 59 PT. TPI MANUFACTURING I INDONESIA
- 60 PT. Astra NTN Driveshaft Indonesia
- ◆ NTN China Technical Center

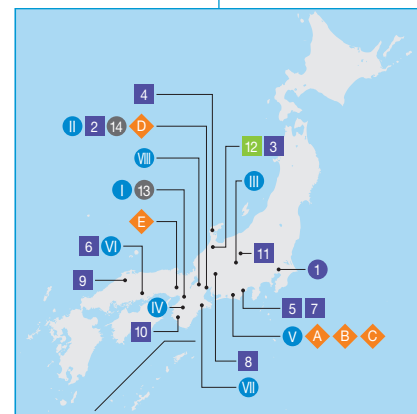
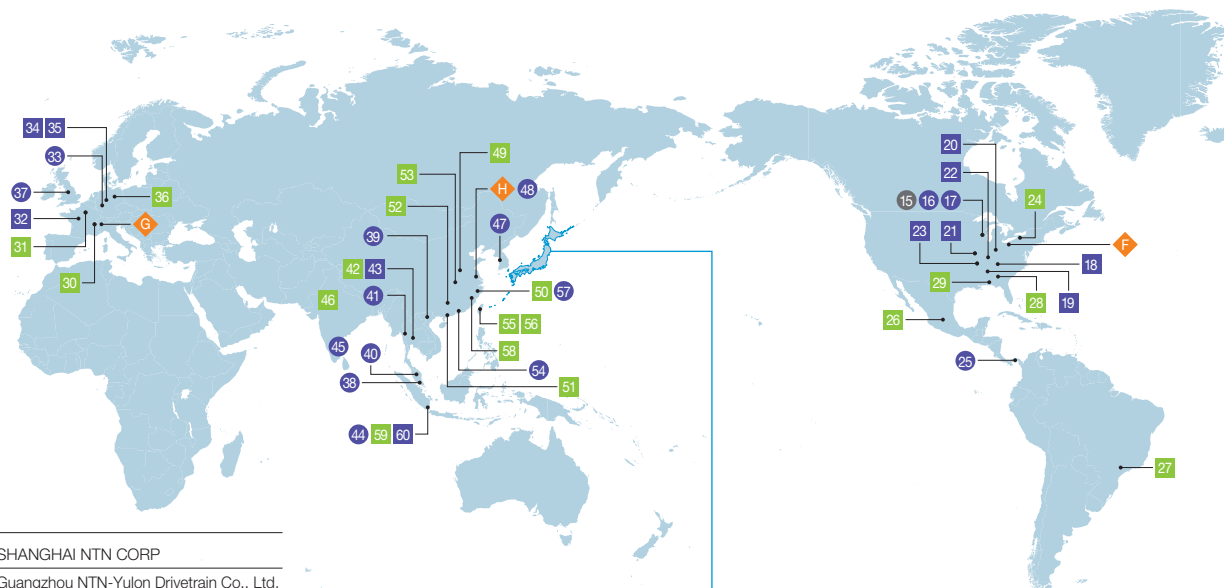
## Americas

- 15 NTN USA CORP.
- 16 NTN BEARING CORP. OF AMERICA
- 17 NBCA Asset Finance LLC.
- 18 NTN DRIVESHAFT, INC.
- 19 NTN DRIVESHAFT ANDERSON, INC.
- 20 AMERICAN NTN BEARING MFG. CORP.
- 21 NTN-BOWER CORP.
- 22 NTK PRECISION AXLE CORP.
- 23 NTA PRECISION AXLE CORP.
- 24 NTN BEARING CORP. OF CANADA LTD.
- 25 NTN-SUDAMERICANA, S.A.
- 26 NTN MANUFACTURING DE MEXICO, S.A.DE C.V.
- 27 NTN do Brasil Produção de Semi-Eixos Ltda.
- 28 ASAHI FORGE OF AMERICA CORP.
- 29 Seohan-NTN Driveshaft USA CORP.
- ◆ F NTN Automotive Center

