### **Presentation Material**

# MID-TERM MANAGEMENT PLAN NOF VISION 2030

# May 25, 2023 Solve the second state of the se

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# <u>Agenda</u>

## Review of 2022 Mid-Term Management Plan

## Mid-Term Management Plan NOF VISION 2030

# Review of 2022 Mid-Term Management Plan (FY2020~FY2022)

# Solution NOF <u>Review of 2022 Mid-Term Management Plan</u>

[¥100 million (%)]

	FY2020 Actual	FY2021 Actual	FY2022 Actual	FY2022 Plan	FY2025 Plan
Net sales	1,726	1,926	2,177	1,790	2,100
Operating income	266	356	406	290	380
Ratio of operating income to net sales	15.4	18.5	18.7	Over 15	Over 15
ROA *1	11.4	13.4	14.4	Over 10	_
ROE *2	12.2	12.6	14.8	Over 10	_

\*1 ROA:Return on Assets, ratio of ordinary income to total assets

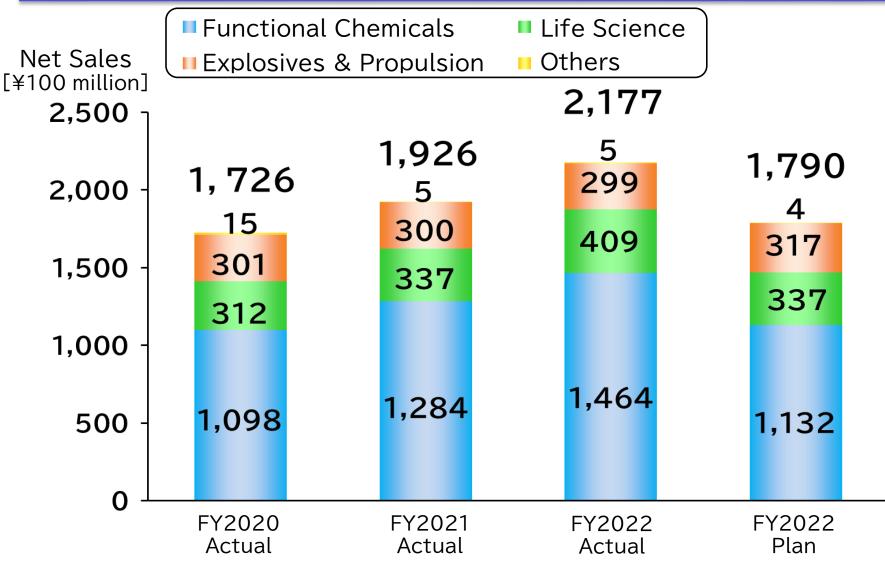
\*2 ROE:Return on Equity, ratio of net income to shareholders equity

## Net Sales

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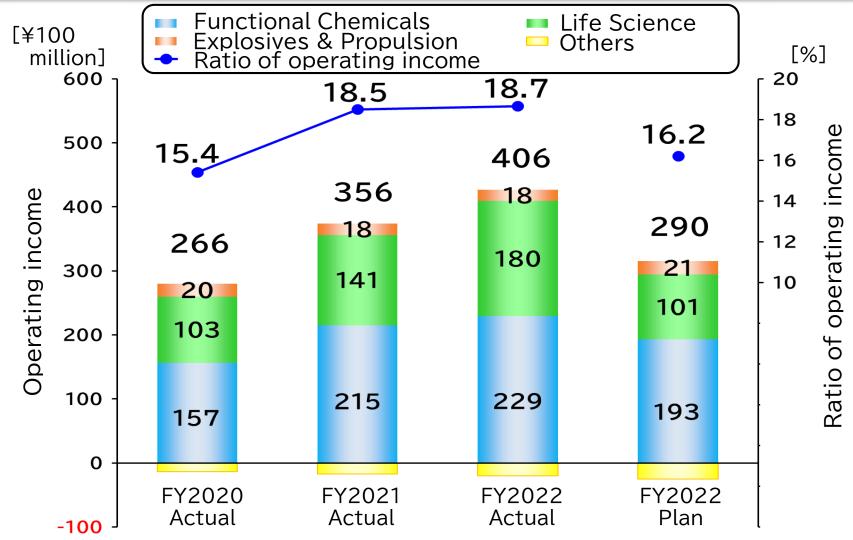
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### Actual performance of 2022 Mid-Term Plan



# Operating Income and Ratio of Operating Income

### Actual performance of 2022 Mid-Term Plan



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# Revised Corporate Philosophy and Guiding Framework

## Revised Corporate Philosophy and Guiding Framework

### Corporate philosophy

The NOF Group is dedicated to contributing to humanity and society as a corporate group that creates new value through the power of chemistry, "from the biosphere to outer space."

