Presentation Material

MID-TERM MANAGEMENT PLAN NOF VISION 2025

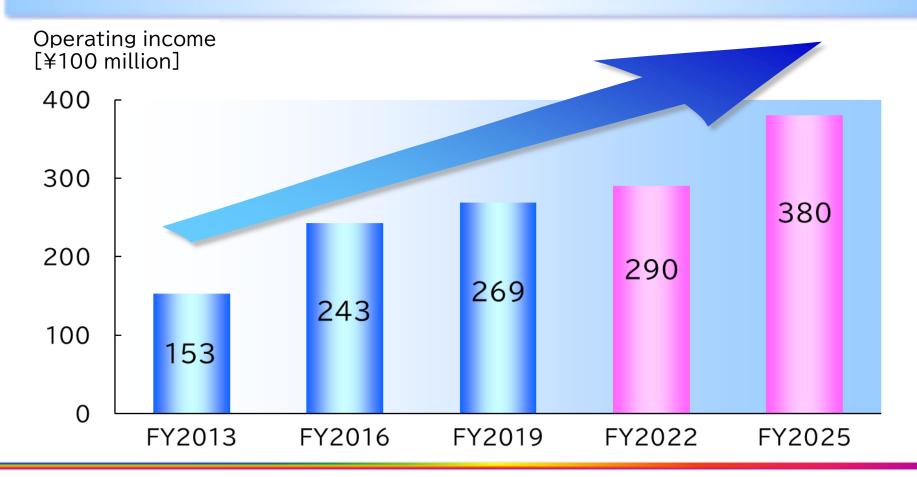
November 19, 2020





Corporate Vision for 2025

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





NOF VISION 2025

2022 Mid-Term Management Plan Stage I

Strengthening foundation

- ·Actively invest in growth fields
- Improvement in profitability of less profitable businesses