One consolidated subsidiary in addition to the Group companies above

## Japan

- I NTN Corporation (parent company)
- II Industrial Business Headquarters, Kuwana Works
- III Industrial Business Headquarters, Nagano Works
- IV Industrial Business Headquarters, Kongo Works
- V Automotive Business Headquarters, Iwata Works
- VI Automotive Business Headquarters, Okayama Works
- VII Automotive Business Headquarters Mikumo Works
- VIII Composite Material Product Division, Engineering Plastics Works
- 1 NTN SALES JAPAN CORP
- 2 NTN MIE CORP.
- 3 NTN HOUDATSU SHIMIZU CORP.
- 4 NTN NOTO CORP.
- 5 NTN FUKUROI CORP.
- 6 NTN AKAIWA CORP.
- 7 NTN OMAEZAKI CORP.
- 8 NTN Advanced Materials Corp.
- 9 NTN CASTING CORP.
- 10 NTN KINAN CORP.
- 11 NTN KAMIINA CORP.
- 12 Taira Forging Co.,Ltd.
- 13 NTN TECHNICAL SERVICE CORP.
- 14 NTN LOGISTICS CO., LTD.
- ◆ New Product Development R&D Center
- ◆ Production Engineering Development Headquarters
- ◆ CAE R&D Center
- ◆ Advanced Technology R&D Center
- ◆ NTN Next Generation Research Alliance Laboratory



Please see the securities report for information on capital and voting rights ratio.

<https://www.ntn.co.jp/japan/investors/pdf/securities/fsj125.pdf>

NOTES 1. The scope of consolidation consists of NTN Corporation and 60 consolidated subsidiaries (14 domestic and 46 overseas subsidiaries). A total of 10 affiliates (8 overseas affiliates) were accounted for by the equity method.

The following changes to the scope of consolidation and application of the equity method were made during the fiscal year under review.

◆ Consolidated subsidiaries: 1 addition/No removal

◆ Affiliates: No additions/1 removal

2. Of the above subsidiaries, the following companies are specified subsidiaries: NTN USA CORP., NTN DRIVESHAFT, INC., NTN DRIVESHAFT ANDERSON, INC., AMERICAN NTN BEARING MFG. CORP., NTN-BOWER CORP., NTN do Brasil Produção de Semi-Eixos Ltda., NTN Europe S.A. ("NTN-EU"), NTN TRANSMISSIONS EUROPE, NTN NEI Manufacturing India Private LTD., NTN (CHINA) INVESTMENT Corporation, NANJING NTN CORP., and SHANGHAI NTN CORP.

3. Figures in curved brackets under "Holding as a percentage" indicate the percentage of indirectly owned holdings, and are included in the total holding.

4. None of the companies has submitted a securities registration statement or securities report.

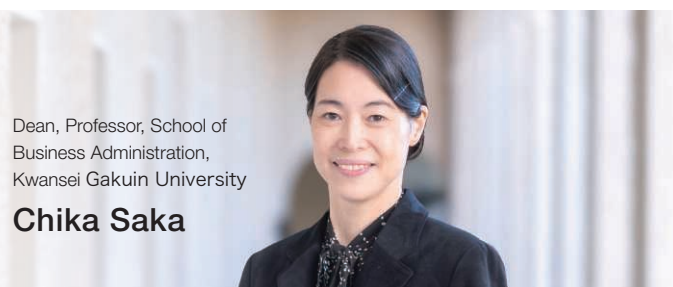
5. Of the above subsidiaries, NTN BOWER CORP. is a company with excess of debts and the amount of excess of debt is 15,728 million yen as of the end of March, 2023.

6. Of the above subsidiaries, NTN BEARING CORP. OF AMERICA and NTN-EU have sales (excluding internal sales between consolidated companies) accounting for more than 10% of consolidated sales. Figures for NTN-EU are consolidated figures encompassing eight NTN-EU subsidiaries.