### Values

Challenge

Fairness

Harmony

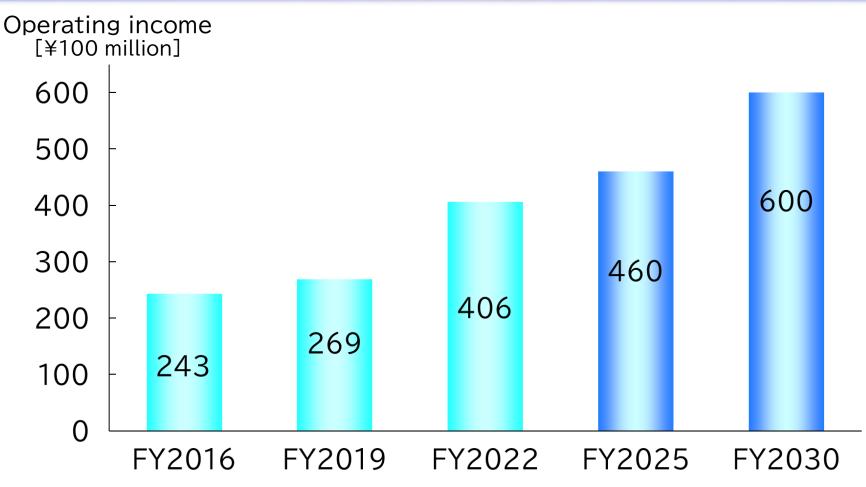
## Code of conduct

- 1. Provide the highest quality products and services globally for the development of humanity and society.
- 2. Leverage the group's collective strengths to develop cutting-edge technologies and products that create new value across a wide range of fields.
- 3. Take on ambitious challenges to achieve personal growth and a fulfilling lifestyle.
- 4. Respect diversity and act fairly with high ethical standards and good sense.
- 5. Be conscious of safety and being in harmony with the environment, while solving social issues by bringing everyone's strengths together.

# Mid-Term Management Plan NOF VISION 2030

# **Corporate Vision for FY2030**

A corporate group that continuously creates new value with the power of chemistry in the three business fields of *"Life/Healthcare"*, *"Environment/Energy"*, and *"Electronics/IT"*, in order to realize a prosperous and sustainable society



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## NOF VISION 2030

## NOF VISION 2030

2022 Mid- Stag	-	2025 Mid-Term Plan Stage II					d-Term Plan ageⅢ
Strengt Found	-	Expanding Profit		Expanding Profit			ess Domain Dansion
<ul> <li>Actively inversion inversion fields</li> <li>Improvemen profitability profitable but</li> </ul>	t in of less	<ul> <li>Establish high-profit structure</li> <li>Make strategic investments for business domain expansion</li> </ul>		•Advance i business o			
FY2022		FY2	025	F۱	(2030		
Operating income	Ratio of operating income	Operating income	Ratio of operating income	Operatin income	g Ratio of operating income		
406	18.7	460	Over 18	600	Over 20		

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# **Organizational Restructuring**

## Organizational restructuring effective as of April 1. 2023

#### **Business Divisions:**

Respond to changes in the market's needs in our three prioritized business fields and aim to provide new value to customers

#### **Corporate Divisions:**

Strive to upgrade and optimize functions to further respond to changes in the business environment

## **Functional Chemicals segment**

#### Functional Materials Div.

- Boost proposal-making capability by merging the sales capabilities of ex-Oleo & Speciality Chemicals Div. and ex-Functional Chemicals & Polymers Div. to explore new demand in growth fields
- Propose new and original materials and techniques that are based on oleo techniques at ex-Oleo & Speciality Chemicals Div. and polymer techniques at ex-Functional Chemicals & Polymers Div.

