

2019

Briefings on Financial Results

For the 1st half of the fiscal year ending Mar. 31, 2020

November 27, 2019

【TSE 4401】

Financial Results Overview

FY2019/1H

Apr. 1, 2019 – Sep. 30, 2019

President and Chief Operating Officer
Hidetaka Shirozume

1. FY2019/1H Consolidated Results
2. FY2019 Consolidated Forecasts and Business Strategy
3. For Reference
 - Overseas Sales

FY2019/1H Consolidated Results

FY2019/1H Consolidated Results

Unit: 100 million yen

Consolidated

| | Apr.-Sep. | | YoY change | |
|---|-----------|-----------|------------|----------|
| | FY2018/1H | FY2019/1H | Amounts | Rate (%) |
| Sales | 1,261 | 1,461 | 200 | 15.9 |
| Operating profit | 107 | 90 | △ 16 | △ 15.7 |
| Current profit | 112 | 82 | △ 29 | △ 26.4 |
| Profit attributable to owners of parent | 79 | 59 | △ 20 | △ 25.7 |
| Net profit per share (yen/share) | 77.3 yen | 57.5 yen | △ 19.8 yen | |
| Dividend (yen/share) | 21 yen | 24 yen | 3 yen | |

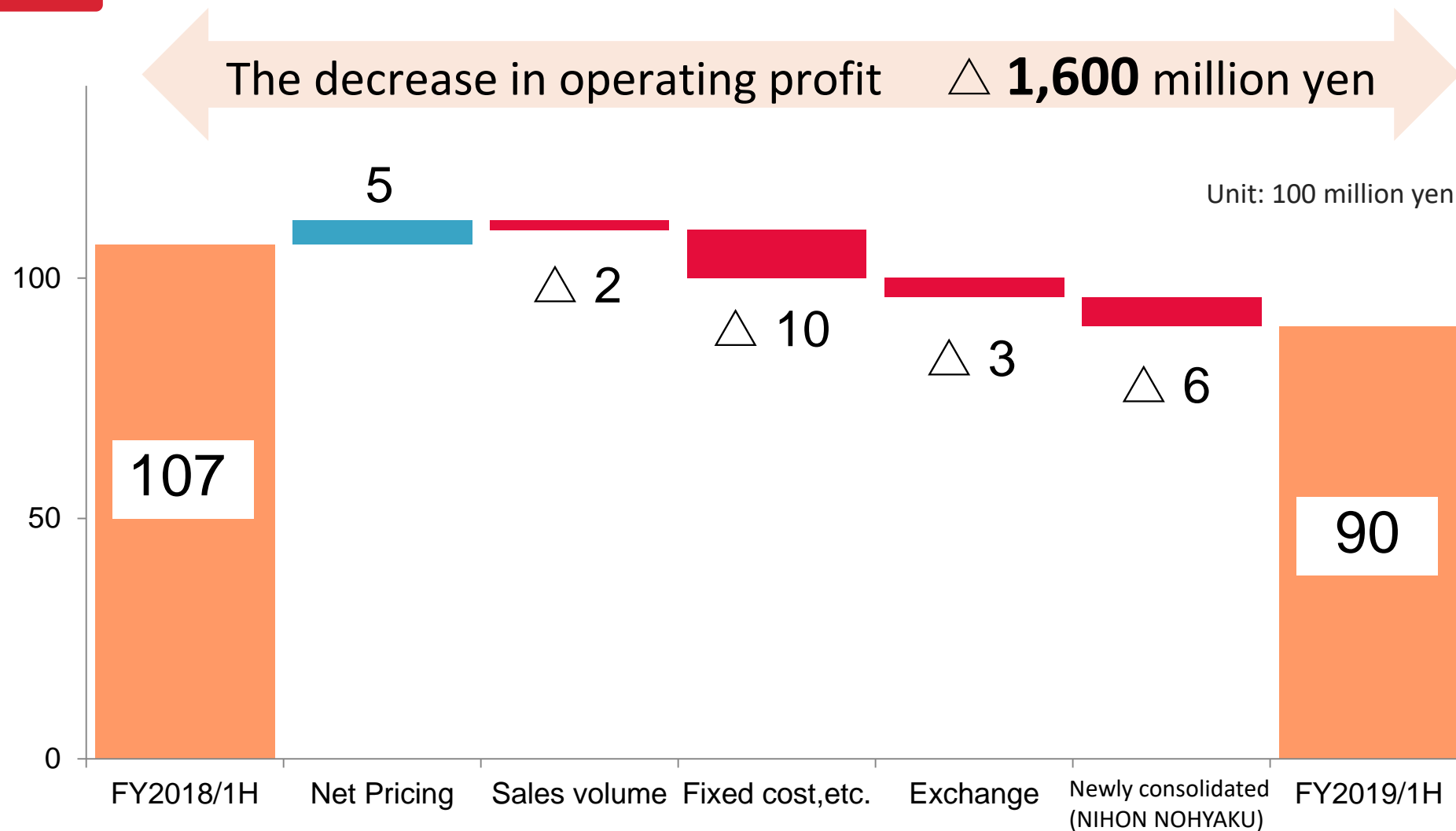
- Sales increased thanks to the contribution of NIHON NOHYAKU CO., LTD., which was made a subsidiary in the second half of the previous year.
- Operating profit, ordinary profit, and profit decreased due to struggles in the chemicals and life science segments, an increase in fixed expenses associated with active capital spending, and the impact of foreign exchange fluctuations.

Note1: Profit earned in the first half of FY2018 represents the value after a revision based on the accounting process (finalization of provisional values) to consolidate subsidiaries such as NIHON NOHYAKU.

Note2: Figures are expressed in units of 100 million yen and have been rounded off.

Analysis of Operating Profit

Consolidated



Note : Figures are expressed in units of 100 million yen and have been rounded off.