7. Of the above subsidiaries, ① to ⑦ are NTN Corporation business units, 1 to 27 and 30 to 54 (in symbols ●●●) are consolidated subsidiaries, and 28, 29, and 55 to 60 (in symbols ●●●) are affiliates subject to the equity method

# Third-Party Opinion

## Third-party opinion on the NTN Report 2024



Dean, Professor, School of Business Administration, Kwansei Gakuin University

### Chika Saka

Profile: Professor Saka currently serves as a member of the Sustainability Standards Board of Japan (SSBJ), an expert member of the Financial System Council of the Financial Services Agency, a member of the Business Accounting Council of the Financial Services Agency, a member of the International Federation of Accountants (IFAC) and the International Panel for Accounting Education (IPAE), a member of the Sustainability Capacity Building Council of the Japanese Institute of Certified Public Accountants, an expert member of the IES Review Committee of the Continuing Professional Development Training Council under the Japanese Institute of Certified Public Accountants, and the Executive Director of the Accounting and Economic Association of Japan, among others. Her publications include Environmental Accounting (Tokyo Keizai Publishing Co., Ltd.). She has received the Japan Accounting Association Award, among others.

### Noteworthy points in NTN Report 2024

The development of a sustainability disclosure framework for investors is progressing at a rapid pace, including the issuance of Exposure Drafts of Sustainability Disclosure Standards to be applied in Japan by SSBJ. Against this backdrop, the characteristics of NTN Report 2024 can be summarized in the following three points.

#### (1) Targeting — Focusing on investors

Until last year, NTN's disclosure had been made with multiple stakeholders in mind. This year, however, disclosure has been revamped, putting the focus on investors and highlighting the Group's growth and its value creation story. The medium used for disclosure has also shifted from a physical booklet to online disclosure via an interactive PDF, thereby realizing more effective communication.

In its efforts to grow the current value creation process sustainably, the Company analyzed its risks and opportunities to clarify the growth businesses, strengthened its business model to focus on these areas of growth, and undertook value chain reform, reform of the management foundation, research and development, and consistent demonstration of the human resources strategy. In these ways, it gave greater clarity to its value creation story.

Disclosure on matters related to sustainability put the focus on carbon neutrality, human rights, and governance, which investors are highly interested in. It also positioned these as strategies that underpin the Company's reform. Information for multiple stakeholders was

disclosed online, adding greater definition and clarity to the purposes of the report as well as significantly enhancing relevance.

#### (2) Commitment — “Visible” management

The new Medium-term Management Plan sets out the Company's resolve to carry out structural reforms and organizational restructuring over the next three years. The commitment of the management team is vital toward achieving such painful reforms. In this Report, members of the management team spoke in their own words about the strategies that lead toward reform alongside details about indicators and targets. In this way, they present a committed stance and raise expectations toward the achievement of the goals.

#### (3) Work enthusiastically — Human resources strategy

NTN's long-term vision (p.12, 52) also reflects the recognition that it is the people who support reforms and value creation. Disclosure of contents related to this has been enhanced, including information on the five pillars of the human resources strategy that aims to realize the prosperous human development, the concrete measures of securing and developing human resources as well as fostering an organizational culture, and the gap between the current situation and the vision (p.45 – 48). These contents are also linked to disclosures in the securities report. If these are thoroughly disseminated among the employees and realized, we can expect NTN to achieve its new Medium-term Management Plan as well.

### Objectives of sustainability disclosure

Disclosure itself is not intended to serve the purposes of corporate activities; rather, it is important to link disclosure to corporate values by recognizing the risks and opportunities faced by the company and changing the business model to adapt to and address them.

NTN Report 2024 looks ahead to 2035, and positions economic values (achievement of ROE exceeding shareholders' capital costs) along the same vector as environmental and social values (achievement of carbon neutrality, and realization of the prosperous human development) (p.9 – 10). On top of that, it sets out the commitment of the management team alongside detailed disclosures of the value creation story from both the financial and sustainability aspects. I believe this is also what sustainability standards aim to achieve. I was also surprised at how clearly the requests made in the third-party opinion presented last year have been reflected in this Report.