2025 Mid-Term Management Plan Stage II

Expanding profit

·Establish high-profit structure

Sustainable growth

FY2022

Operating income

Ratio of operating income to net sales

¥29 billion

Over 15%

FY2025

Operating income

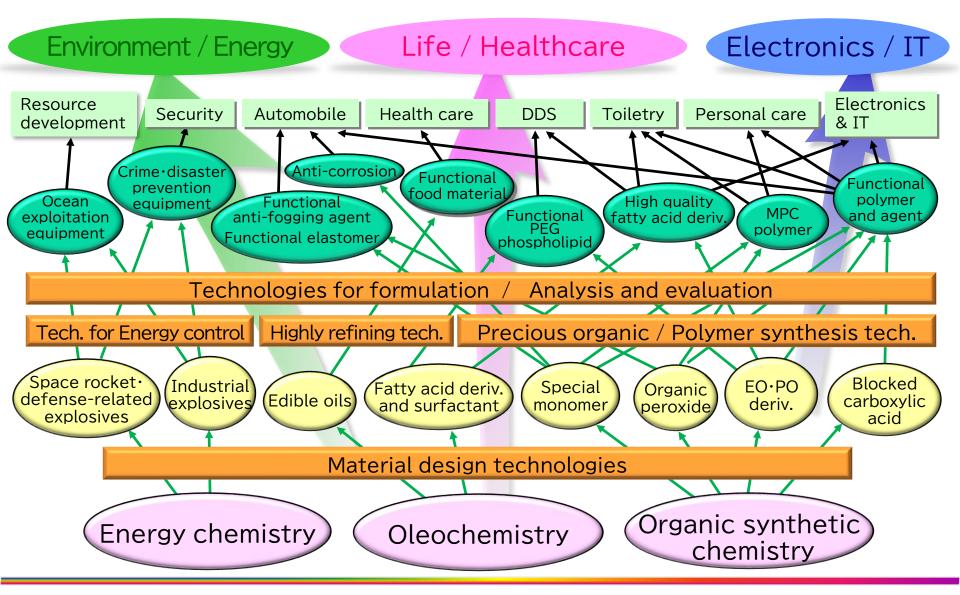
Ratio of operating income to net sales

¥38 billion

Over 15%



Differentiated technologies and materials of the NOF Group





Prioritized business fields of the NOF Group

Environment/Energy field

Highly functional anti-corrosives agents Ocean development devices

Life/Healthcare field

Pollen suppressors Biodegradable lubricants

Vaccine materials

Functional hard-coating agents

High-functional anti-fog agents

Gene therapy materials Modifiers for peptide drugs

Steam-pressure tracturing Agents

Chemicals for water treatment membranes

Modifiers for protein drugs

Materials for regenerative medicine

Functional elastomers

Hydrogel materials Functional additives for medical use

Anti-aging materials

Lipids for nucleic acid drug

Base material for refrigerating oils

Mild surfactants

Additives for diagnostic

Modifiers for antibody drugs

Waterborne anti-corrosion coatings Eco-friendly anti-freezing agents

Cosmetics materials

Contact lens materials Eye-drop materials

pharmaceutical agents

Electronics/IT field

Propellants and gunpowder

Health food Oral care materials

Additives for conductive paste

Industrial explosives

Edible oils Eye care products Photo polymerization initiators Fatty acid deriv.

Binders for metal nanoparticles

Capacitor materials

Core

EO/PO deriv. (Meth)acrylate deriv.

Resist materials Toner additives

Printed electronics materials

Organic peroxide

Color filter coating agents

High-function adhesive

New technology development

Existing products

Newly-developed products

New next-generation products



Classification of major product groups

		Segment			
		Functional Chemicals	Life Science	Explosives & Propulsion	
Field	Life /Healthcare	Surfactants (Toiletries) EO/PO derivatives (Cosmetics materials)	Edible oils Functional foods Biocompatible materials Raw materials for DDS drug formulations	Functional materials and devices (Pharmaceutical materials for treating heart disease) (Sterilization materials for medical use)	
	Environment /Energy	Fatty acid derivatives (Freezer lubricant materials) EO/PO derivatives (Additives for resin) Organic peroxides Special corrosion prevention agents		Industrial explosives Space rocket products Gunpowder and propellants Functional materials and devices (Construction materials)	
	Electronics /IT	Fatty acid derivatives (Toner additives) EO/PO derivatives (Dispersant for ceramics) Functional monomers/polymers (Photopolymer materials)			

Note: EO/PO: Ethylene oxide-propylene oxide / Typical products are shown in parentheses.



<u>Expected business environment surrounding NOF Group</u> <u>in the 2022 Mid-Term Management Plan period</u>

 Continuing restriction of economic activities due to the spread of COVID-19 (until 2021)

Uncertainty of the timing of recovery from the COVID-19 pandemic (rebound of infections)

- Changes in the market caused by new behavior patterns
- Geopolitical risks
 (exchange rate fluctuations and raw material and fuel price changes)

		FY2019 (Actual)	FY2020 (Forecast)	FY2020- FY2022 (Plan)
Palm oil (FOB Malaysia)	USD/MT	563	645	660
Domestically produced naphtha	JPY/KL	42,900	29,800	35,000
	JPY/USD	109	106	105
Exchange rates	JPY/EUR	121	123	120