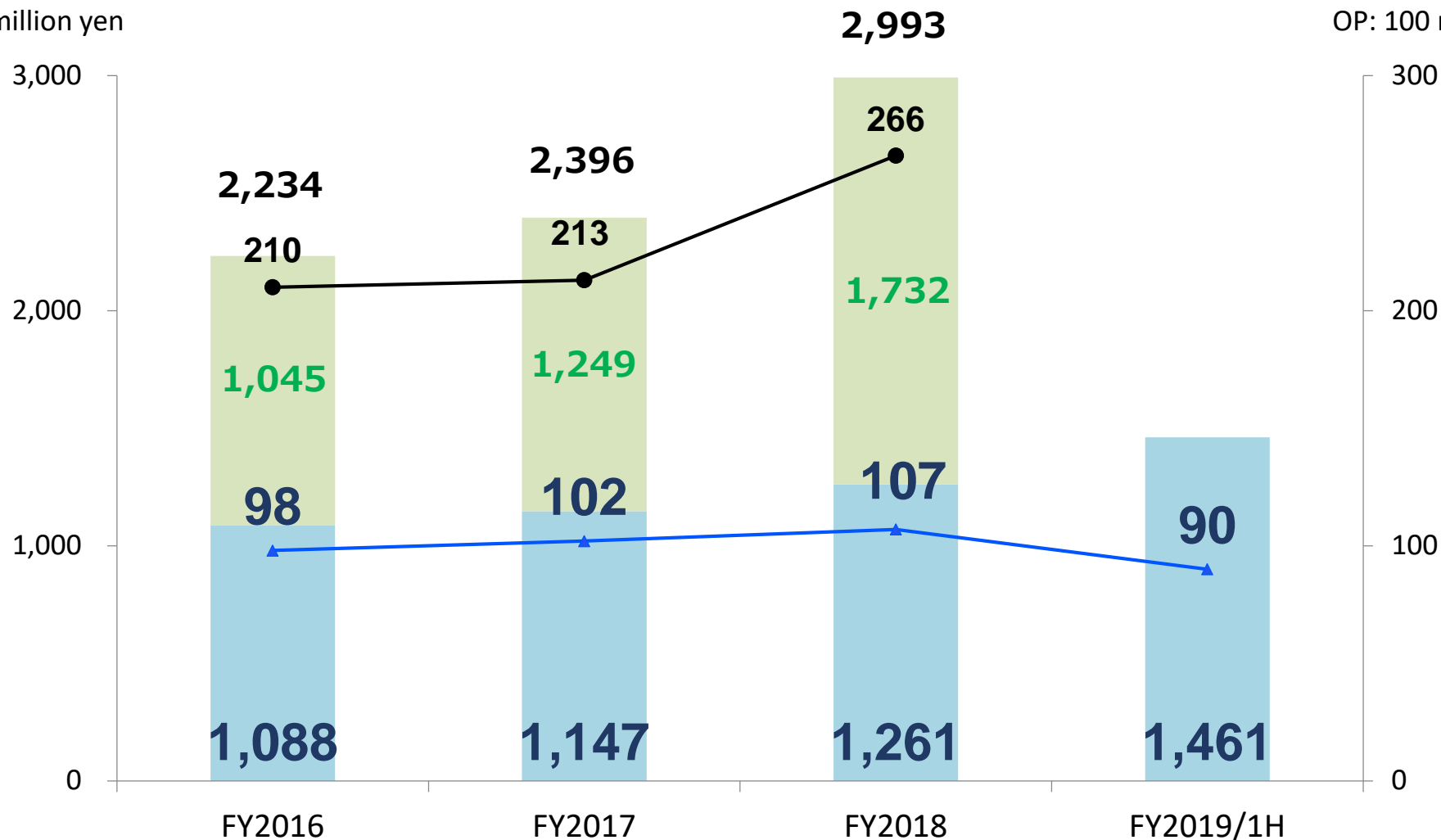
Trends in Consolidated Results

Consolidated

■ Sales in FY/1H ■ Sales in FY/2H
▲ Operating profit for FY/1H ● Operating profit for FY

Sales: 100 million yen

OP: 100 million yen



Note : Figures are expressed in units of 100 million yen and have been rounded off.

Consolidated Results (By segment)

| Consolidated | Apr.-Sep. | | YoY change | |
|-------------------------------------|-----------|-----------|------------|----------|
| | FY2018/1H | FY2019/1H | Amounts | Rate (%) |
| Unit: 100 million yen | | | | |
| Sales | 1,261 | 1,461 | 200 | 15.9 |
| Chemicals | 848 | 812 | △ 36 | △ 4.3 |
| <i>Polymer additives</i> | 452 | 406 | △ 46 | △ 10.3 |
| <i>Electronics and IT materials</i> | 126 | 129 | 3 | 3.1 |
| <i>Functional chemicals</i> | 270 | 276 | 6 | 2.4 |
| Food products | 352 | 345 | △ 6 | △ 1.8 |
| Life science | - | 261 | 261 | - |
| Other | 60 | 42 | △ 18 | △ 30.1 |
| Operating profit | 107 | 90 | △ 16 | △ 15.7 |
| Chemicals | 100 | 87 | △ 13 | △ 13.0 |
| <i>Polymer additives</i> | 33 | 32 | △ 1 | △ 5.5 |
| <i>Electronics and IT materials</i> | 34 | 30 | △ 3 | △ 10.5 |
| <i>Functional chemicals</i> | 32 | 24 | △ 7 | △ 23.4 |
| Food products | 3 | 4 | 0 | 18.2 |
| Life science | - | △ 6 | △ 6 | - |
| Other | 2 | 4 | 1 | 76.3 |

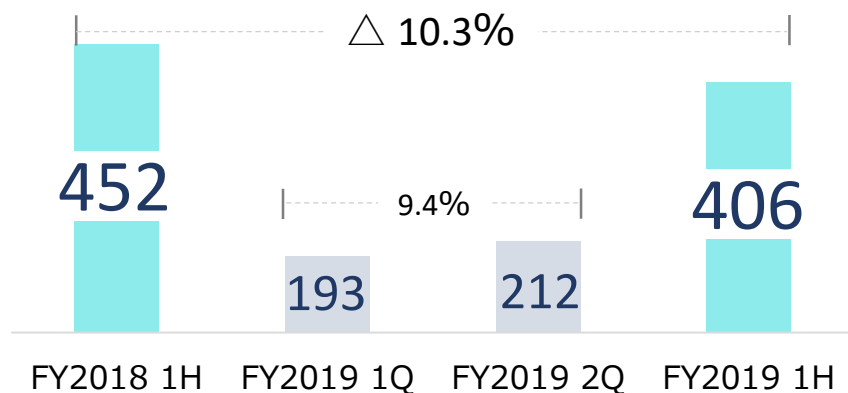
Note : Figures are expressed in units of 100 million yen and have been rounded off.

Consolidated

Polymer Additives : decrease in sales and profit

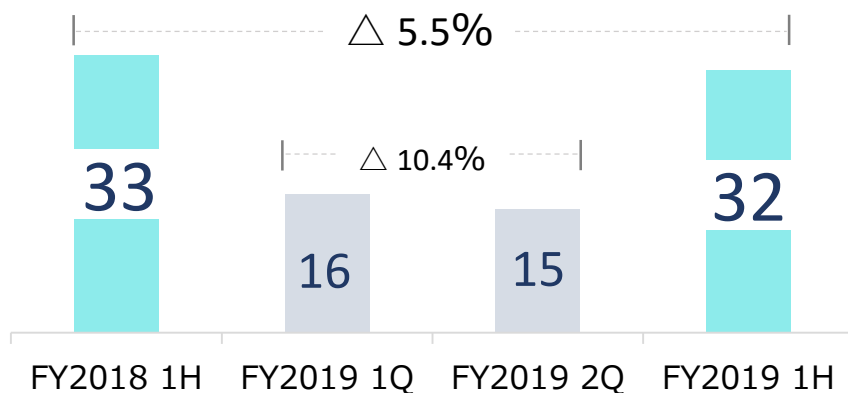
◆ Sales

Unit: 100 million yen



◆ Operating profit

Unit: 100 million yen



Note : Figures are expressed in units of 100 million yen and have been rounded off.