The final version of the Sustainability Disclosure Standards is scheduled to be published this fiscal year, but I hope that the Company will not be overly caught up in the details. Instead, I hope that future disclosures will continue focusing on the spirit of enhancing corporate value that the Company has demonstrated in this Report.

## Response to the third-party opinion

Executive Officer  
ESG Promotion Department  
**Shumpei Kinoshita**



We would like to thank Professor Saka for her invaluable opinions.

Amid the rapid evolution of the sustainability disclosure framework, I am delighted and honored that NTN has been appraised highly for strengthening our communication to investors, and our consistent aim to provide clearer and highly relevant information. In particular, Professor Saka's comments on the clarification of targeting, visualization of the management's commitment, and incorporation of concrete details about our human resources strategy, are greatly encouraging and give us confidence on the direction that we are heading toward and our efforts. I would also like to express my appreciation on the comment that we have reflected the requests set out in the third-party opinion last year.

While the publication of the final version of the Sustainability Disclosure Standards will present us with fresh challenges, we sincerely accept the invaluable opinions that we have received this time. Going forward, we will continue to pursue transparent disclosures and dialogues accompanied by action, and we will strive to enhance our corporate value over the medium- to long-term.

# IR Activities

We will strive to develop the company and proactively engage in dialogue with shareholders/investors and disclose information. When disclosing information, we will strive to promptly and fairly disclose information that we believe would be useful to shareholders/investors, even if the information does not fall under any laws or regulations.

## Dialogue with shareholders and investors

General Meetings of Shareholders, quarterly financial results, and Medium-term Management Plan briefings provide valuable opportunities for dialogue with shareholders/investors, and the CEO and other top management actively participate in these opportunities. In addition, at ESG briefings to explain our ESG initiatives, not only top executives, but also the Chair of the Board of Directors, who is our top supervisory figure, and Outside Director also participate and engage in direct dialogue.

Going forward, we will continue to create opportunities to carefully communicate with shareholders/investors about our business and corporate value through explanations of our management policies and business strategies, etc., so that they can evaluate and understand our business and corporate value.

Activity details	Number of times held	Number of people interacted
General Meeting of Shareholders	1 time	71 people (held in June 2024)

April 1, 2023 to March 31, 2024

Activity details	Number of times held	Total number of people interacted
Financial results briefings	4 times	266 people
Small meetings and individual interviews	138 times	198 people
IR conferences hosted by securities companies	2 times	11 people
ESG briefings	1 time	38 people

## ESG briefing session

On December 18, 2023, we held an online ESG briefing, and 38 securities analysts and institutional investors participated. We have been holding these briefings since 2018, and this year marked the sixth time that we have held the event online to engage with investors.

At the briefing, CEO Ukai and Chair of the Board of Directors Komatsu explained the Group's ESG initiatives and engaged in dialogue with investors about the company's challenges.



## Inclusion in Indexes

### MSCI Japan ESG Select Leaders Index\*2

2024 CONSTITUENT MSCI JAPAN  
ESG SELECT LEADERS INDEX

### MSCI Nihonkabu ESG Select Leaders Index\*2

2024 CONSTITUENT MSCI NIHONKABU  
ESG SELECT LEADERS INDEX

### MSCI Japan Empowering Women (WIN) Select Index\*2

2024 CONSTITUENT MSCI JAPAN  
EMPOWERING WOMEN INDEX (WIN)

### SOMPO Sustainability Index



Sompo Sustainability Index

### Morningstar Japan ex-REIT Gender Diversity Tilt Index



### S&P/JPX Carbon Efficient Index



### FTSE Blossom Japan\*3



FTSE Blossom Japan Index

### FTSE Blossom Japan Sector Relative Index\*4



FTSE Blossom Japan Sector Relative Index

\*1 Inclusion status as of the end of July 2024

\*2 Inclusion in MSCI and the use of MSCI logos, trademarks, service marks, or index names do not imply sponsorship, endorsement, or promotion of NTN by MSCI or its affiliates. MSCI indexes are the exclusive property of MSCI. MSCI and the names and logos of MSCI indexes are trademarks or service marks of MSCI or its affiliates.