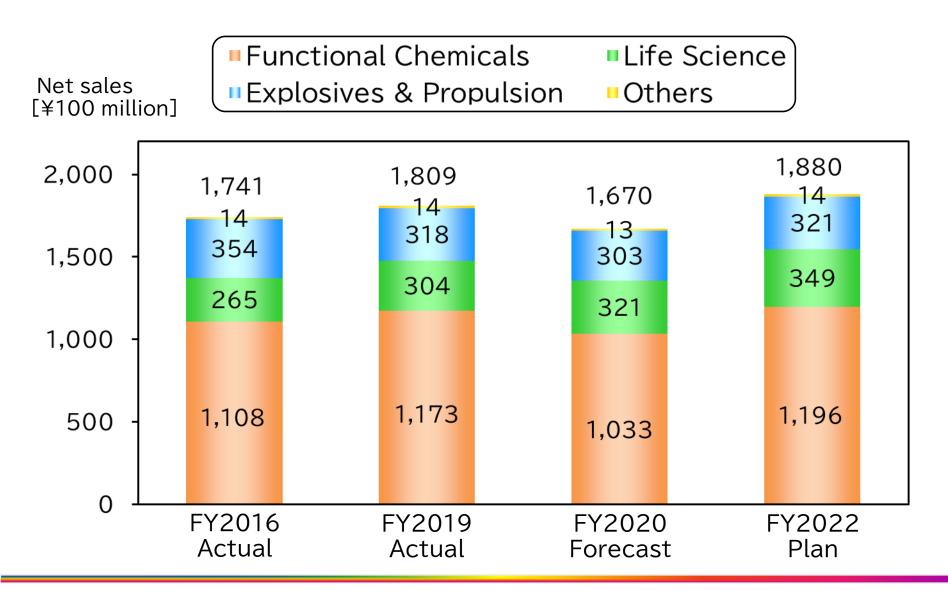


Major impacts of the COVID-19 pandemic

Segment	Conditions	
	[Special corrosion prevention agents and various kinds of additives]Reduction in demand due to reduction in automobile production and partial shutdowns	
Functional	[Base material for refrigerating oils]Reduction in demand from China and other regions for use in air conditioners	
Chemicals	[Cosmetics materials] • Loss of inbound demand and reduction in demand due to the stay-at-home order	
	[Toner additives]Reduction in demand for toner due to the spread of telecommuting and the resulting spread of paperless operations.	
Life Science	[Biocompatible materials]Increase in demand for MPC-related products due to increased awareness of hygiene	
	[Pharmaceutical preparation materials] • Increase in demand for pharmaceutical raw materials	
Explosives & Propulsion	[Functional materials and devices]Reduction in demand for construction materials	



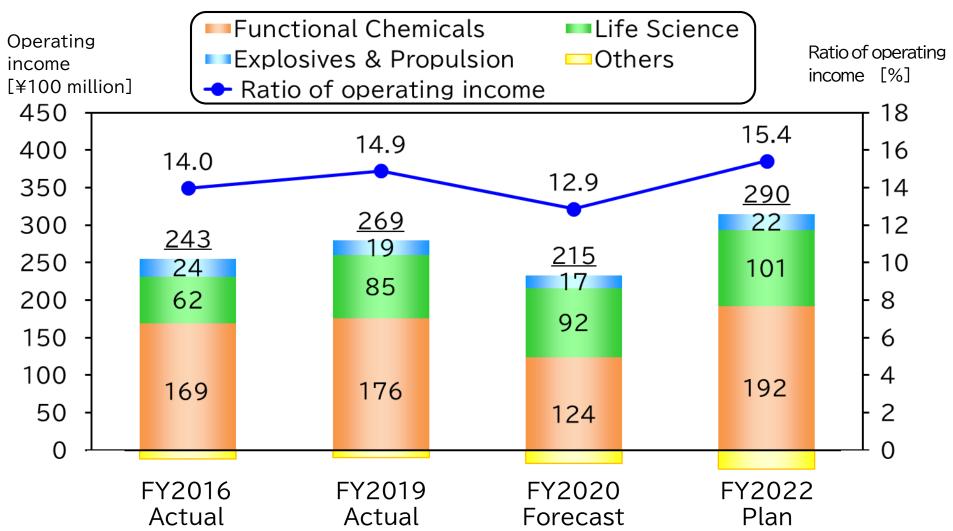
Net sales by segment





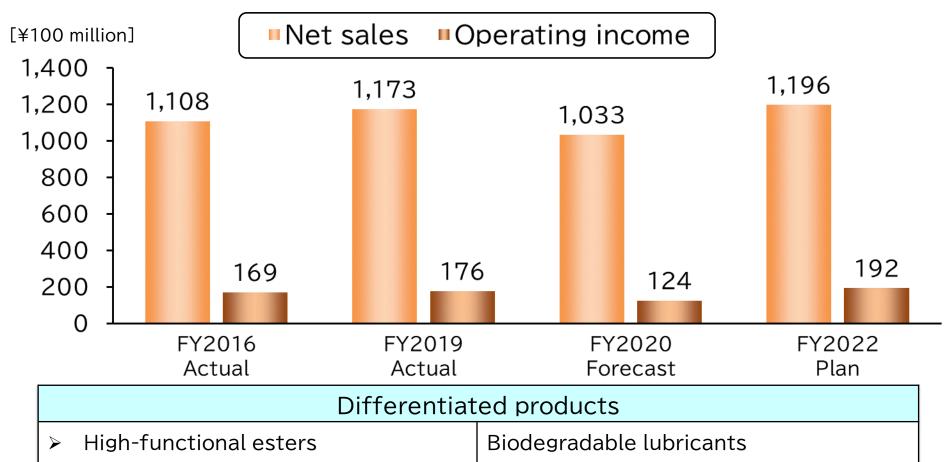
Operating income by segment and Ratio of operating income

◆ We are expecting to achieve the highest profit in FY2022 (¥29 billion)