Main factor (YoY)

◆ Additives for polyolefin

weak • General-purpose antioxidant

◆ Plasticizers, Stabilizers

Impact of supply-demand balance and price competition in the US, China and Southeast Asia

weak • Product in general

◆ Flame retardants

strong • Product for Engineering plastics

Main factor (YoY)

Unit: 100 million yen

Net pricing
0.8

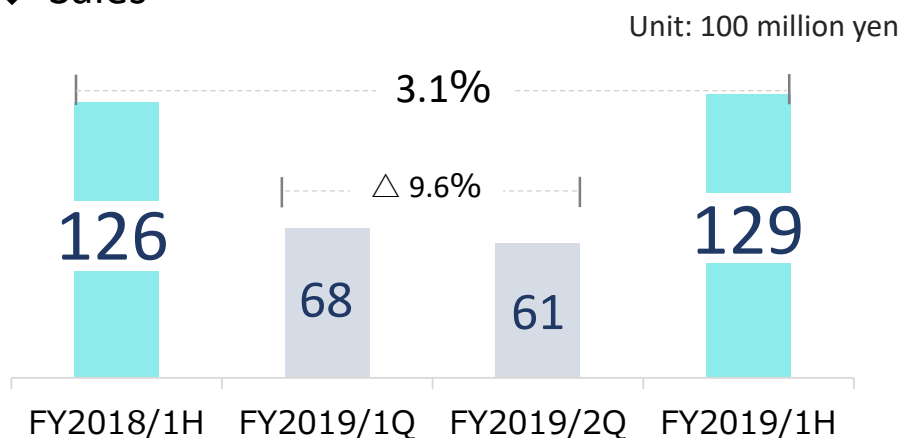
Sales volume
△ 0.8

Exchange
△ 1.4

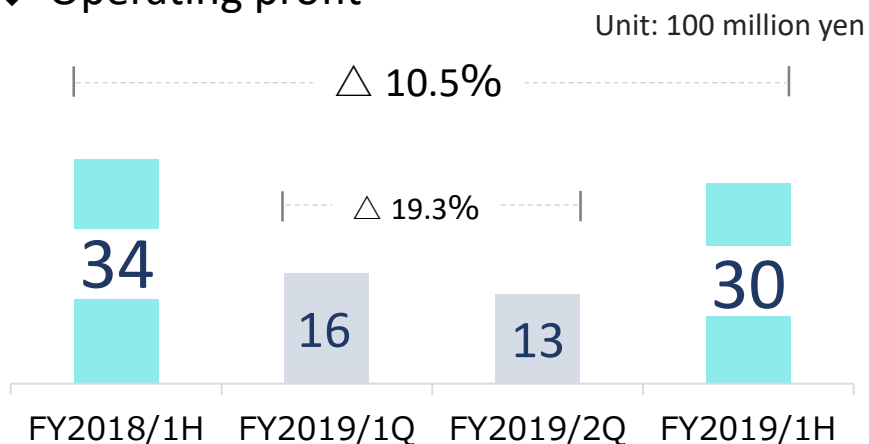
Consolidated

Electronics and IT materials/ increase in sales and decrease in profit

◆ Sales



◆ Operating profit



Note : Figures are expressed in units of 100 million yen and have been rounded off.

Main factor (YoY)

◆ Information media materials

strong • Photoacid generator used for semiconductor lithography

◆ Electronic Materials

grew • High-K materials for DRAM
• Etchants used for LCD panel

weak • Materials for NAND flash

Main factor (YoY)

Unit: 100 million yen

Sales volume
2.4

Net pricing
△ 3.8

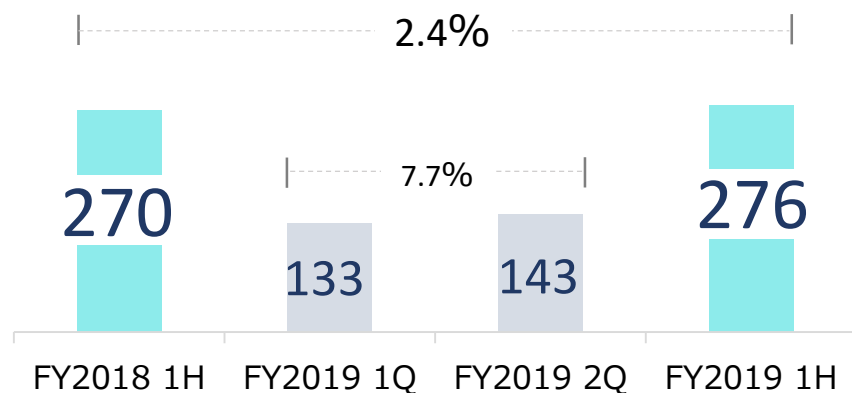
Exchange
△ 1.2

Consolidated

Functional chemicals / increase in sales and decrease in profit

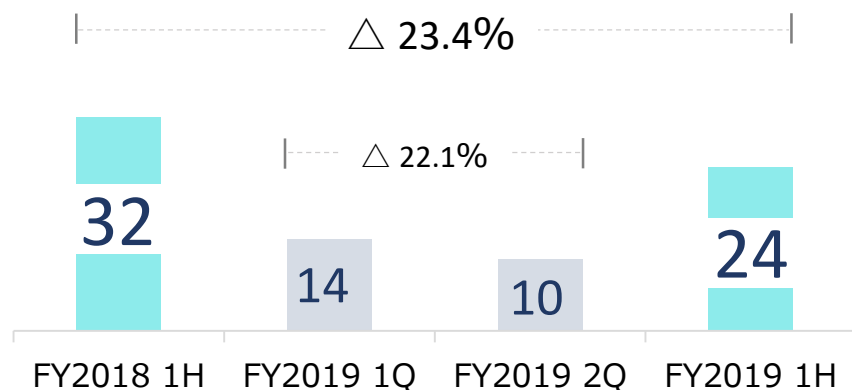
◆ Sales

Unit: 100 million yen



◆ Operating profit

Unit: 100 million yen



Note : Figures are expressed in units of 100 million yen and have been rounded off.

Main factor (YoY)

◆ Surfactants

strong

- Cosmetics ingredients used for moisturizing and gelling
- Reactive type emulsifiers used for paint and adhesives

◆ Functional polymers

strong

- Epoxy resin related products used for adhesion of electronic devices

◆ Industrial agents

weak

- Peroxygen chemicals used to bleach paper and pulp

Main factor (YoY)

Unit: 100 million yen

Net pricing

6.4

Sales volume

△ 4.7

Fixed cost, etc.

△ 8.7

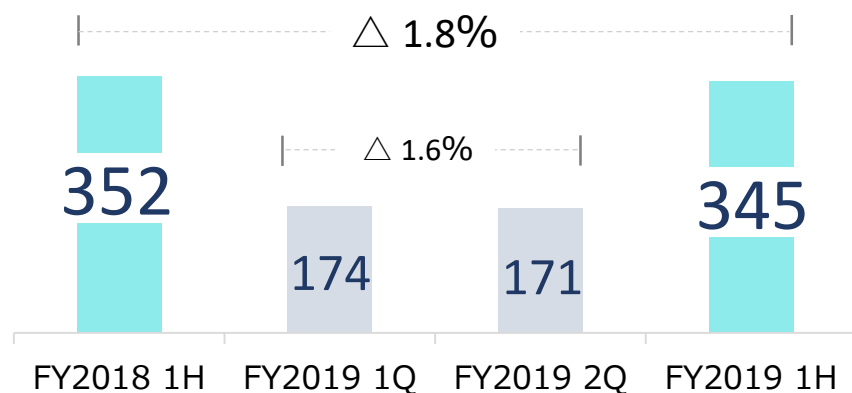
Segmental Information : Food Products

Consolidated

Food products / decrease in sales and increase in profit

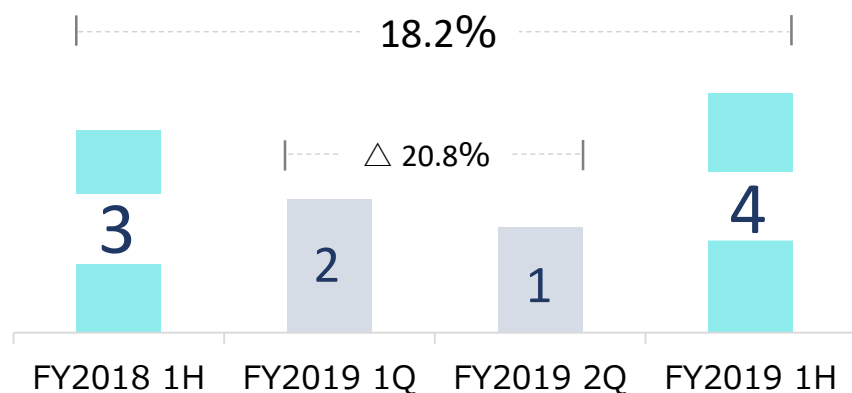
◆ Sales

Unit: 100 million yen



◆ Operating profit

Unit: 100 million yen



Note : Figures are expressed in units of 100 million yen and have been rounded off.

