NTN
Make the world NAMERAKA

New Medium-term Management Plan

DRIVE NTN100 Final

Digitalization Resources Innovation Variable cost reformation Efficiency improvement



Presentation material May 31, 2024

NTN Corporation

INDEX

1. Review of the Previous Medium-term Management Plan “DRIVE NTN100” Phase 2

2. Long-term Vision

3. Positioning of New Medium-term Management Plan “DRIVE NTN100” Final

4. “DRIVE NTN100” Final

   (1) Management Indicators

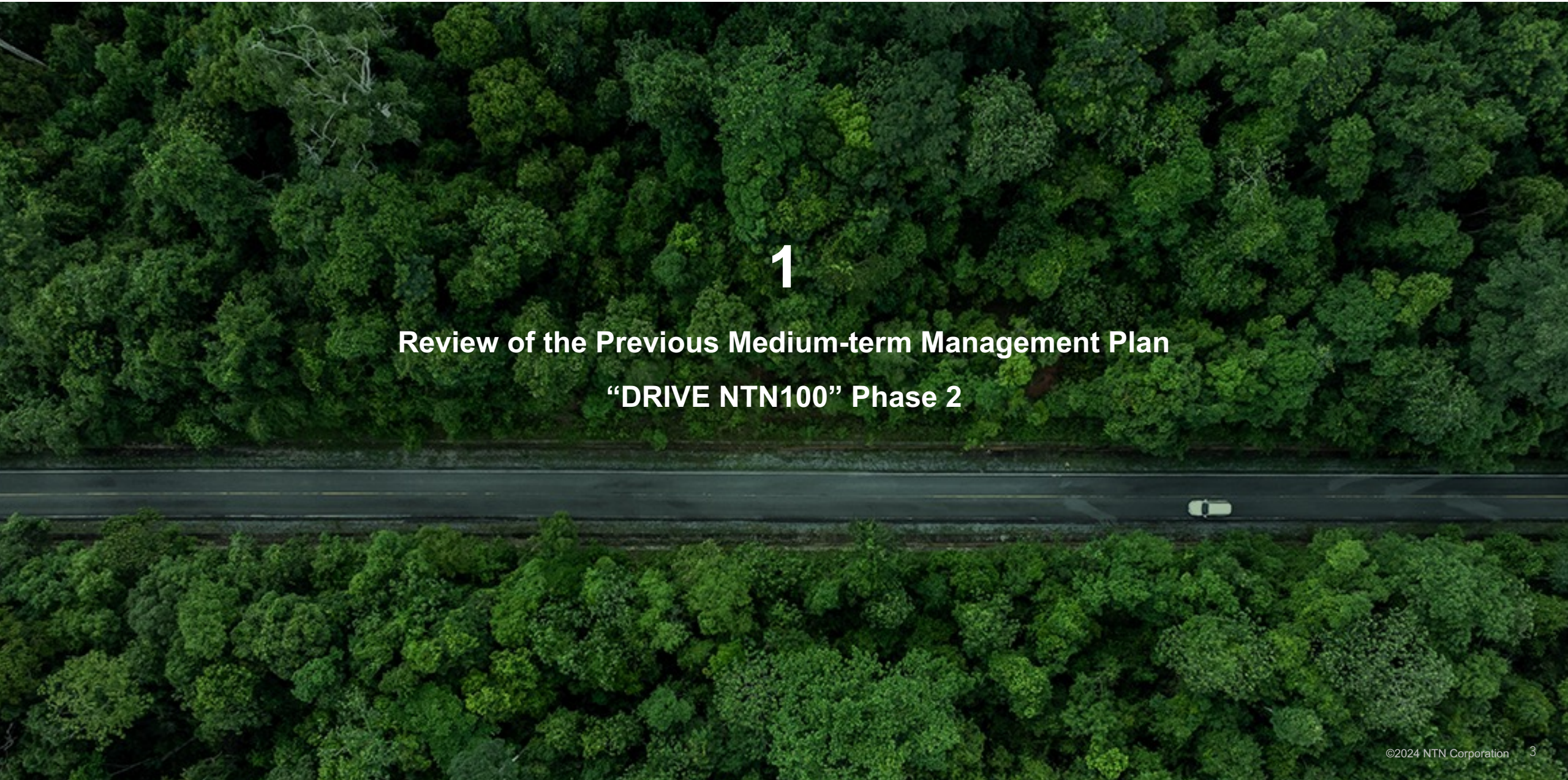
   (2) Basic Strategies

   (3) Key Measures

   (4) Basic Policies and Strategies by Business Sector

5. Realize Management that is Conscious of Cost of Capital and Stock Price

©2024 NTN Corporation



1

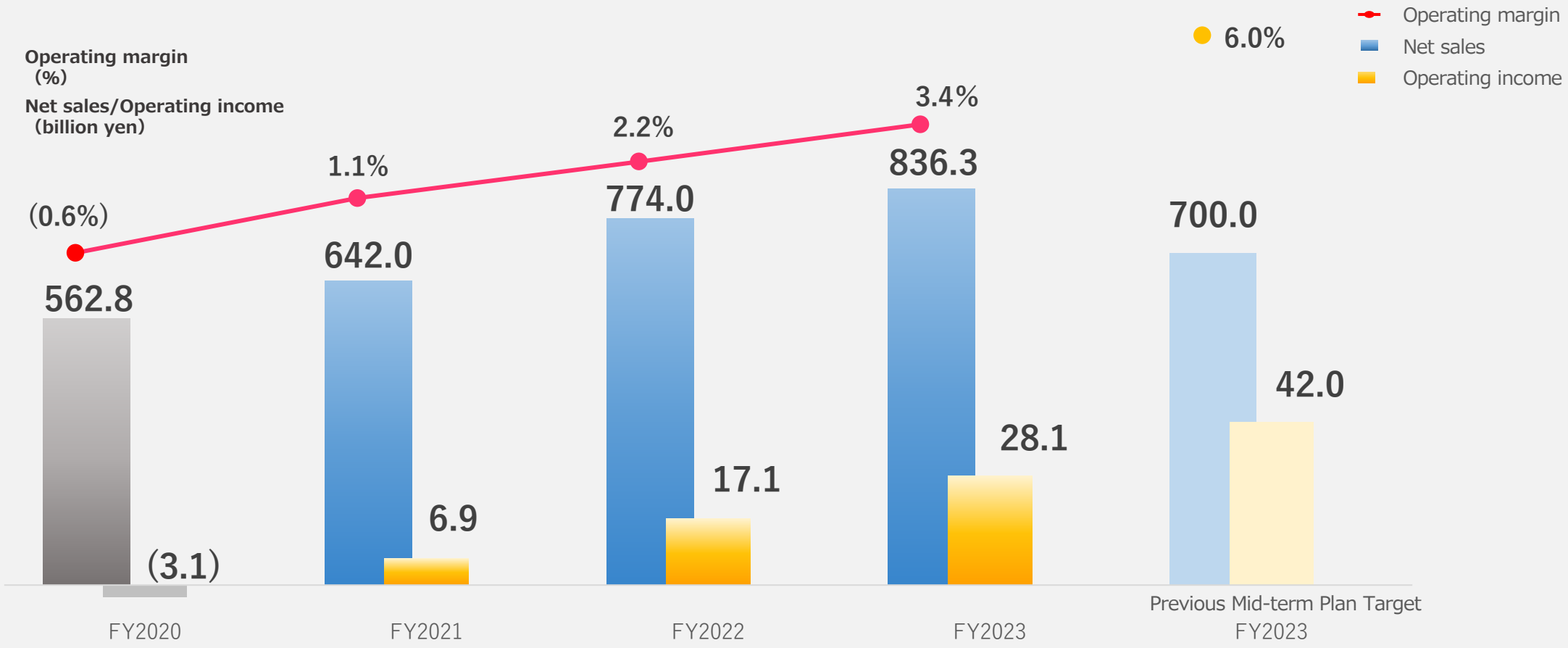
Review of the Previous Medium-term Management Plan