<u>Functional Chemicals segment</u>



- Surfactants
- EO/PO derivatives
- Special corrosion prevention agents

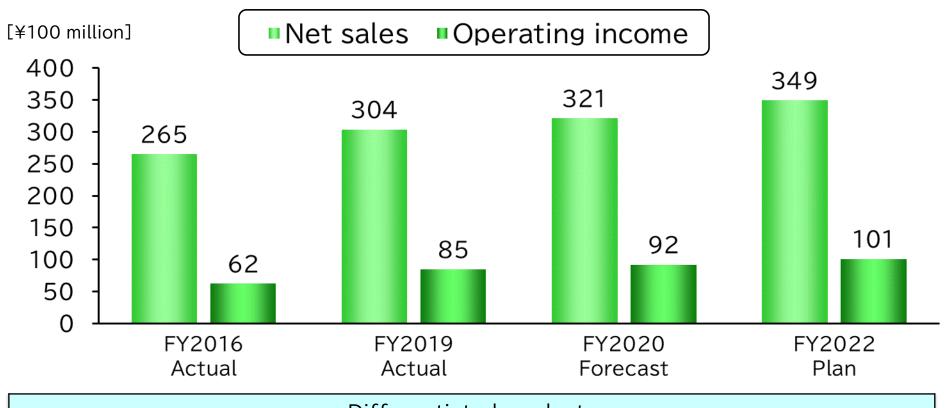
Mild surfactants

Additives for cosmetics

Waterborne anti-corrosion agents



Life Science segment



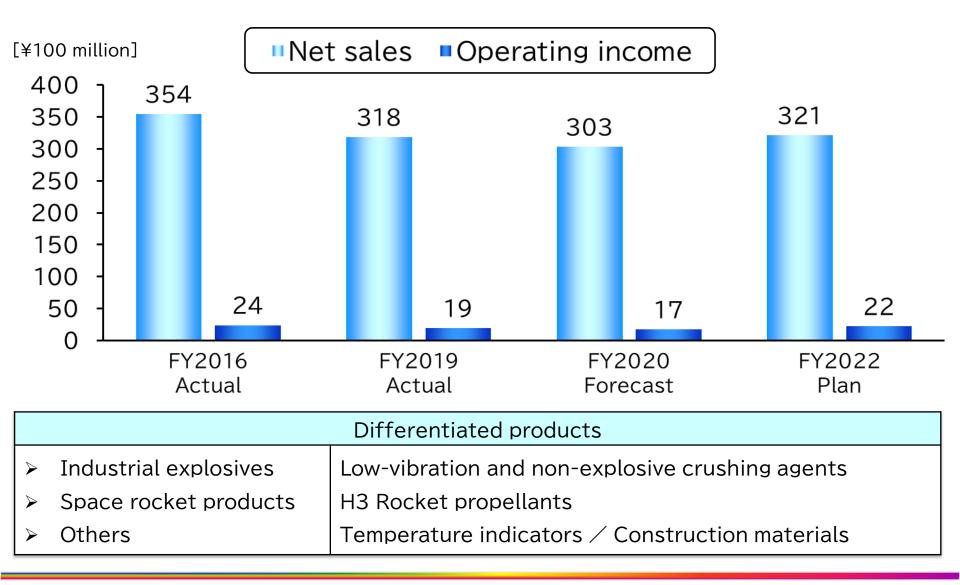
Differentiated products

- Processed oils
- Biocompatible materials
- > DDS

Functional oils for confectioneries, breads, and processed foods Materials for eye-care products and external skin preparations Medicals for antibody drug and nucleic acid drug



Explosives & Propulsion segment





2022 Mid-Term Management Plan

[¥100 million (%)]

	FY2019 Actual	FY2020 Forecast	FY2022 Plan	FY2025 Plan
Net sales	1, 809	1, 670	1, 880	2,200
Operating income	269	215	290	380
Ratio of operating income to net sales	14.9	12.9	Over 15	Over 15
ROA *1	12.0	9.6	Over 10	
ROE *2	11.9	10.0	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