Main factor (YoY)

◆ Domestic

A decrease in demand due to efforts to reduce food waste and low sales of buns in the market

weak • Margarine, shortening

◆ Overseas (China, Southeast Asia)

Strengthen sales structure and product development in line with local demands

strong • Margarine, shortening

Main factor (YoY)

Unit: 100 million yen

Net pricing

2.3

Sales volume

0.9

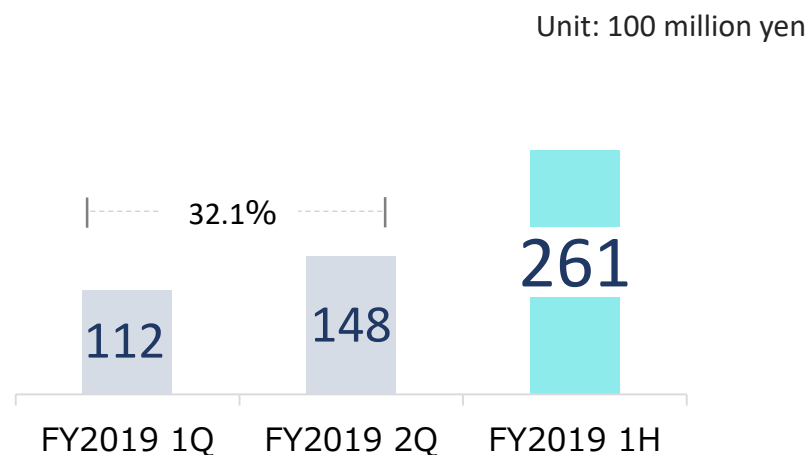
Fixed cost, etc.

△ 2.3

Consolidated

Life science / Incorporating NIHON NOHYAKU's achievements

◆ Sales



Main factor

◆ Agrochemicals

strong

- South America region due to recovery of Brazilian market

weak

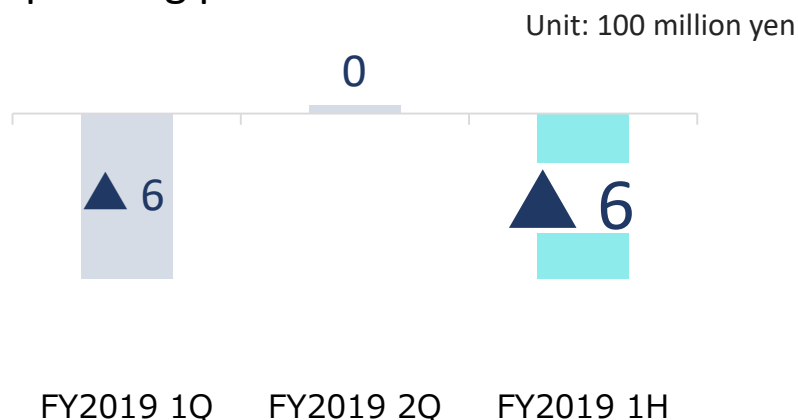
- Domestic and Asian regions affected by bad weather

◆ Pharmaceuticals, others

weak

- Field of Athlete's foot
- Topical antifungal agent *Luliconazole*

◆ Operating profit



Main factor

Incurred operating loss due to a low demand season for agrochemicals

Note : Figures are expressed in units of 100 million yen and have been rounded off.

FY2019 Prospective Forecasts and Business Strategy

FY2019 Consolidated Forecasts

Unit: 100 million yen

Consolidated

| | FY2019 | | | FY2018 Results | YoY change | |
|---|------------|--------------|------------------|----------------|------------|----------|
| | 1H Results | 2H Forecasts | Annual Forecasts | | Amounts | Rate (%) |
| Sales | 1,461 | 1,738 | 3,200 | 2,993 | 206 | 6.9 |
| Operating profit | 90 | 134 | 225 | 266 | △ 41 | △ 15.5 |
| Current profit | 82 | 142 | 225 | 266 | △ 41 | △ 15.4 |
| Profit attributable to owners of parent | 59 | 88 | 148 | 170 | △ 22 | △ 13.2 |

| | | | | | |
|----------------------------------|----------|----------|-----------|-----------|------------|
| Net profit per share (yen/share) | 57.5 yen | 86.1 yen | 143.7 yen | 165.8 yen | △ 22.2 yen |
| Dividend (yen/share) | 24 yen | 24 yen | 48 yen | 45 yen | 3 yen |

| | | FY2019 Assumption | | FY2018 Results |
|----------------|--------|-------------------|-----------|----------------|
| | | Beginning | FY2019 2H | |
| Exchange rates | ¥ / \$ | 110.00 | 106.00 | 110.90 |
| | ¥ / € | 128.00 | 121.00 | 128.40 |
| Naphtha | ¥ / KL | 47,000 | 45,000 | 49,400 |

Note : Figures are expressed in units of 100 million yen and have been rounded off.

FY2019 Consolidated Forecasts (By segment)

Consolidated

| Unit: 100 million yen | FY2019 | | | FY2018 Results | YoY change | |
|-------------------------------------|------------|--------------|------------------|----------------|------------|----------|
| | 1H Results | 2H Forecasts | Annual Forecasts | | Amounts | Rate (%) |
| Sales | 1,461 | 1,738 | 3,200 | 2,993 | 206 | 6.9 |
| Chemicals | 812 | 932 | 1,745 | 1,807 | △ 62 | △ 3.5 |
| <i>Polymer Additives</i> | 406 | 473 | 880 | 946 | △ 66 | △ 7.0 |
| <i>Electronics and IT materials</i> | 129 | 155 | 285 | 301 | △ 16 | △ 5.5 |
| <i>Functional chemicals</i> | 276 | 303 | 580 | 559 | 20 | 3.6 |
| Food products | 345 | 394 | 740 | 717 | 22 | 3.1 |
| Life Science | 261 | 368 | 630 | 344 | 285 | 83.0 |
| Other | 42 | 43 | 85 | 123 | △ 38 | △ 31.4 |
| Operating profit | 90 | 134 | 225 | 266 | △ 41 | △ 15.5 |
| Chemicals | 87 | 95 | 183 | 215 | △ 32 | △ 15.3 |
| <i>Polymer Additives</i> | 32 | 34 | 67 | 69 | △ 2 | △ 3.0 |
| <i>Electronics and IT materials</i> | 30 | 33 | 64 | 82 | △ 18 | △ 22.1 |
| <i>Functional chemicals</i> | 24 | 27 | 52 | 64 | △ 12 | △ 19.7 |
| Food products | 4 | 13 | 18 | 12 | 5 | 43.1 |
| Life Science | △ 6 | 25 | 19 | 33 | △ 14 | △ 42.8 |
| Other | 4 | 0 | 5 | 4 | 0 | 8.5 |

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Economics : General slowdown

- US-China trade friction
- Brexit
- Global tightening of environmental regulations
- Impact of consumption tax hike in Japan

Automotive

- ✓ Auto sales in the Chinese, US, and European markets slowed down.
- ✓ Activities to promote next-generation cars increased.