# Pharmaceuticals, Medicals and Health segment (ex-Life Science segment)

#### Life Science Div.

- Enhance the quality assurance system of biocompatible materials by applying the GMP\* knowledge from ex-DDS Development Div. to ex-Life Science Products Div. in order to boost and accelerate business expansion in the medical field
- \* Good Manufacturing Practice(Manufacturing control/quality control standard requirements for manufacturers and marketing authorization holders of drugs, etc.)

# **Organizational Restructuring**

#### **Overview** (comparison of before and after the restructuring)

#### (1) Business Divisions

Before	After
Oleo & Speciality Chemicals Div. Functional Chemicals & Polymers Div.	Functional Materials Div.
Life Science Products Div. DDS Development Div.	Life Science Div.

#### (2)Corporate Divisions

Before	After
_	Corporate Communications Dept. <i>(newly established)</i>
_	Legal Dept. (newly established)
Responsible Care & Production Engineering Dept.	Corporate Technical Div. (newly established) (Reorganized Responsible Care & Plant Investment Dept. and newly established Quality Management Dept. in the division)



# **Strategic Investments**

# <u>Strategic Investments</u> in 2025 Mid-Term Management Plan

Strategic investment framework: Approx. 70 billion yen is assumed.

Investments toward expansion of business areas

Research and development for creation of new businesses, M&A

Investments for expansion of existing businesses, response to environmental issues, etc.

Construction of manufacturing facility in line with expansion of demand (DDS Development, Cosmetic ODM Business) Efforts toward carbon neutrality, DX(Smart factory), etc.

Human investments including recruitment and human resource development

Improvement of working environment, ability development program, DX human resource development

Securing of investment funding through self-financing and sales of cross-held stocks

Active investments for achievement of 2025 Mid-Term Management Plan and further growth

# Solution NOF <u>Plan of Strategic and Existing Investments</u>

70 billion-yen investment is planned (for three years by FY2025) as a strategic investment for business domain expansion, acceleration of development of new products and techniques and for further environmental and social considerations.

		Amount	Impact on BS *	Impact on PL
	Production	479	410	69
Strategic investments	Environment	21	19	3
700	R&D	87	16	71
	Human investment	86	40	46
Existing investments	Facility investment	252	_	
436	R&D	184		

\* Amount affecting the BS at the end of FY2025

## **Facility Investments**

## Major facility investments

- Construction of manufacturing facilities for pharmaceutical raw materials(PEG modifiers) [Aichi Works]
- Construction of manufacturing facilities for SS lipids [Aichi Works]
- Extension of manufacturing facilities for cosmetics materials [Aichi Works]
- Extension of manufacturing facilities for anti-fog agents [Aichi Works]
- Extension of manufacturing facilities for fatty acid derivatives [Amagasaki Plant]

# **Facility Investments**

## Improving productivity

- Improve operational efficiencies by automation and laborsaving
  - ⇒Use RPA and AI-OCR, introduce production scheduler⇒Introduce automatic filling machines
- •Increase the use of data in production and sales activities
  - ⇒Promote smart factories (at a new DDS plant)
  - ⇒Introduce marketing support tools, chemical substance management systems and facility maintenance management systems

### Investment in environmental response

- •Address the regulatory control of CFCs in manufacturing facilities
  - ⇒Change CFC's to natural refrigerants
- Save energy and streamline efficiency in manufacturing facilities
  - $\Rightarrow$  Electrification of equipment that utilizes steam  $\Rightarrow$  Convert boiler fuel and improve boiler officiency
  - ⇒Convert boiler fuel and improve boiler efficiency



## **Facility Investments**

## Facility investment plan and results

			[¥10	0 million]
	FY2020- Acti	-		-FY2025 an
	FY2022 Total		FY2023	Total
Capital expenditures *	78	227	256	695
Depreciation & amortization	64	178	69	228

\* Acceptance basis

# **Research and Development**

## Expansion of the R&D areas

- Explore promising themes through external co-creation, open applications, and public bidding invitations, etc.
- Accelerate the development of new businesses by enhancement of system for R&D
- Introduce a database system and analysis software
- •Streamline R&D by developing the MI environment and fostering human resources

**MI:**Materials informatics

 Promote collaboration among industry, academia and government

⇒Use open laboratories and government projects
Proactively participate in open innovation

# **Research and Development**

### Cases of open innovation

2025 Mid-Term Plan: Continuation of public bidding invitation for wider areas of industry-academia sponsored research

FY2023: Start of sponsored research on themes adopted in the fields of materials for electronics and health food

#### 1. Materials for electronics

•Advanced technology, such as materials for highspeed communications, semiconductor, rechargeable battery, etc.