\*3 FTSE Russell confirms that NTN Corporation has been independently assessed according to the index criteria, and has satisfied the requirements to become a constituent of the FTSE Blossom Japan Index. Created by the global index and data provider FTSE Russell, the FTSE Blossom Japan Index is designed to measure the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices. The FTSE Blossom Japan Index is used by a wide variety of market participants to create and assess responsible investment funds and other products.

\*4 FTSE Russell confirms that NTN Corporation has been independently assessed according to the index criteria, and has satisfied the requirements to become a constituent of the FTSE Blossom Japan Sector Relative Index. The FTSE Blossom Japan Sector Relative Index is used by a wide variety of market participants to create and assess responsible investment funds and other products.

# External Evaluations

## Organizational evaluations

- Three-star rating in the 7th Nikkei Smart Work Management Survey (for five consecutive years)



- Bronze certification in the "Sports Yell Company 2024"



- Certified as a "Health and Productivity Management Organization in the Large enterprise category (White 500)" (for four consecutive years)



- "Platinum Kurumin" certification



## Received the Technology Award and the Encouragement Award of Japanese Society of Tribologists 2023

We received the "Technology Award" and the "Encouragement Award" of Japanese Society of Tribologists 2023 by the Japanese Society of Tribologists. The Technology Award was bestowed upon us for our "development of grease for Low Friction Hub Bearings III," and the Encouragement Award was bestowed upon us for "visualization of grease behavior in rolling bearings using colorants" and "evaluation of rolling contact fatigue by using analyzer of X-ray diffraction ring."

The Technology Award is bestowed for excellence in originality, novelty, and performance in research and technology, while the Encouragement Award is bestowed for outstanding research results in tribology.

Japanese Society of Tribologists <https://www.tribology.jp/>



Technology Award

(From left) Mr. Umehara, 68th President of the Japanese Society of Tribologists, Takayuki Kawamura, Advanced Technology R&D Center, NTN



Encouragement Award

(From left) Tomohiro Obata, Advanced Technology R&D Center, NTN  
Mr. Umehara, 68th President of the Japanese Society of Tribologists  
Naoya Kamura, Advanced Technology R&D Center, NTN

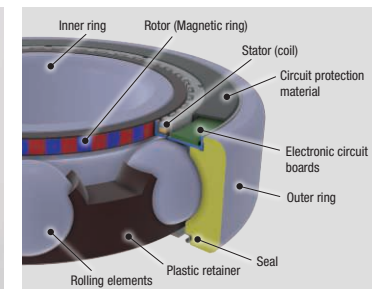
## Received the Machinery & Robot Component Award at the 2023 "CHO" MONODZUKURI Innovative Parts and Components Awards

We received the "Machinery & Robot Component Award" at the 2023 "CHO" MONODZUKURI Innovative Parts and Components Awards that were sponsored by the Monodzukuri Nihon Conference and the Nikkan Kogyo Shimbun, Ltd. Our winning product was our "Talking Bearing," which is a rolling bearing with an integrated sensor.

Our "Talking Bearing" enables the early detection of abnormalities in bearings and surrounding parts, which contributes to improved equipment utilization rate and productivity. It is the industry's first structure with a sensor built into a standard bearing, which makes it possible to add condition monitoring functionality without changing equipment design, and it can be widely deployed in a variety of industrial machinery. In addition to contributing to the decarbonization of industry, the award was given in recognition of the originality of the technology incorporating the sensor.