- Connected
- Autonomous
- Shared & Services
- Electric & Weight saving

IT • Semiconductor

- ✓ Semiconductor market is bottoming out. Full-fledged recovery may be in or after FY2020.
- ✓ Trend of sophistication of electronics continues due to diffusion of 5G communications.

- Large memory
- Large and high-definition screens
- Extension of battery life

Food

- ✓ New demand is appearing for contribution to reduction of food waste and labor shortages.

- Extension of best-before dates
- Distribution of frozen and chilled food products

Implement product development and investment in view of market changes

**Accelerate business expansion
in line with economic and market recovery**

Challenges and demands in automotives



- Raising fuel efficiency to meet tighter environmental regulations
- Reducing weight of electric vehicles

Material manufacturer

One of the measures

Use of resin materials (compound of metals and resin or resin alone)

Nucleating Agent for polypropylene *ADK STAB NA-27*

Added to PP resin



Makes materials stronger and thinner

Contribute to an increase in fuel efficiency by reducing car body weight while maintaining its strength

Focus on further sales expansion in the global market



▲ Major automobile materials for which PP is used



Challenges and demands for the spread of AI, IoT and 5G

- Development of very large memory through miniaturization and multilayers
- Realization of real-time communications through high-speed data processing

■ Semiconductor technology roadmap

| | 2017 | 2019 | 2021 | 2024 | 2027 | 2030 | 2033 |
|---------------|------|------|------|------|------|------|------|
| DRAM (nm) | 18 | 17.5 | 17 | 14 | 11 | 8.4 | 7.7 |
| NAND (layers) | 64 | 96 | 128 | 192 | 384 | 512 | 512 |
| Logic IC (nm) | 18 | 14 | 12 | 10.5 | 7.0 | 7.0 | 7.0 |

▲Source : Prepared by ADEKA Corp. based on the material of IEEE (Institute of Electrical and Electronics Engineers)
 “2018_International Roadmap for Devices and Systems”

| Property | Our high dielectric material <i>High-k materials</i> | Strategy |
|--|--|--|
| <ul style="list-style-type: none"> • Makes thin and even DRAM capacitors • Contributes to development of very large memory, device miniaturization and cost saving | | <ul style="list-style-type: none"> • Mass production of new high-k materials corresponding to the most advanced miniaturization • Implement capital investment in Korea and at Kashima Plant • Expand R&D center in Korea |

Challenges and demands in shipping industry

- Tightened SOx control - Reduce the impact of air pollution -
 ⇒ The limit of sulfur contained in ship fuel oil will be reduced in Jan. 2020



| | | |
|--------------------|----------------------------|---|
| Shipping companies | One of the measures | |
| | Mainstream | Change fuel oil from high sulfur to low sulfur |
| | challenge | There is a concern over the generation of fuel sludge that causes ship engine problems when changing fuel or using low-sulfur fuel oil. |

Sludge dispersant ADEKA ECOROYAL SD-20

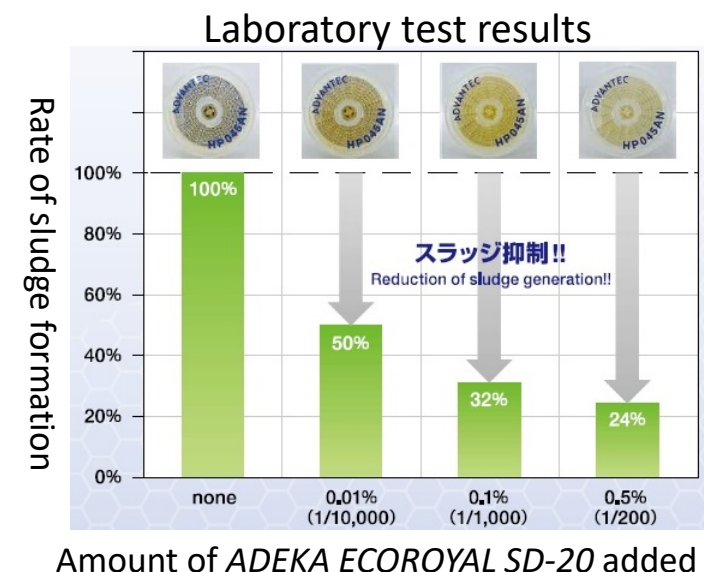
Prevents solidification of sludge by wrapping sludge like a surfactant

Added to fuel oil



Reduces sludge formation

Helps achieves safe operation of ships and compliance with environmental regulations



Challenges and demands in Western confectionery



- Labor shortages
(increased production efficiency and manpower saving)
- Reduction of food waste
- Overseas business development (export)
- Expansion of online sales

Western
confectionery
manufacturers

One of measures

Distribution of frozen and chilled food products

challenge

Cream whose flavor and mouthfeel do not change after freezing and thawing

New products for FY2019

Whipping cream for frozen and chilled desserts *Blend whip FC*

Water-retaining
ingredient

×

Fine ice crystals

Contribute to the good taste

***Keep a fresh and smooth mouthfeel and fresh milk flavor
even after freezing and thawing***



▲ Examples of use of *Blend Whip FC*

Challenges and demands in automobiles, electric power industry

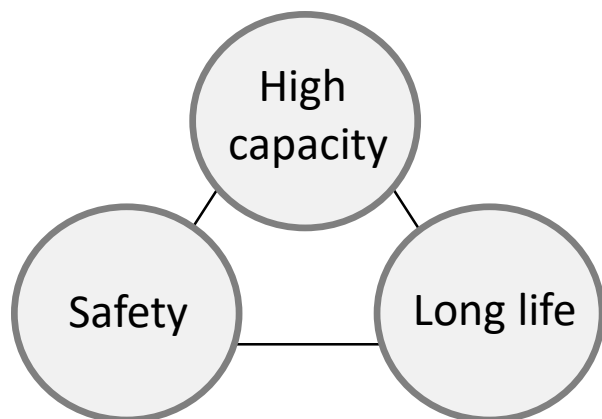


- Renewable energy
- Safety
- Resource exhaustion
- Rate of power self-sufficiency (Japan)

| | | |
|----------------|-----------|--|
| Automotive | challenge | Increase in capacity of electric vehicle batteries and high safety |
| Electric power | challenge | Efficient use of natural energies with large output fluctuations |

Materials for next-generation rechargeable batteries

Rare-metal-free electrode active material *SPAN* / Conductive agent *graphene*



- ✓ Rare-metal-free
- ✓ Suppression of an increase in cell temperature was confirmed in safety tests (nailing tests)
- ✓ Good characteristics of charge and discharge cycle help achieve long-term, stable battery performance



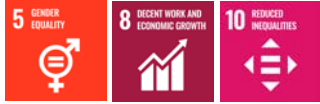




Pilot plant completed at Soma Plant and started providing samples for EV, stationary storage batteries



Efforts to Promote CSR Activities

Identifying of CSR priority issues that ADEKA should prioritize



| | Priority Domain | Priority Issue |
|--|--|--|
| E | Environment | Supply of eco-friendly products  |
| | | Conserve global environment  |
| S | Human rights, human resources | Respect human rights  |
| | | Expand the opportunities for utilizing human resources  |
| | Better living conditions communication | Create value that meets society's expectations  |
| Conduct dialogue with stakeholders  | | |
| G | Governance | Enhance group governance and risk management  |