#### 2. Materials for health food

- Useful materials for health food
- Most efficient production technologies of useful materials for health food

## **Research and Development**

### Results and plan of R&D expenses

#### [¥100 million]

	FY2020-FY2022 Actual		FY2023 <sup>.</sup> Pl	Rate of Change	
	FY2022	Total (A)	FY2023 (Forecast)	Total (B)	(B/A)
Functional Chemicals	30	86	34	106	123%
Pharmaceuticals, Medicals and Health	16	44	20	59	133%
Explosives & Propulsion	13	40	14	46	116%
Others *	6	15	13	45	310%
Total	66	184	81	256	139%

\* Including industry-academia collaboration and collaboration with startup companies

## Human Investments

# Human investments including recruitment and human resource development

- Promote employees' autonomous growth
  - ⇒Further enhance and upgrade the fostering of self-sustained human resources
  - ⇒Support career design development
- Promote DX human resource development ⇒Establish new training to foster DX specialists

#### •Promote the fostering of global leaders

- ⇒Revise the overseas study program and related overseas educational systems
- ⇒Foster local staff at the overseas subsidiaries to internally spread and consolidate the Group's philosophy and approach

#### Motivate and utilize diverse human resources

⇒Raise the retirement age to 65, revise the continuous employment system

#### Upgrade and renovate welfare facilities

⇒Upgrade and renovate company housing in the Kanto area and a dormitory in Kansai area



# 2025 Mid-Term Management Plan Stage II

# Business Environment Stress NOF in the 2025 Mid-Term Management Plan Period

#### Business environment surrounding NOF Group

- Continuous aftershocks from COVID-19
- •Increasing geopolitical risks (Ukraine crisis, U.S.-China conflict, etc.)
- •Economic downturn caused by the global monetary restraint and rising prices

Delay in recovery of demand

Continuously high raw material and fuel prices

		FY2022 Actual	FY2023 Forecast	FY2023- FY2025 Plan
Palm oil *	USD/MT	1,150	950	950
Domestically produced naphtha	JPY/KL	76,500	69,000	69,000
Evolopeo rotas	JPY/USD	135	130	130
Exchange rates	JPY/EUR	141	140	130
			Ψ EC	D Malaycia

\* FOB Malaysia

## 2025 Mid-Term Management Plan and Corporate Vision for FY2030

#### [¥100 million (%)]

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	FY2022 Actual	FY2023 Forecast	2025 Plan	FY2030 Plan
Net sales	2,177	2,300	2,550	3,000
Operating income	406	370	460	600
Ratio of operating income to net sales	18.7	16.1	Over 18	Over 20
ROA *1	14.4	12.0	Over 13	—
ROE *2	14.8	11.6	Over 12	