“DRIVE NTN100” Phase 2

©2024 NTN Corporation

Net Sales and Operating Income

- Net sales achieved the target by positive effect of exchange rate
- Operating income did not achieve the target due to delay in passing on higher procurement cost mainly in automotive business

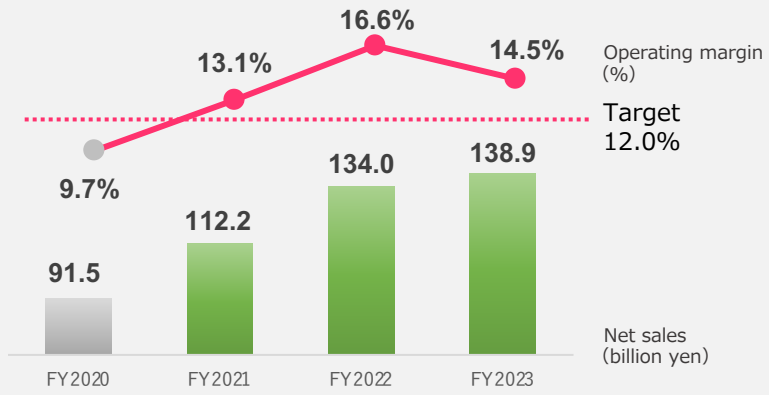


©2024 NTN Corporation

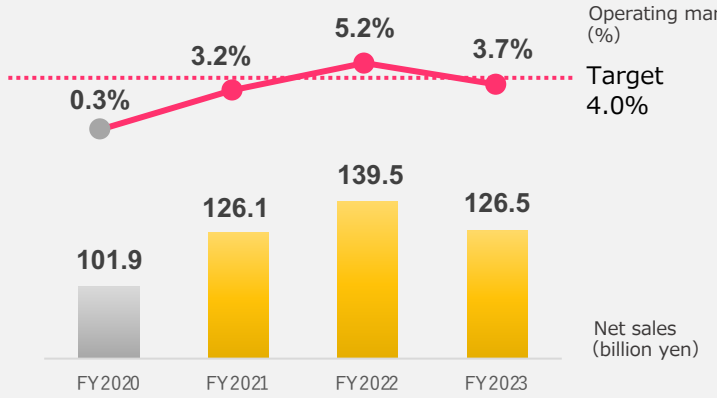
Comparison with Target of Medium-term Management Plan by Business Segment

◆ Comparison with Target of Medium-term Management Plan by Business Segment

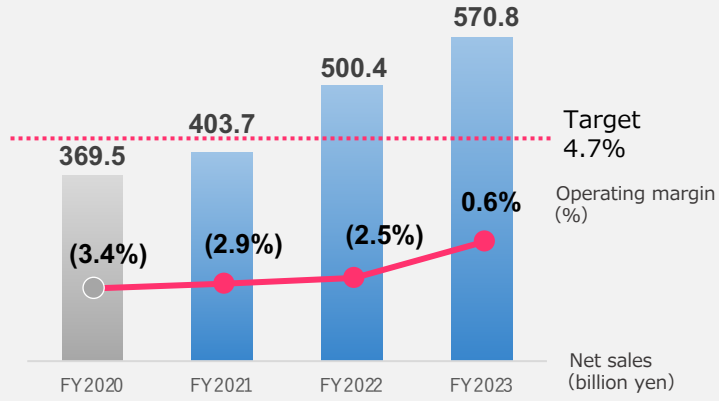
Aftermarket



Industrial machinery

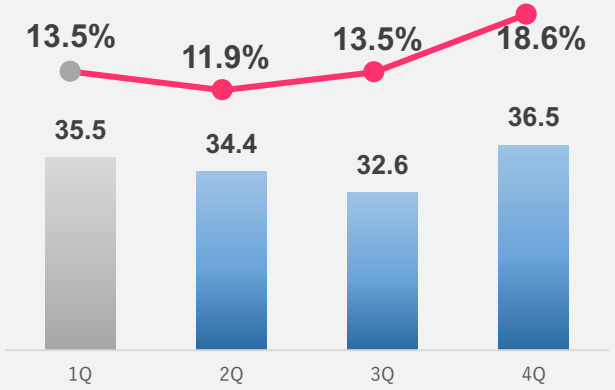


Automotive

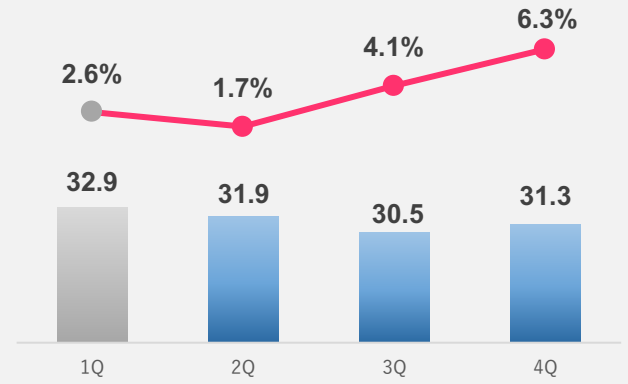


◆ FY2023 quarterly transition of Net sales and Operating margin

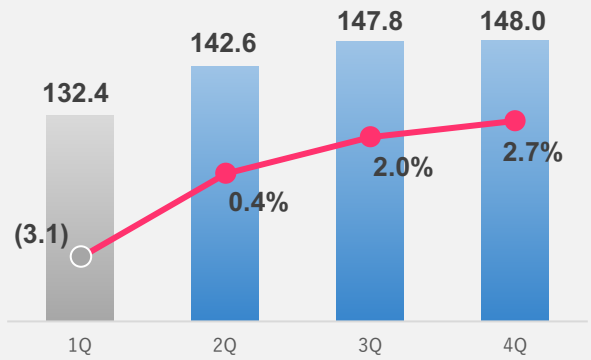
Aftermarket



Industrial machinery



Automotive



©2024 NTN Corporation

Review on Major Measures

Variable cost reformation — Neutral

- Strengthen of competitiveness by exploring suppliers in India and South Korea
- Issue: overseas expansion involving engineering/design departments