Establishing KPIs for priority CSR priority issues

The mid-term management plan

Progress of "BEYOND 300"

| | FY2018 1st year of <i>BEYOND 300</i> (Performance) | FY2019 2nd year of <i>BEYOND 300</i> (Forecast) | FY2020 Final-year of <i>BEYOND 300</i> |
|-------------------------|--|---|---|
| Consolidated sales | 299.3 billion yen | 320.0 billion yen | Over 300 billion yen - Via organic growth - |
| Organic growth * | 255.0 billion yen | 257.0 billion yen | |
| Operating income margin | 8.9% | 7.0% | 10% |
| ROE | 8.5% | 7.2% | 10% |
| Investment and finance | 36.2 billion yen/year | — | 100 billion yen/3 years |
| Capital investment | 17.4 billion yen/year | 16.0 billion yen/year | 50 billion yen/3 years |
| M&A funds | 18.8 billion yen execution | — | 50 billion yen/3 years |
| Dividend | Dividend payout ratio 27.1% | Dividend payout ratio 33.4% | Dividend payout ratio 30% (Target for the final year of the plan after incremental increases) |

* Organic growth : Aims to reach sales exceeding 300 billion yen with business growth from polymer additives, chemicals and food products. - Excluding contributions from M&A -

Investment in Strategies for Further Business Expansion

Polymer additives

- Mie plant Enhanced facilities for additives for polyolefins (Jul. 2019)

Electronics and IT materials

- Kashima plant / ADEKA KOREA Completed new facilities for high-k materials (May. 2019)

Functional chemicals

- Chiba plant Completed new facilities for water-borne polyurethane (Aug. 2019)
- Soma plant Enhanced facilities for lubricants (Oct. 2019)
- ADEKA (CHINA) Opened an innovation center for water-borne resins etc. (Aug. 2019)

Food products

- ADEKA FOODS (CHANGSHU) Enhanced facilities for processed fats and oils (Aug. 2019),
Opened a branch in Guangzhou, China, as a sales office (Jun. 2019)

Corporate research "Environment and energy"

- Soma plant Placed a pilot plant for SPAN and graphene (Apr. 2019)

Major investments in progress

Polymer additives / chemicals

- ADEKA FINE CHEMICAL (ZHEJIANG) New plant construction
(Scheduled to start operation in Jan. 2020)

Electronics and IT materials

- ADEKA KOREA Expansion R&D center
(Scheduled to be completed in spr. 2020)

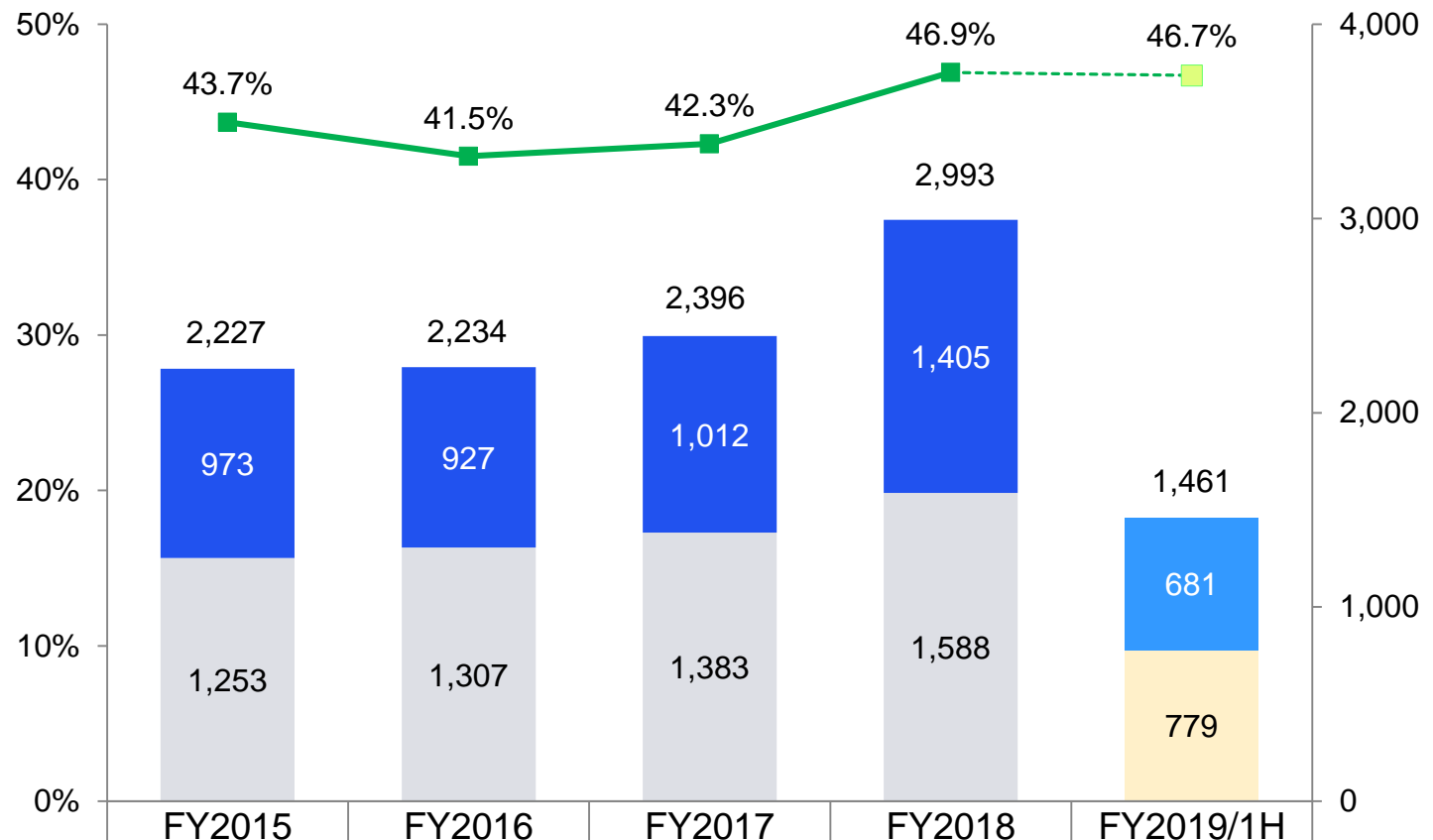


▲ Soma Plant: Facilities for lubricants

For Reference

Overseas Sales - For reference -

Unit: 100 million yen



| | | | | | |
|----------------------|-------|-------|-------|-------|-------|
| Overseas sales | 973 | 927 | 1,012 | 1,405 | 681 |
| Domestic sales | 1,253 | 1,307 | 1,383 | 1,588 | 779 |
| Overseas sales ratio | 43.7% | 41.5% | 42.3% | 46.9% | 46.7% |
| sales | 2,227 | 2,234 | 2,396 | 2,993 | 1,461 |

Note : Figures are expressed in units of 100 million yen and have been rounded off.