Talking Bearing



Structure of "Talking Bearing"

# Corporate and Stock Information (as of March 31, 2024)

## Head office

### NTN Corporation

Daibiru-Honkan Bldg., 3-6-32, Nakanoshima,  
Kita-ku, Osaka 530-0005, Japan

## Common stock

Authorized : 1,800,000,000  
Issued and outstanding : 532,463,527

## Number of shareholders

81,321

## Transfer agent for common stock

Mitsubishi UFJ Trust and Banking  
1-4-5, Marunouchi, Chiyoda-ku, Tokyo  
100-8212, Japan

## Stock exchange listings

Tokyo Stock Exchange

## Independent audit firm

Ernst & Young ShinNihon LLC

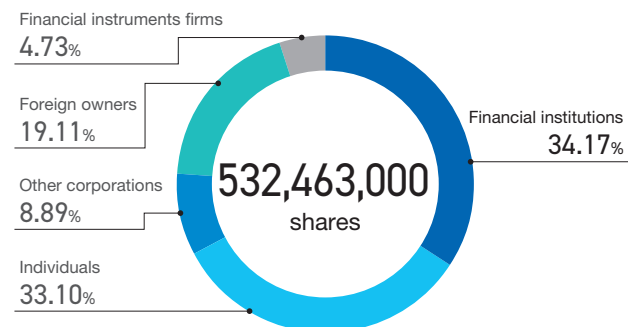
## General meeting of shareholders

The General Meeting of Shareholders was held  
on June 25, 2024 in Osaka

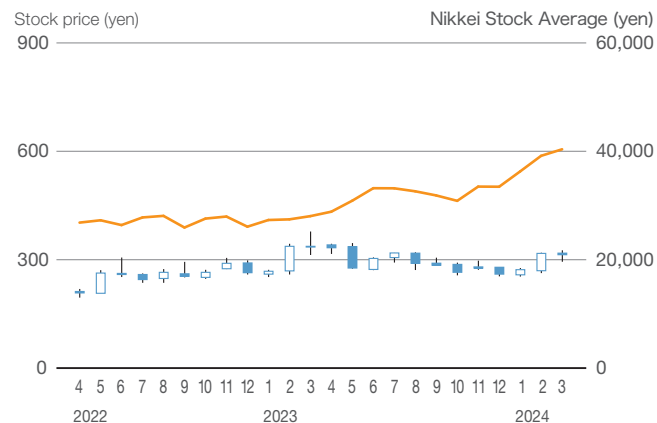
## Stock price range in fy 2023

High: 346.0 yen  
Low: 253.3 yen

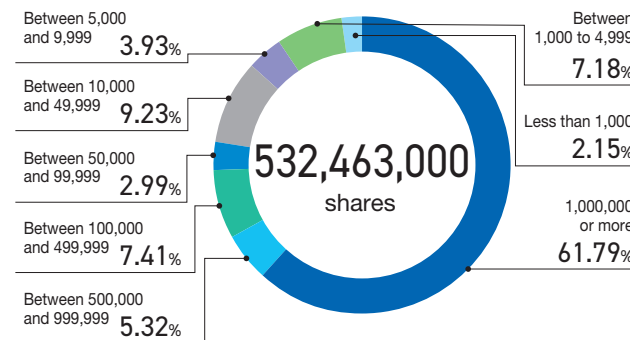
## Recent stock price range



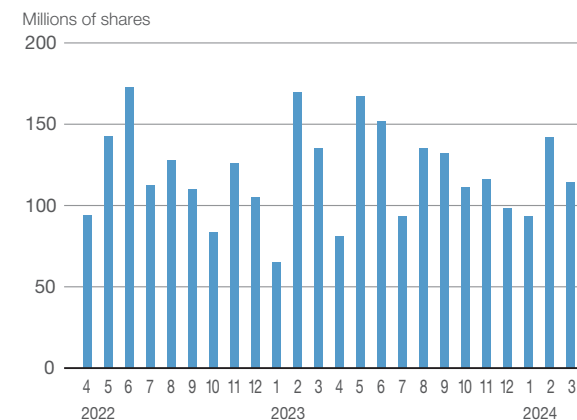
## Breakdown of shareholders



## Breakdown of number of shares held



## Monthly volume traded



# Editorial Policy

## Editorial policy

The NTN Group believes that building relationships of trust with shareholders and investors, customers, business partners, the international community, local communities, and employees, as well as contributing to the global environment, will lead to enhance our corporate value. In order to inform stakeholders of the NTN Group's business activities and sustainability activities, we have been issuing the NTN Report (integrated report) since FY2009. We utilize this report as a dialogue tool with stakeholders to deepen their understanding of the Company, thereby contributing to realizing a "NAMERAKA Society."