Management Policy for 2022 Mid-Term Management Plan

Challenge and Co-create

Basic strategies

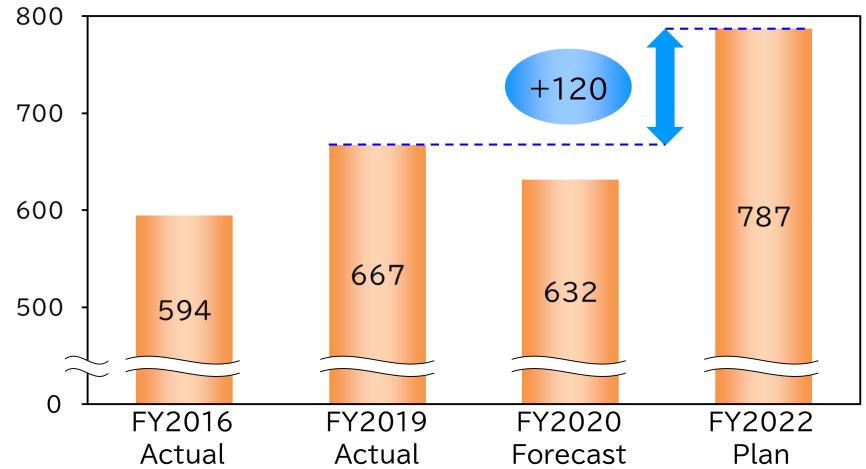
- 1 Expanding business into the growth market
- 2 Accelerating development of new products and techniques
- 3 Strengthening collaboration internally and externally
- 4 Improving productivity
- 5 Promoting CSR activities



High-function and high-value added products

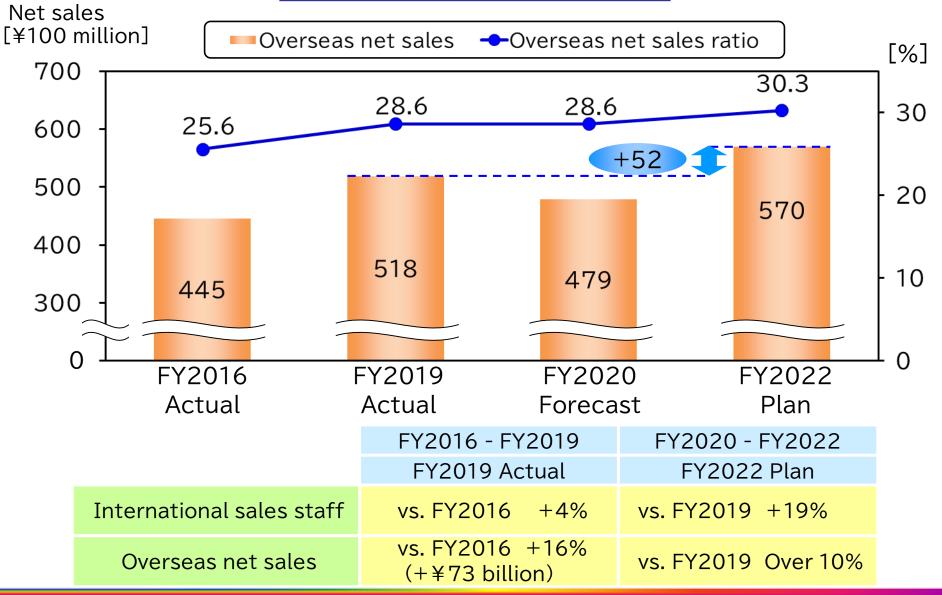
「Accelerating development of new products」

Net sales [\frac{\psi}{100 million}] \int \bigcirc | Increase the number of new research themes] (+\frac{\psi}{12 billion vs. FY2019, growth rate +18%)





Overseas net sales





<u>Accelerating development of new products and techniques</u>

① Increase the number of research themes

- Accelerate the development of new businesses in the I&S Department of the Corporate R&D Division
- Explore new research themes by using iCONM, etc.
- •Explore new materials and develop new formulas by using MI

iCONM:Innovation Center of NanoMedicine, KAWASAKI INSTITUTE OF INDUSTRIAL PROMOTION MI:Materials informatics

② Promote collaboration among industry, academia and government

- ·Use open laboratories and government projects
- Proactively participate in open innovation



R&D expenses by segment

[¥100 million]

	FY2016-FY2019 (Actual) total	FY2020-FY2022 (Plan) total	Rate of change
Functional Chemicals	97	90	93%
Life Science	38	44	116%
Explosives & Propulsion	45	44	98%
Others	12	20	167%
Total	192	198	103%



Improving productivity

① Increase production capacity and earning capacity

- Enhance facilities to support demand for high-function and high-value added products
- Increase earning capacity by way of reviewing less profitable businesses, etc.