FY2019/1H

Supplemental Documents for Financial Results Overview

Director and Operating Officer **Youji Shiga**

- I .Supplementary Data for consolidated Closing of Accounts
- II .Management indexes, etc.
- III .For information purposes:
 - ◆ Overview of non-consolidated and consolidated closing accounts
 - ◆ Overview of ADEKA Group
 - ◆ Core products of each business segments

I . Supplementary Data for consolidated Closing of Accounts

1.Consolidated Balance Sheet

Unit: ¥ million

| | As of Mar. 31, 2019 | As of Sep. 30, 2019 | YoY change |
|--|---------------------|---------------------|------------|
| Assets | | | |
| Current assets ① | 233,087 | 210,903 | △ 22,184 |
| Fixed assets | 181,462 | 186,482 | 5,020 |
| Tangible fixed assets ② | 108,672 | 113,537 | 4,865 |
| Intangible fixed assets | 17,596 | 16,856 | △ 739 |
| Investment and other assets | 55,193 | 56,088 | 895 |
| Total assets | 414,549 | 397,386 | △ 17,163 |
| Liabilities | | | |
| Current liabilities ③ | 107,156 | 90,635 | △ 16,520 |
| Long-term liabilities ④ | 62,893 | 62,177 | △ 715 |
| Total liabilities | 170,049 | 152,813 | △ 17,236 |
| Net assets | | | |
| Shareholders' equity | 190,772 | 194,315 | 3,542 |
| Capital stock | 22,944 | 22,994 | 50 |
| Capital surplus | 20,023 | 20,084 | 61 |
| Retained earnings | 148,630 | 152,063 | 3,432 |
| Treasury stock | △ 825 | △ 827 | △ 1 |
| Accumulated other comprehensive income | 13,807 | 11,383 | △ 2,424 |
| Net unrealized gains on securities | 10,098 | 9,344 | △ 753 |
| Reserve for land revaluation | 4,253 | 4,253 | — |
| Translation adjustment | 1,867 | 67 | △ 1,800 |
| Adjustments for retirement Benefits | △ 2,411 | △ 2,282 | 129 |
| Minority interests | 39,919 | 38,873 | △ 1,045 |
| Total net assets | 244,500 | 244,572 | 72 |
| Total liabilities and net assets | 414,549 | 397,386 | △ 17,163 |

Unit: ¥ 100 million

POINT①

| | |
|-------------------------------|-------|
| Decrease in current assets | △ 221 |
| Decrease in trade receivables | △ 180 |

POINT②

| | |
|-------------------------------|-------|
| Decrease current liabilities | △ 165 |
| Decrease in in trade payables | △ 157 |

Note : Figures are expressed in units of million yen and have been rounded off.

I . Supplementary Data for the Consolidated Closing of Accounts

2. Cash Flow Statement (Summary)

Consolidated

Unit: ¥ million

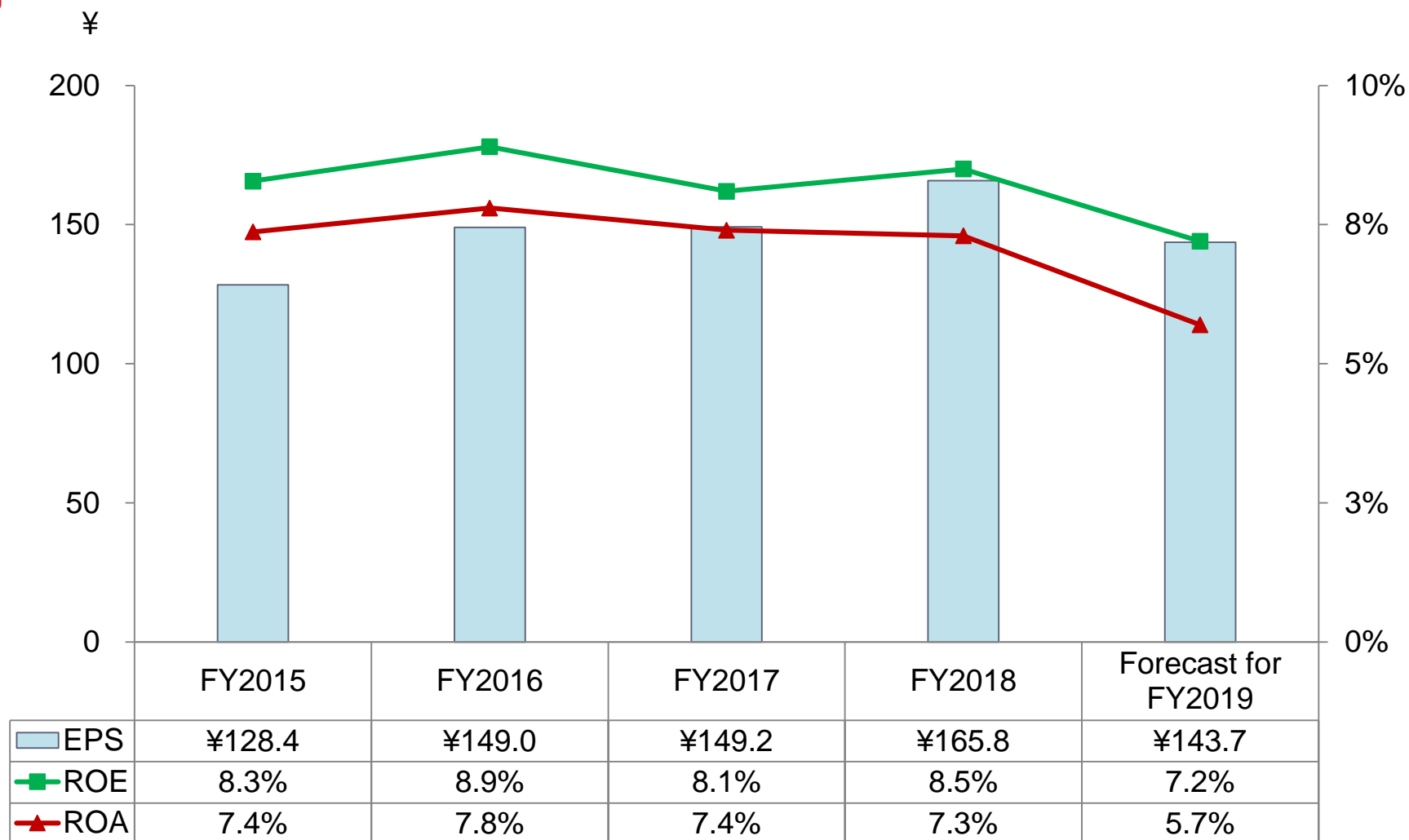
| | FY2018/1H (Apr. - Sep.) | FY2019/1H (Apr. - Sep.) |
|--|----------------------------|----------------------------|
| Cash flows from operating activities | 9,763 | 16,056 |
| Cash flows from investing activities | △ 8,280 | △ 7,891 |
| Cash flows from financing activities | 18,244 | △ 7,171 |
| Effect of exchange-rate changes on cash and cash equivalents | △ 787 | △ 589 |
| Net increase/decrease in cash and cash equivalents (increase) | 18,939 | 404 |
| Cash and cash equivalents at the Beginning of period | 48,902 | 56,504 |
| Cash and cash equivalents from newly consolidated subsidiaries | — | — |
| Cash and cash equivalents at the end of period | 67,841 | 56,909 |

Note : Figures are expressed in units of 100 million yen and have been rounded off.