## Period and scope of coverage

**Period of coverage** FY2023 (April 1, 2023 to March 31, 2024)  
Includes some activities from FY2024

**Scope of coverage** NTN Group  
Includes some non-consolidated reporting on NTN

## Reference guidelines

We are working to enhance our information disclosures by referring to the following guidelines.

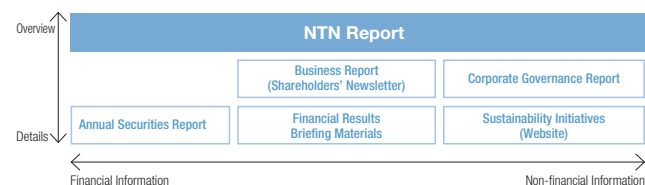
- IFRS Foundation "International Integrated Reporting Framework"
- Ministry of Economy, Trade and Industry "Guidance on Integrated Disclosure and Dialogue for Value Creation".
- SASB (U.S. Sustainability Accounting Standards Board) Standards
- FGRI (Global Reporting Initiative)

Sustainability Reporting Standards  
<https://www.ntnglobal.com/en/csr/gri.html>

## Disclaimer

This report contains forecasts and projections regarding NTN's future plans, strategies, and business performance. Note that actual business performance may materially differ from the forecasts discussed in this report.

## NTN communication



This report focuses on the most important financial and non-financial information. For more detailed financial information, refer to NTN's annual securities reports and financial results presentation materials. Additionally, more detailed information about NTN's sustainability activities is provided on the NTN website.

### Inquiries

Corporate Communications Dept.  
Group Management HQ.  
E-mail: [irmanager@ntn.co.jp](mailto:irmanager@ntn.co.jp)

### NTN's website

NTN's website provides a variety of information, including the latest NTN Report and NTN's financial results.  
<https://www.ntnglobal.com>

## Editor's Note



Executive Officer  
Deputy Corporate  
General Manager,  
Group Management HQ.  
Corporate  
Communications  
Department

### Koji Takahashi

Thank you for reading the NTN Report 2024.

NTN newly established the Corporate Communications Department this fiscal year with the aim of putting more effort than ever before into communicating with all our stakeholders.

With regard to "NTN Report," our integrated report that serves as an important communication tool, we have been publishing it every year in printed and electronic (PDF) format as a report for conveying financial and non-financial information, including details of our businesses and ESG information. However, the editorial policy has been revised significantly as follows, with effect from this fiscal year.

1. We have positioned institutional investors in Japan and abroad as the main readers of this publication, and enhanced disclosure, including financial and non-financial information, that contributes to enhancing our medium- to long-term corporate value.
2. We have enhanced sustainability information on our website, such as sustainability-related information that we wish to convey to all our stakeholders.
3. By using an electronic format that can be analyzed as data, rather than physical paper, we aim to improve convenience and searchability for our readers while also contributing to global environmental conservation.

This report was produced with a focus on the important measures of the Medium-term Management Plan "DRIVE NTN100" Final, that started this fiscal year, and with particular effort put into communicating in a narrative style that makes it easier for readers to understand our initiatives on enhancing our economic, environmental, and social values with a view to realizing the Company's vision of a "NAMERAKA Society."

We hope that all our stakeholders will make full use of this report as a communication tool for gaining a better understanding of the NTN Group.

Going forward, we will work on further improving this report and advancing efforts to enhance our corporate value through proactive communication with everyone. We appreciate your continued feedback and support.



"NTN Report 2024" production team members



## NTN corporation

Daibiru-Honkan Bldg., 3-6-32,  
Nakanoshima, Kita-Ku, Osaka 530-0005, Japan  
<https://www.ntnglobal.com/en/>