\*1 ROA:Return on Assets, ratio of ordinary income to total assets

\*2 ROE:Return on Equity, ratio of net income to shareholders equity

## Net Sales

# FY2022 actual performance and 2025 Mid-Term Management Plan

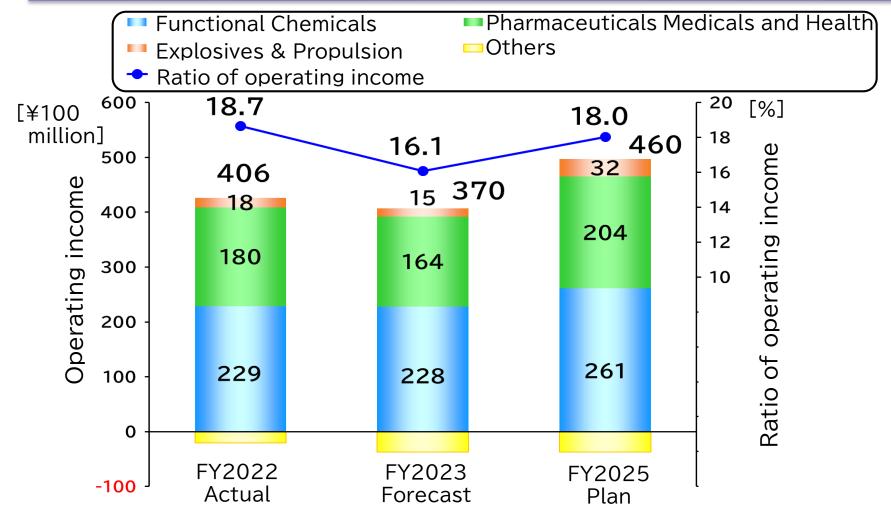
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Functional Chemicals		.s Pharmaceu	ticals, Medicals and He	ealth
II E	xplosives & Propuls	sion <mark>-</mark> Others		
Net Sales [¥100 million]	1		2,550	
2,500	2,177 5	2,300	398	
2,000	299	330	581	
1,500	409	519		
1,000				
500	1,464	1,447	1,566	
0	FY2022	FY2023	FY2025	
	Actual	Forecast	Plan	

The business divisions in charge of an overseas sales company and some products were transferred between the Functional Chemicals segment and the Pharmaceuticals, Medicals and Health segment at the beginning of FY2023. (Estimated impact on the net sales in FY2022: negative impact of approx. ¥10 billion for Functional Chemicals, positive impact of approx. ¥10 billion for Pharmaceuticals, Medicals and Health)

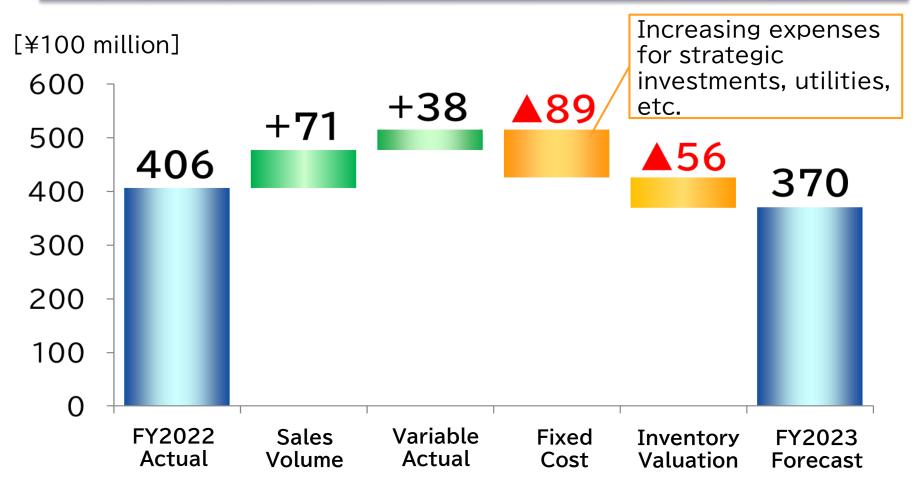
## <u>Operating Income</u> and Ratio of Operating Income

# FY2022 actual performance and 2025 Mid-Term Management Plan



# **Changes in Operating Income**

### FY2023 Forecast vs. FY2022 Actual



**Solution** 

# **Functional Chemicals Segment**

## FY2023 Forecast and Focus in 2025 Mid-Term Plan

#### [FY2023]

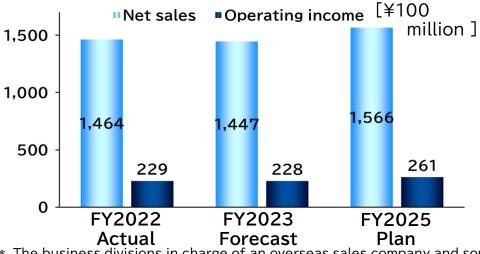
- Cosmetics materials
  - ⇒Recovery in demand from foreign tourists in Japan

#### Base material for refrigerating oils

⇒Delay in demand recovery in Asia (China)

#### Special anti-corrosion agents

⇒Recovery from the shortage of semiconductors, recovery in automobilerelated demand



\* The business divisions in charge of an overseas sales company and some products were transferred between the Functional Chemicals segment and the Pharmaceuticals, Medicals and Health segment at the beginning of FY2023. (Estimated negative impact on the net sales in FY2022: approx. ¥10 billion)