Strengthen of Aftermarket business — Neutral

- Increased net sales and profits and expanded capital investments
- Issue: drastic increase in supply capacity and development of supply source

Promotion of reorganization of production — Poor

- Delays in outsourcing production to overseas suppliers
- Delays in consolidating/restructuring bases to increase profits

R&D of new products and acceleration of business creation — Neutral

- Product launch in line with market needs such as for EVs
- Insufficient acceleration of business creation for new product

Improvement of productivity using digital technology — Neutral

- Largely reconstructed of IT core system
- Issue: expanding smart factories and labor-saving measures

Strengthen of financial structure — Good

- Generated cash flow by selling cross-shareholdings and refraining investment etc.
- Improved net D/E ratio and equity to capital ratio

©2024 NTN Corporation

Financial Results: Comparison with Target of Previous Medium-term Management Plan

(billion yen)	FY2020 Results	DRIVE NTN100 Phase 2 ①	FY2023 Results ②	Diff. ② - ①
Net sales	562.8	**700.0 or more**	**836.3**	**+136.3**
Operating income	(3.1)	**42.0 or more**	**28.1**	**(13.9)**
Operating margin	(0.6%)	**6% or more**	**3.4%**	**(2.6pt)**
FCF	18.5	**27.0 or more**	**40.1**	**+13.1**
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 more**	**0.9**	**(0.6)**
ROIC	(0.4%)	**5% or more**	**3.2%**	**(1.8pt)**
ROE	(7.1%)	**8% or more**	**4.4%**	**(3.6pt)**

- **FCF (72.0 billion yen/3 years) and improvement of financial structure achieved the target.**
- **Need to strengthen earning power (= to improve operating income and reduce inventories)**

©2024 NTN Corporation



2

Long-term Vision

©2024 NTN Corporation

Changes of NTN's Business Environment

Uncertain global situation



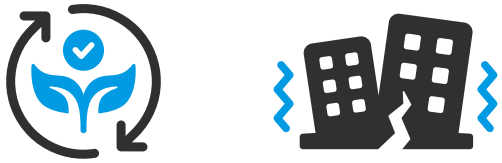
- Rise of hegemonism and protectionism due to security concerns
- Impact on raw material prices and supply chain

Changes in business environment



- Intensify competition and low-priced sales by appearance of emerging competitors
- Acceleration of EV and electrification in automotive market
- Risk of sudden exchange rate fluctuations

Social requirements for sustainability



- Specified targets and initiatives for achieving carbon neutrality
- Increased information security risks and natural disasters such as earthquakes and floods
- Respond for diverse work styles

External environment is increasingly uncertain, and structure is changing from the past
Increased demand for sustainability

©2024 NTN Corporation

The NTN Group's Vision for FY2035

FY2024 to FY2026

New Medium-term Management Plan

Measures back-casting from the vision for FY2035

Vision for FY2035

A company trusted and needed by stakeholders with increased corporate value

- Generate sustainable profits that exceed capital cost -

Economic value

Achieve and further improve ROE that constantly exceeds shareholder capital cost even under economic fluctuation

- ■ Transformation of business structure
  - –Sales ratio: Aftermarket 40%, OEM 60%
  - –Create and develop new businesses

Environmental/social value

Achieve carbon neutrality, fulfill prosperous human development

- ■ Achieve carbon neutral target (Scope1, 2)
- ■ Foster an organizational culture that works to increase economic and environmental/social value and develop diverse human resources that can work with job satisfaction

Vision

A NAMERAKA Society

©2024 NTN Corporation



3

Positioning of New Medium-term Management Plan

“DRIVE NTN100” Final

©2024 NTN Corporation

Positioning of New Medium-term Management Plan “DRIVE NTN100” Final

2018	2019	2020	2021	2022	2023	2024	2025	2026	2027～	2035

DRIVE NTN100

Basic Policy : Drive Forward Transformation of Business Structure for the new 100 years

Digitalization（latest digital technology）x
Resources （Management resources that NTN has developed）
Innovation（development of innovative technologies products and services）
Variable cost reformation（procurement reformation）
Efficiency improvement
（achievement of the world’s No1 productivity and quality / improvement of asset efficiency）

Phase 1
(FY2018-FY2019)

- Improve profitability and investment efficiency of existing products and businesses
- Materialize new business by creating products and businesses
- Establish management system to facilitate reform of business structure

Crisis Response Period
(FY2020)

- Ensure the health and safety of employees
- Secure cash and continue business
- Prepare for future growth

Phase 2
(FY2021-Fy2023)

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

New Mid-term Management Plan

Final
(FY2024-FY2026)

Achieve ROE8%

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

Forecast by analyzing internal and external environments

Back casting from what we aim to be in FY2035

Next Mid-term Management Plan

Early achievement of **10%ROE or more**

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

Vision for FY2035

Achieve and improve ROE above shareholder capital cost

Aftermarket ratio 40%

Achieve carbon neutrality

Fulfill prosperous Human development

©2024 NTN Corporation



4

“DRIVE NTN100” Final

©2024 NTN Corporation

(1) Management Indicators: Management Indicators of “DRIVE NTN100” Final

Target Management Indicators (billion yen)	FY2023 Results ①	FY2024 Forecast	FY2025 Target	FY2026 Target ②	Diff. ② - ①
Net sales	836.3	860.0	840.0	**830.0**	(6.3)
Operating income	28.1	32.0	44.0	**50.0**	+21.9
Operating margin	3.4%	3.7%	5.2%	**6.0%**	+2.6pt
Extraordinary income(loss)	(3.4)	(8.0)	(17.5)	**(5.0)**	-
Net income	10.6	5.0	9.0	**21.5**	+10.9
Inventory turnover ratio	3.2	3.6	4.0	**4.5**	+1.3
ROIC	3.2%	3.9%	5.4%	**6.2%**	+3.0pt
ROE	4.4%	2.1%	3.7%	**8.0%**	+3.6pt
Equity to capital ratio	29.0%	27.9%	29.5%	**30.0%**	+1.0pt
Net D/E ratio	0.9	1.1	0.8	**0.7**	0.2pt improved
Exchange rate 1USD	¥144.5	¥145.0	¥140.0	¥140.0	(¥4.5)
Exchange rate 1EURO	¥156.7	¥160.0	¥150.0	¥150.0	(¥6.7)