2 Promote the digitization of operations

- Improve operational efficiency by promoting automation and labor-savings
- ·Make more use of data in production, sales and research

	[¥100 million] FY2016-FY2019 FY2020-FY2022	
	(Actual) total	(Plan) total
Capital expenditures *	198	257
Depreciation & Amortization	153	178

* Acceptance basis



Efforts to Improve Productivity

① Production

- Increase production capacity in the Functional Chemicals and Life Science segment
- ·Enhance the quality management system

2 Research & Development

- Develop human resources skilled in digital technologies
- Increase R&D efficiency by using MI

③ Operations

- Promote work style reform (paperless operations and telecommuting)
- ·Use RPA, introduce production planning and marketing support tools, etc.



Promoting CSR Activities

① Provide new value to realize a prosperous and sustainable society

- ·Realize innovation through business activities
- Supply high-function and high-value added products in the three prioritized business fields

2 Strengthen the business foundation

- ·Create a comfortable workplace and support employees' activities
- Improve resilience through CSR-based procurement and the development of BCPs

③ Promote responsible care activities

- •Enhance the management of chemicals and labor safety
- ·Respond to climate change



Materiality Matrix

Fai	rl	ly
hi	gŀ	1

Impact on society

- · Contribute to communities
- Share and assess the principle of respect human rights

- · Preserve water resources
- Work for biodiversity

- Enhance information security
- Improve product quality

high

- Promote labor safety and health
- Contribute through eco-friendly products
- Contribute to smart societies
- Manage chemicals
- Support employees' activities
- Promote CSR-based procurement

- · Respond to climate change
- Innovation through businesses
- Contribute to medicine, medical care and health
- · Improve resilience
- · Create a comfortable workplace

- Work toward saving resources
- · Help improve QOL
- Corporate governance
- Risk management
- Compliance
- Smart operations
- Economic performance

high

Impact on the company

Fairly high



Contribution to SDGs

Provide new value to realize a prosperous and sustainable society

- Innovation through business
- · Contribute to medicine, medical care and health
- · Contribute through eco-friendly products
- Contribute to smart society



Strengthen the business foundation

- ·Create a comfortable workplace
- ·Support employees' activities
- Promote CSR-based procurement
- ·Improve resilience



Promote responsible care activities

- ·Respond to climate change
- Manage chemicals
- Promote labor safety









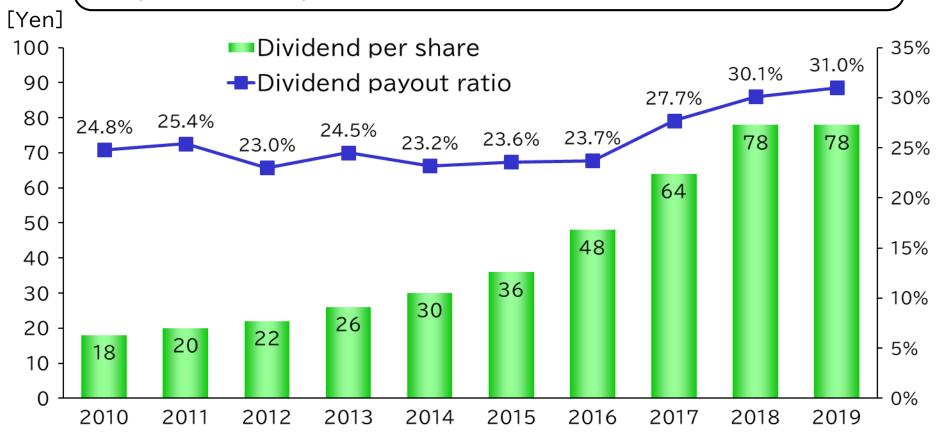






Shareholder Returns

- Continue to return profits in a stable manner
- Aim to maintain a dividend payout ratio of around 30% (consolidated)



Note: The dividends per share in FY2017 and before years are the amounts after consolidating two shares into one share.



Response to COVID-19 pandemic

We are taking various countermeasures against COVID-19 and are making efforts to secure the safety of all those involved and the employees of our group companies.

We are striving to keep production, sales and distribution operations working.

- <Countermeasures against the infection>
- Implement telecommuting and staggered commuting hours
- Utilize web conferencing
- Wear and supply masks
- Place transparent sheets on desks to prevent droplet spread
- Ban business trips to designated areas
- Donate masks and medicated hand soap to municipalities



- •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.