[Focus]

#### Cosmetics materials

⇒Improve sales, obtain new demand, promote the development of plant-based raw materials and its market launch, accelerate business expansion overseas

#### •Fatty acid derivatives

⇒Expand the sales of eco-friendly products (such as base material for refrigerating oils and stern tube bearing oil), promote the development of new products of highperformance ester and their market launch

#### million ] • Special anti-corrosion agents

⇒Promote product development in the electric vehicle (EV) field and non-automotive fields such as wind power generation and work towards expanding their sales

#### [Analysis of changes in operating income (FY2023 Forecast vs. FY2022)]

Sales	Variable	Fixed	Inventory	Total
Volume	Cost	Cost	Valuation	
+47	+29	(23)	(52)	(1)

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## FY2023 Forecast and Focus in 2025 Mid-Term Plan

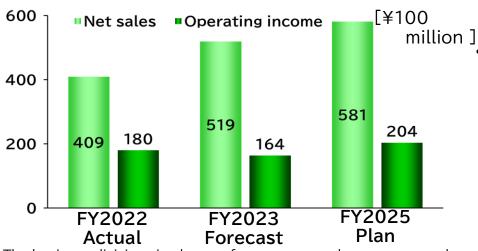
#### [FY2023]

#### Raw materials for DDS drug formulations

- ⇒Product demand for COVID-19 vaccines will be stable
- ⇒Product demand for other biopharmaceuticals will tend to expand

#### •Edible oils

⇒Recovery in the restaurant market and demand from foreign tourists in Japan



\* The business divisions in charge of an overseas sales company and some products were transferred between the Functional Chemicals segment and the Pharmaceuticals, Medicals and Health segment at the beginning of FY2023. (Estimated positive impact on the net sales in FY2022: approx. ¥10 billion)

#### [Focus]

#### •Raw materials for DDS drug formulations

⇒Enhancement of the production system in response to demand increase caused by the further development of antibody and nucleic acid medicines

#### Biocompatible materials

⇒Focusing on materials development, sales expansion in the medical field, acceleration of business expansion overseas

#### •Edible oils

⇒Reorganization of the product line and expansion of the sales of functional food materials

[Analysis of changes in operating income (FY2023 Forecast vs. FY2022)]

Sales	Variable	Fixed	Inventory	Total
Volume	Cost	Cost	Valuation	
+14	+7	(31)	(5)	(15)

# **Explosive & Propulsion Segment**

## FY2023 Forecast and Focus in 2025 Mid-Term Plan

#### [FY2023] •Industrial explosives

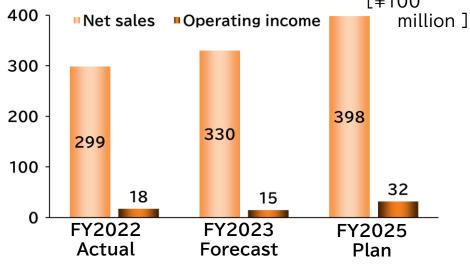
⇒Demand will be slightly higher due to the Hokkaido Shinkansen and high-standard highways (The building of the Shinkansen railway using the maglev system is partially delayed.)

#### Defense products

⇒Response to the effect from accidents at raw material suppliers

#### Space rocket products

⇒Demand is unclear due to the rocket launch failure
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#### [Focus]

#### Industrial explosives

⇒Review of prices caused by the higher prices for raw materials

#### Defense products

⇒Measures for higher defense budget

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#### Space rocket products

⇒Profitability improvement by establishing an efficient productivity system

#### [Analysis of changes in operating income (FY2023 Forecast vs. FY2022)]

Sales Volume	Variable Cost	Fixed Cost	Inventory Valuation	Total
+11	+1	(15)	+1	(3)
				32