©2024 NTN Corporation

(1) Management Indicators: New Organization to Promote Transformation of Business Structure

- Strengthen our supply capabilities and proposing optimal solutions for sales expansion in aftermarket business by consolidating bearing business and integrating OEM and aftermarket
- Increase profits and respond to new needs such as electrification in CVJ/Axle business

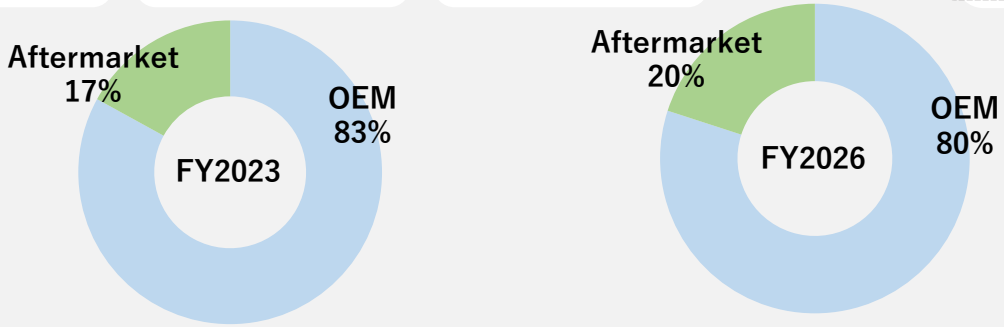
Former Organization (by market)
Prior to FY2023

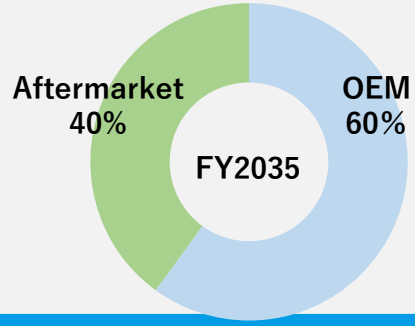
Aftermarket	Industrial machinery	Automotive
Bearing CVJ/Axle	Bearing	Bearing CVJ/Axle

New Organization (by products)
From FY2024

Bearing and Others	CVJ/Axle
Aftermarket Industrial machinery Automotive	Aftermarket Automotive