# Financial Strategy

# **Financial Strategy**

#### Cash allocation plan (total from FY2023 to FY2025)

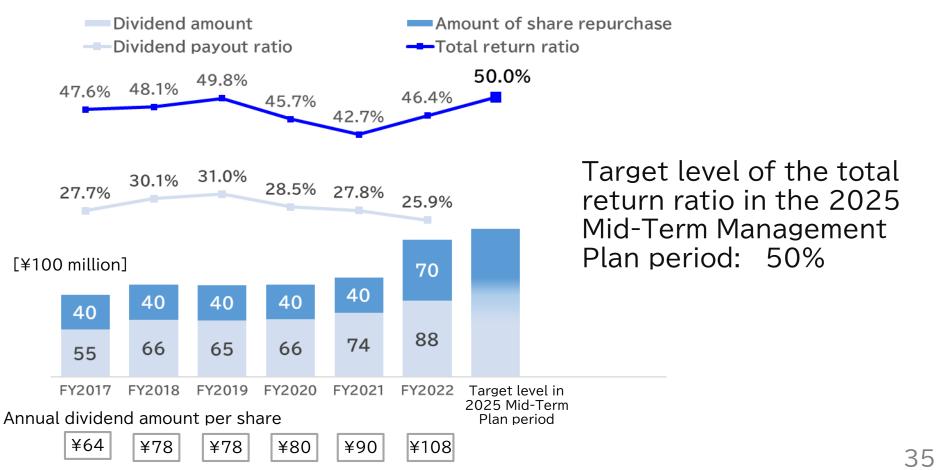
NOF formulated a cash allocation plan by striking the right balance of financial soundness, enhancement of capital efficiency and shareholder returns while actively making strategic investments.

	Cash in	Cash out	[¥100 million]
	Cash flows from operating	Strategic Investments 700	Investments in growing areas and new businesses(production, environment, R&D, human investment)
activities 1,000	Existing Investments 436	Replacement of production facilities of existing businesses	
Ratio of cross- shareholdings to net assets: below 15%	Cash reserves (partial) Sale of cross -shareholdings	Dividend 250 Additional shareholder returns (Share repurchase, etc.)	Improve profit returns with the total return ratio of 50% as the target level

# **Financial Strategy**

## **Policy of Shareholder returns**

Return profits to shareholders while being aware of the improvement in capital efficiency, strive to maintain and increase shareholder returns by striking a balance with strategic investments.





# **Promoting CSR**

# **Initiatives for Sustainability Issues**

## Human capital-related initiatives

#### Diversity

⇒Increase the number of new female graduates recruited for career-track positions, raise the percentage of female management-level employees, raise the employment rate of persons with disabilities, lower the wage gap between male and female employees, raise the percentage of male employees taking childcare leave, recruit personnel with business experience

#### •Employee engagement

⇒Encourage taking of yearly paid holidays, carry out measures stemming from results of the engagement survey

## Respond to biodiversity (TNFD)

- Promote afforestation, expand the use of RSPO-certified oil
- •Expand the sales of products that contribute to biodiversity: Biodegradable hydraulic fluid, Antifreezing agents, etc.

## Respond to climate change (TCFD)

•Analysis based on the 1.5°C scenario  $\rightarrow$  Include it in a report made in compliance with the TCFD recommendation 37

# <u>Climate Change-related Opportunities</u>

NOF

## **Innovation for Decarbonization**

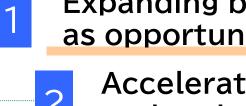
- R&D activities, such as industry-academia collaborative projects
  - ⇒Biomass-derived materials and a derivatization technique for the same
  - ⇒Heat-storing material production techniques to effectively use unused exhaust heat

Provision of products that contribute to the mitigation of global warming

- Electric vehicles
  - ⇒Dispersants for electronic components, lubricants for electronic units, noise reduction agents, etc.
- Wind power generation / solar power generation
   ⇒Biodegradable hydraulic oil, anti-corrosives, etc. 38

Solution States NOF <u>Management Policy for the Period throughout</u> <u>the 2025 Mid-Term Management Plan</u>

# **Practice and Breakthrough**



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Expanding business by seizing market changes as opportunities

Accelerating development of new products and techniques

Improving productivity



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Pursuing safety and security

Promoting CSR

- •This material is intended to provide an explanation of the company and its business, not to induce investment or any other action.
- •The results forecasts presented in this document are based upon currently available information and assumptions deemed rational. A variety of factors could cause actual results to differ materially from forecasts.
- •Please be aware that decisions regarding investments are the responsibility of the users themselves.
- •Please note that, in this material, amounts less than ¥100 million have been rounded off.

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