Market



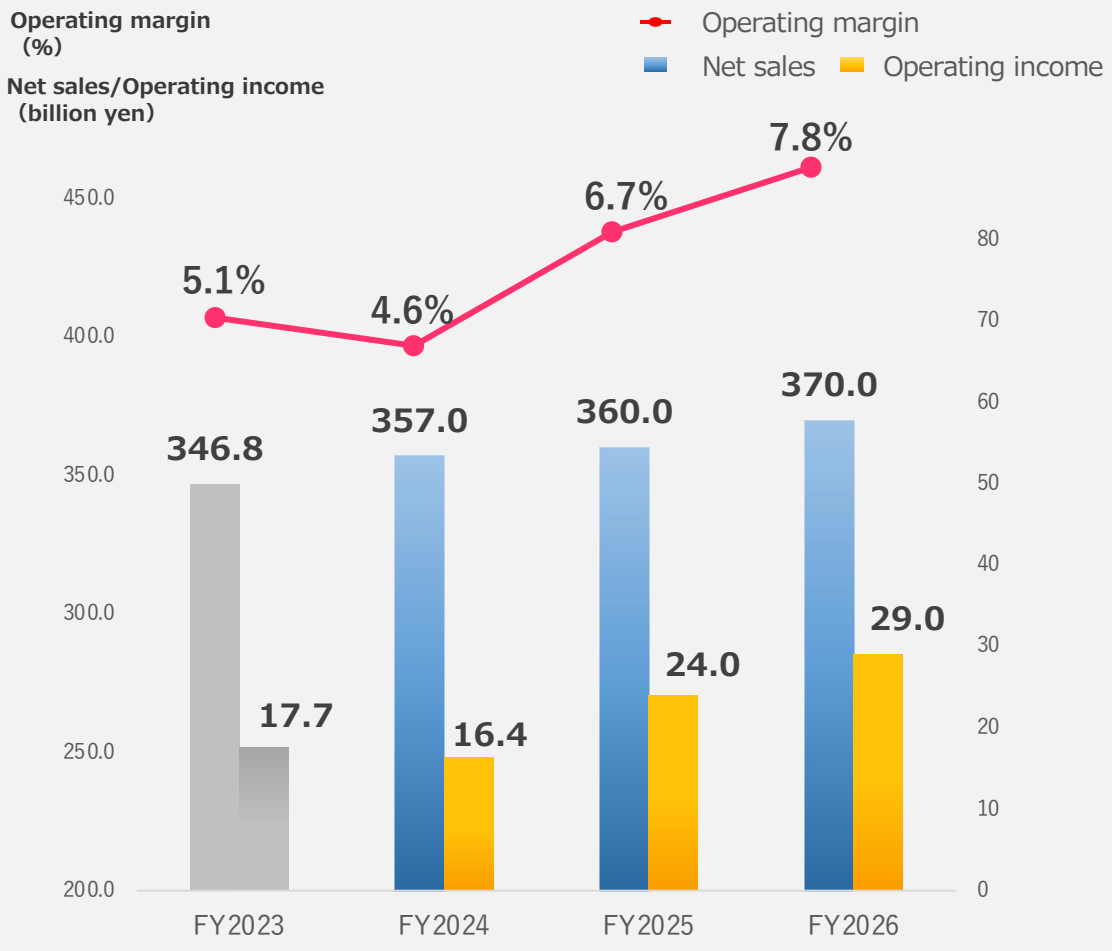


Aftermarket business 6% annual growth

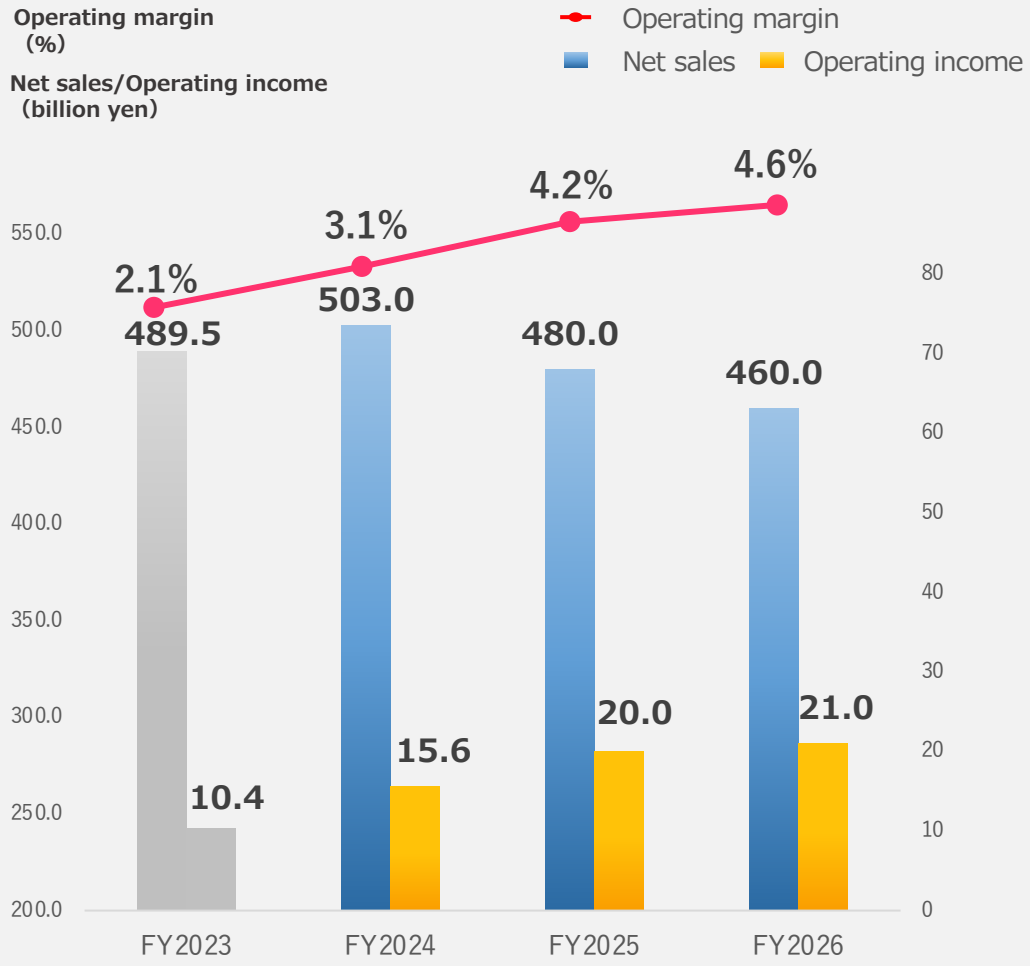
©2024 NTN Corporation

(1) Management Indicators: Target of Net sales and Operating Income by Business Segment

Bearing and others



CVJ/Axle



©2024 NTN Corporation

(2) Basic Strategies: Basic Strategies of “DRIVE NTN100” Final

Vision for FY2035

DRIVE NTN100 Final

Transformation of business structure

- Expand aftermarket business
- Improve competitiveness of OEM business
- Create and develop new businesses

Strategies to support transformation

Value chain reform

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

Transformation of business foundation

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

Evolution of ESG management

- Carbon neutral and sustainable response
- Human resource development and work styles respecting diversity
- Advancement of governance and strengthening risk management

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

©2024 NTN Corporation

(3) Key Measures: Expand Aftermarket Business

Responsiveness that keeps customers’ machines and plants running and engineering solutions considerate of customers to solve problems

Strengthen supply capability

<Industrial machinery aftermarket>

- Expand external purchasing and outsourcing for the aftermarket products
- Optimal allocation and expansion of production capacity through integrated OEM/aftermarket operations
- Expand inventories of popular products for the aftermarket

<Automotive aftermarket>

- Expand product lineup by utilizing external purchasing and outsourcing



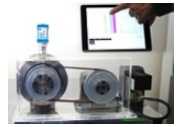
Overseas supplier

+

Strengthen engineering solutions

<Industrial machinery aftermarket>

- Strengthen “bearing life cycle management” through integrated OEM/aftermarket operations
- Expand sales by expert organization for engineering solutions
- Expand service business such as bearing diagnosis and refurbish



NTN Portable Vibroscope

<Automotive aftermarket>

- Expand sales to Europe and America and strengthen marketing to other regions



Remote service center

©2024 NTN Corporation

(3) Key Measures: Bearings Resistant to Electrical Pitting for EVs

Cash flow oriented business operation and providing value to meet market needs and functional requirement from customers

Structural reform

- Improve asset efficiency by reorganization of production bases in the Americas, Europe, China and Japan
- Drastic review on costs through production at optimal site
- Price increases and reduction in unprofitable business

＋

Procurement/design reform and expand external purchasing

- Cost reduction by design not trapped in the conventional design concepts and reviewing materials
- Maximize profits by restructuring the supply chain of parts and finished products

Develop new products that meet market needs and bring them to market speedy

- **Accelerate development of new products that meet market needs such as EV and electrification etc.**



Deep Groove Ball Bearings for EVs and HEVs

Special Heat Treatment Technology “HA-C”

High Efficiency Fixed Type CVJ “CFJ”

Low Friction Hub Bearing

Contribution to profit improvement
Further new product development

©2024 NTN Corporation

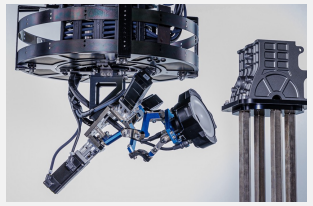
(3) Key Measures: Create and Develop New Businesses

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

- Accelerate product development by establishing Innovation & Business Development HQ. in charge of ascertaining needs, product planning, 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 develop human resources



NTN Next Generation Research Alliance Laboratory



i-WRIST for visual inspection

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 international standards for electrification and human resource development for electronic control development, etc.
- Expand green energy products business (NTN Green Power Stations, N^3 N-CUBE)



Ball screw for electric brakes



N^3 N-CUBE as an eco toilet

©2024 NTN Corporation

(3) Key Measures: Value Chain Reform

Engineering Chain Management (ECM)

ECM reform (Quality)

- Defensive quality
- Proactive quality
- Profitable quality

Market research
Product planning
Design
Prototype

ECM reform (Design)

- Review of design standards
- Review of material procurement
- Digitalization of design work
- Commercialization of products in growth field

Sales → Procure-ment → Manufac-turing → Logistics → Distribution

Supply Chain Management (SCM)

SCM reform (Procurement)

- Global optimal procurement
- Purchase price optimization
- Development of new suppliers

SCM reform (Manufacturing)

- Procurement reform and streamlining
- Digitalization of manufacturing work
- Investment in labor saving and CN

SCM reform (Logistics)

- Redesigning logistics network
- Improve truck loading rate
- Response to 2024 problem

©2024 NTN Corporation

(3) Key Measures : Transformation of Management Foundation- Generate Profits utilizing Digital Technology

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 by sensors

Manufacturing and procurement

- Automaton and labor saving in line work by expanding smart factory
- Improve productivity by smart devise utilization

Develop digital human resources



- Reskilling employees for improving 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-CRIST globally and strengthen security education

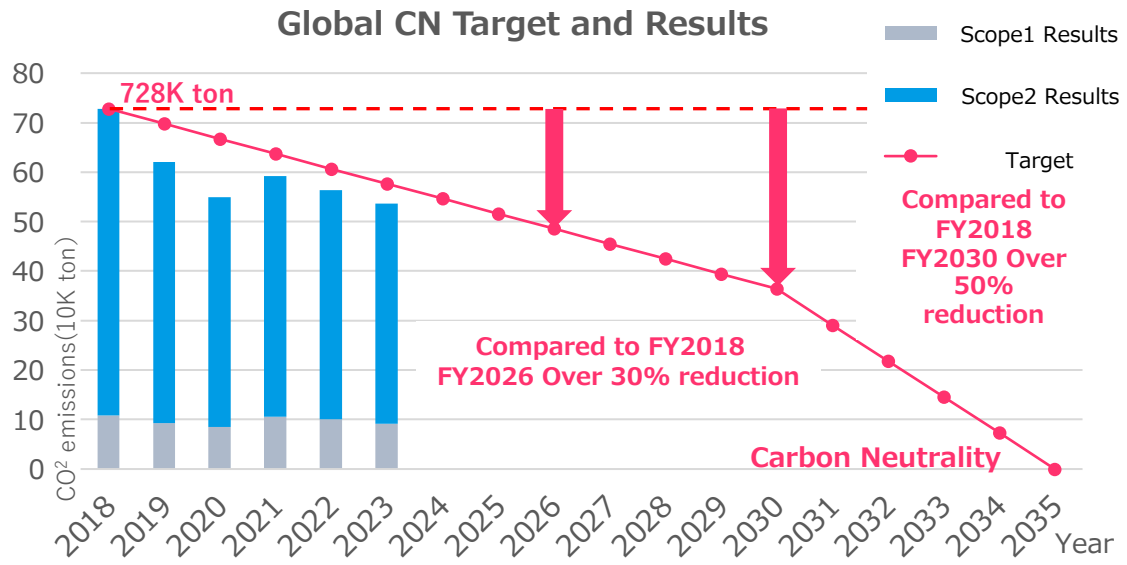
©2024 NTN Corporation

(3) Key Measures: Evolution of ESG management

E:Environment

Promote activities to achieve CN

- Reduce CO_2 emissions by more than 30% by FY2026 compared to FY2018 toward achievement of carbon neutrality
- Develop and provide products and services that reduce energy loss to the utmost limit



S:Social

Fulfill prosperous human development

- Secure and develop diverse human resources
  - -Expand support for self-directed career development
  - -Establish the job-standard manager personnel system
  - -Introduce performance-linked compensation (bonus) system
  - -Develop next-generation management
- Foster an organizational culture
  - -Strengthen support measures for balancing work and childcare/elderly care
  - -Enhance employee engagement through workplace improvement activities etc.
  - -Implement and continue town hall meetings by management

G:Governance

Advancement of governance

- Evaluate after transition to a Company with a Nominating Committee, etc. and promote continuous improvement activities
- Dialog between Outside Directors and stakeholders
- Enhance and strengthen internal controls based on Internal Control Policy
- Strengthen risk management system

©2024 NTN Corporation

(4) Basic Policies and Strategies by Business Sector: Bearing and others

Business target

FY2026 **Operating margin 7.8%**

Policy

1. Expand aftermarket business
2. Improve profits in bearing OEM business
3. Develop products for electrification and strengthen market competitiveness by reviewing application standards and design criteria
4. Enlarge service solutions

Market environment


Construction machinery Earthquake reconstruction projects, stable growth associated with infrastructure development and progress in automation and electrification


Agricultural machinery Population growth in emerging countries, and electrification and automation by labor shortages and aging populations in Japan , U.S. and Europe


Gear box Growth in the robot market due to labor-saving measures to address labor shortages


Aerospace Growing passenger demand, and increasing communication satellite services to stimulate the space industry


Rolling stocks Infrastructure development in emerging countries due to the economic growth and addressing environmental issues


Wind turbine Increasing wind power generation to achieve a carbon neutral society


Machine tool Energy savings through automation and efficiency using IoT


Automobile Decrease in engine vehicles and expansion of electric vehicles, especially BEVs

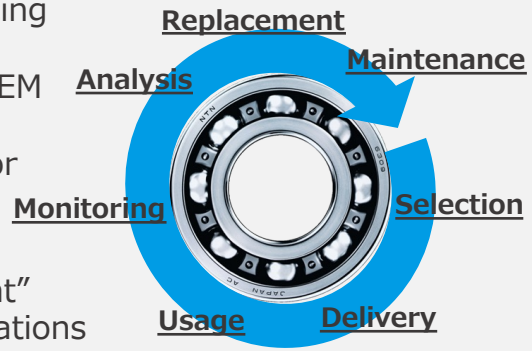

Aftermarket (Industrial machinery) Expanding demand from the aftermarket due to economic expansion in emerging countries
(Automotive) Increase in the number of vehicles on the road due to global population growing and longer vehicle life

Main strategy

Expand aftermarket business

- **Strengthen supply capability**
  - Expand external purchasing and outsourcing
  - Optimal allocation and expansion of production capacity through integrated OEM and aftermarket operation
  - Expand inventories of popular products for the aftermarket
- **Strengthen engineering services**
  - Strengthen "bearing life cycle management" through integrated OEM/aftermarket operations
  - Expand sales by expert organization for engineering solutions
  - Expand service business such as bearing diagnosis and refurbish

Bearing life cycle management



Improve profits in OEM business

- **Improve asset efficiency by reorganization of production bases in the Americas, Europe, China and Japan**
- **Drastic review on costs through production at optimal site**
- **Price increases and reduction in unprofitable business**
- **Develop new products that meet market needs and bring them to market speedy**


"Resin Mold Insulated Bearing" for e-Axle

©2024 NTN Corporation

(4) Basic Policies and Strategies by Business Sector: CVJ/Axle

Business target

FY2026 **Operating income 4.6%**

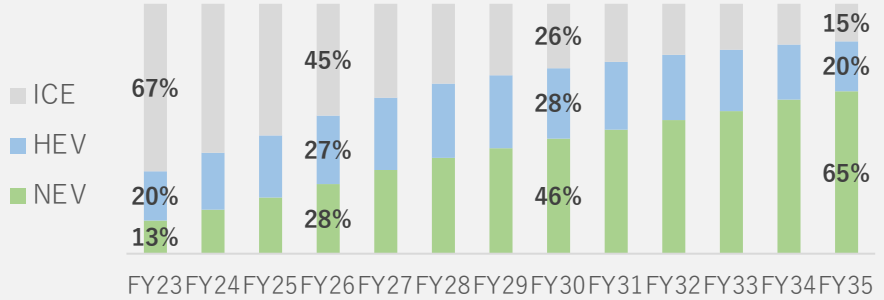
Policy

1. Pass-on price and set selling price 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

Market environment

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





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

Main strategy

Improve profits of OEM business

- **Improve asset efficiency by reorganization of production bases in the Americas, Europe, China and Japan.**
- **Price increases and reduction in unprofitable business**
- **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 speedy**

Expand aftermarket business

- **Strengthen supply capability**
  - Develop alternative products and outsourcing
  - Expand product lineup through external purchasing
  - Establish LCC brand and expand sales
- **Relocate aftermarket headquarters functions to Europe and establish sales expansion system**







High Efficiency Fixed Type CVJ “CFJ”

Shudderless Sliding Type CVJ “PTJ”

Fixed Type CVJ

Sliding Type CVJ

©2024 NTN Corporation

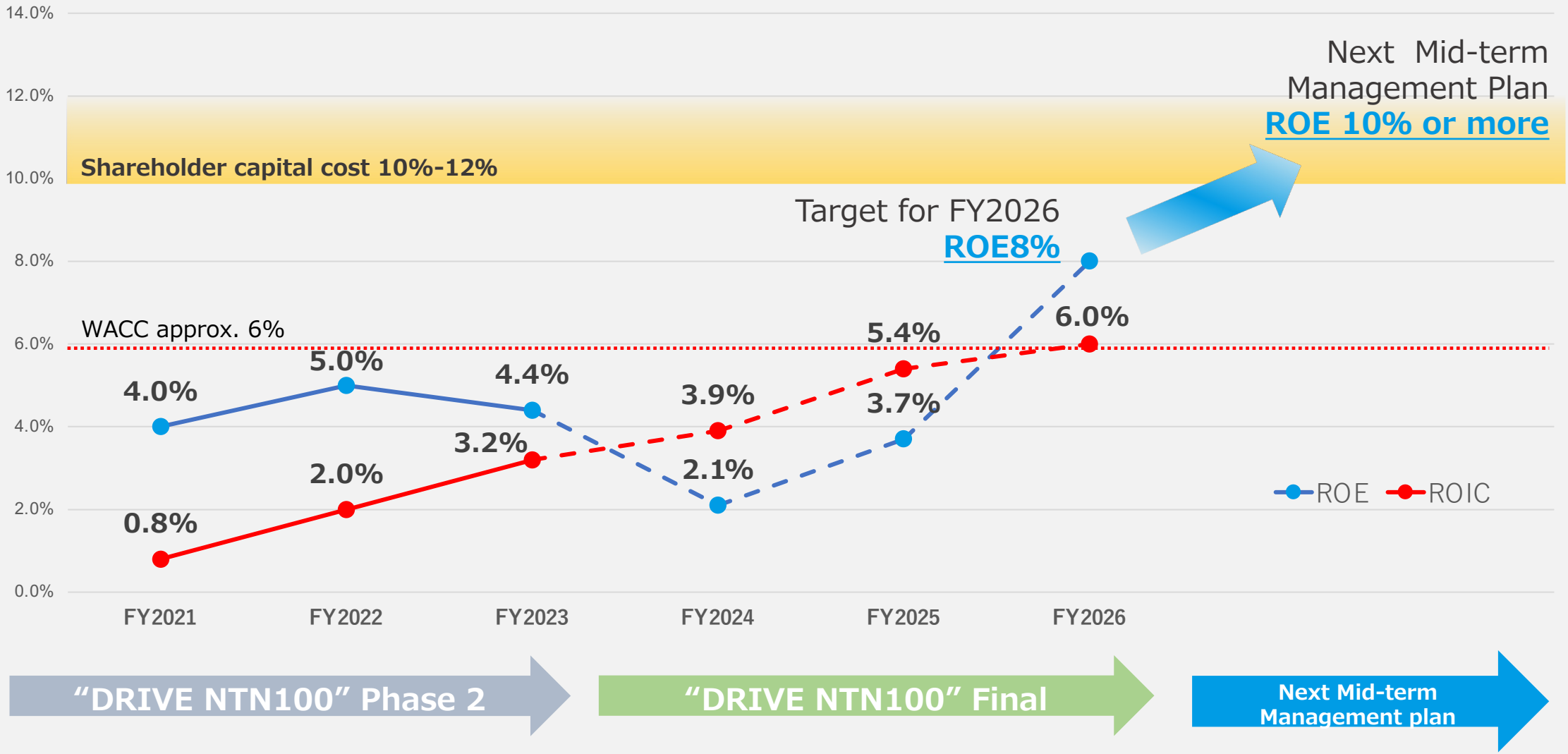
5

Realize Management that is Conscious of Cost of Capital and Stock Price



©2024 NTN Corporation

Cost of Capital and ROE: Current Status and Future Targets

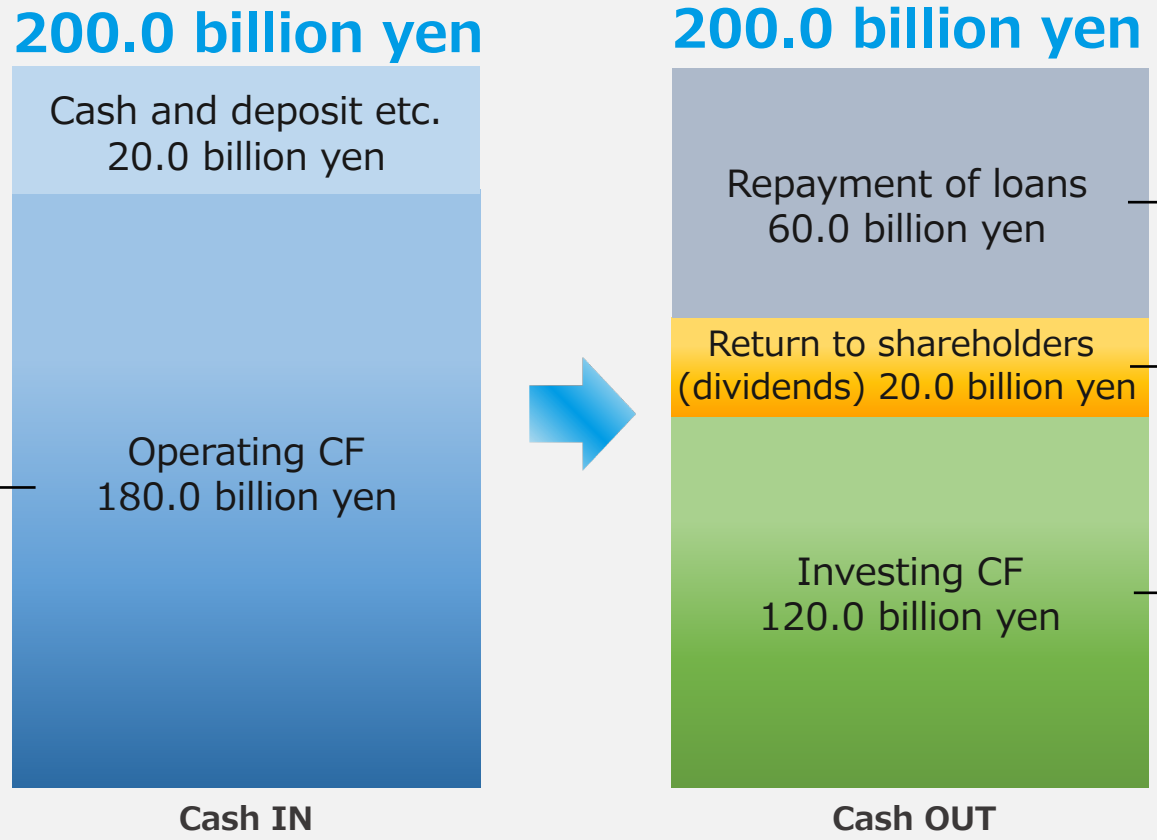


©2024 NTN Corporation

Cash Allocation

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

Cash allocation (3 years)



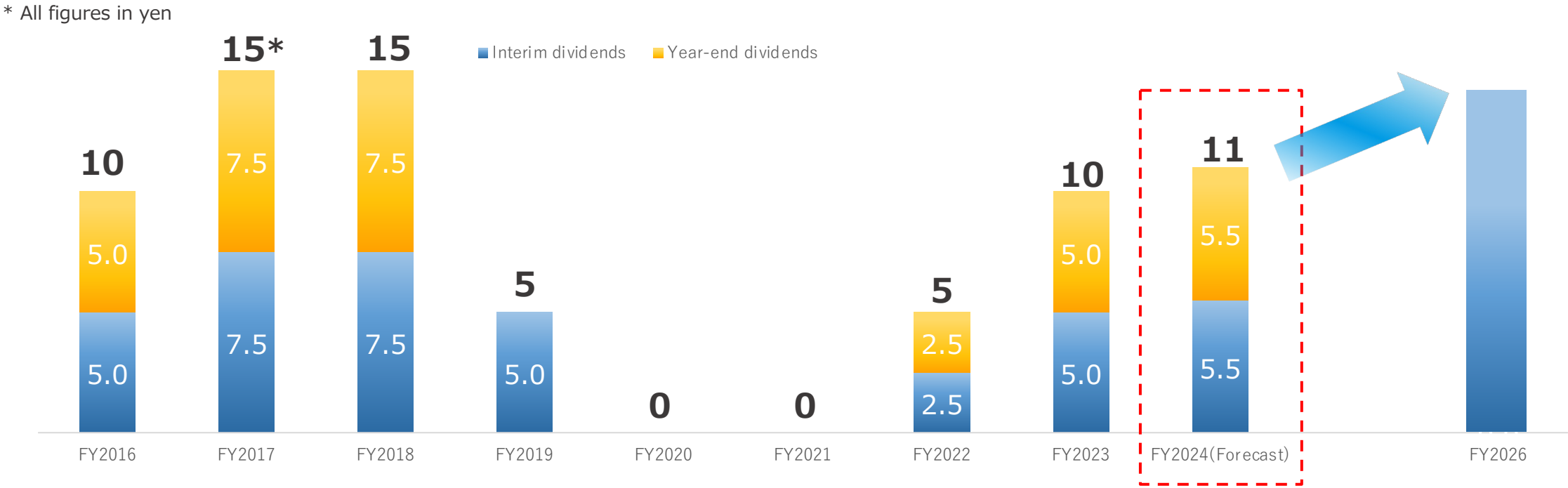
- **Steady profit increase**
- **Improve inventory turnover ratio and improve CCC by reducing working capital**

- **Raise the rating perspective to facilitate diversified fund raising on favorable terms**
- **Achieve stable and continuous dividends**
- **Implement structural reform**
- **Invest in growth areas**
- **Invest for carbon neutrality**
- **Digital investment**
- **Invest for facility maintenance and labor saving**

©2024 NTN Corporation

Policy of Return to Shareholders

- **Continue to implement dividends according to business results in a stable and continuous manner from a medium-to-long-term viewpoint**
- **DOE2.5% is the lower limit and we aim to DOE4% after accomplishing the target of “DRIVE NTN100” Final**



* Including 100th anniversary commemorative dividends

©2024 NTN Corporation

For improvement of ROE

ROE

FY2026 8.0%
↑
FY2023 4.4%

Net income margin

FY2026 2.4% or more
▲ FY2023 1.3%

×

Total asset turnover

FY2026 1.0 or more
▲ FY2023 0.92

×

Financial leverage

FY2026 3.3 times
▲ FY2023 3.4 times

=

Net income

FY2026 20.0 billion yen or more

- Expand aftermarket business
- Improve profits in CVJ/Axle business

=

Net sales

FY2026 830.0 billion yen or more

- Increase aftermarket ratio
- Expand new business and new products ratio

=

Total assets

FY2026 4.5 (Inventory turnover ratio)

- Expand and accelerate production reform activities
- Overall supply chain optimization and lead time reduction
- Accelerate structural reform

÷

Net sales

FY2026 830.0 billion yen or more

- Increase aftermarket ratio
- Expand new business and new products ratio

÷

Total assets

FY2026 4.5 (Inventory turnover ratio)

- Expand and accelerate production reform activities
- Optimize the entire supply chain and reduce lead time
- Accelerate structural reform

÷

Equity

FY2026 Equity to capital ratio 30%

- Achieve steady profits improvement
- Reduce interest-bearing debt

Capital cost reduction

Strengthen and facilitate dialog with stakeholders

- Disclose video and script of IR meeting in both Japanese and English
- Enhance business briefing and plant tour for shareholders and investors
- Strengthen direct dialog between shareholders/investors and senior management/Outside Directors
- Educate employees about the importance of dialog and collaborate with IR-related departments

©2024 NTN Corporation

- This presentation and comments made in this conference or during the following Q&A session include forward-looking statements about future performance and future business strategies, all of which are based on decisions of the management of the Company currently available.
- These statements represent the best judgment of the management of the Company based on the information currently available. However, there can be no assurance that future results will meet any expectation, estimate or projection conveyed by these statements or comments. Actual results may differ materially from Management projections depending on various factors such as changes in product demand, exchange rates and interest rates, and contingent liabilities.

©2024 NTN Corporation