II. Management Indexes, etc.

1. Profitability

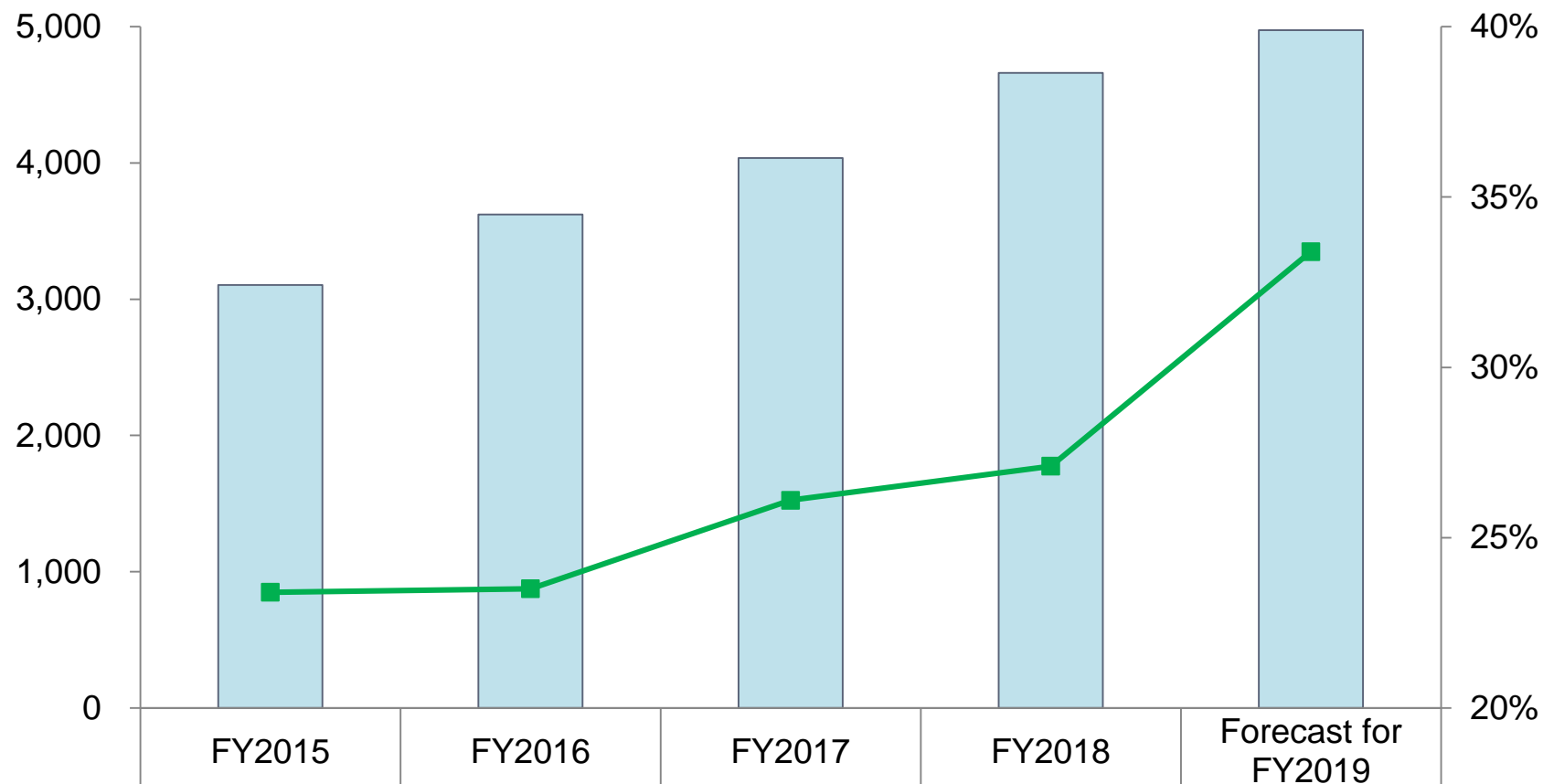
Consolidated



2. Dividend payout ratio and dividends

Consolidated

¥ million



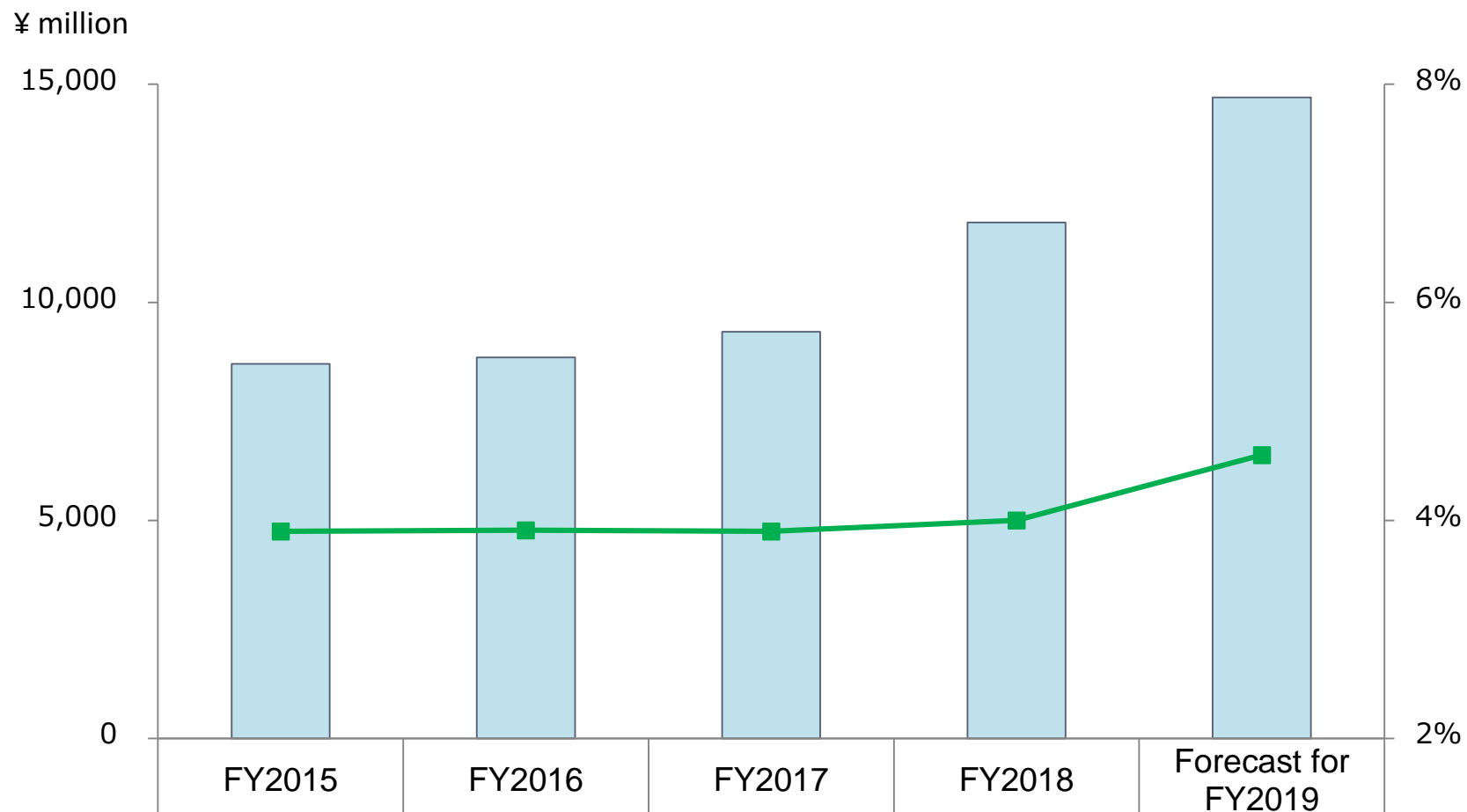
| | | | | | |
|-------------------------|-------|-------|-------|-------|-------|
| Dividend | ¥30 | ¥35 | ¥39 | ¥45 | ¥48 |
| Total Dividend | 3,104 | 3,621 | 4,037 | 4,661 | 4,975 |
| Rate of dividend payout | 23.4% | 23.5% | 26.1% | 27.1% | 33.4% |

Note 1: Dividends in FY2016 include a commemorative dividend of five yen in commemoration of the 100th anniversary.

Note 2: Figures are expressed in units of million yen and have been rounded off.

3. Research and development costs

Consolidated



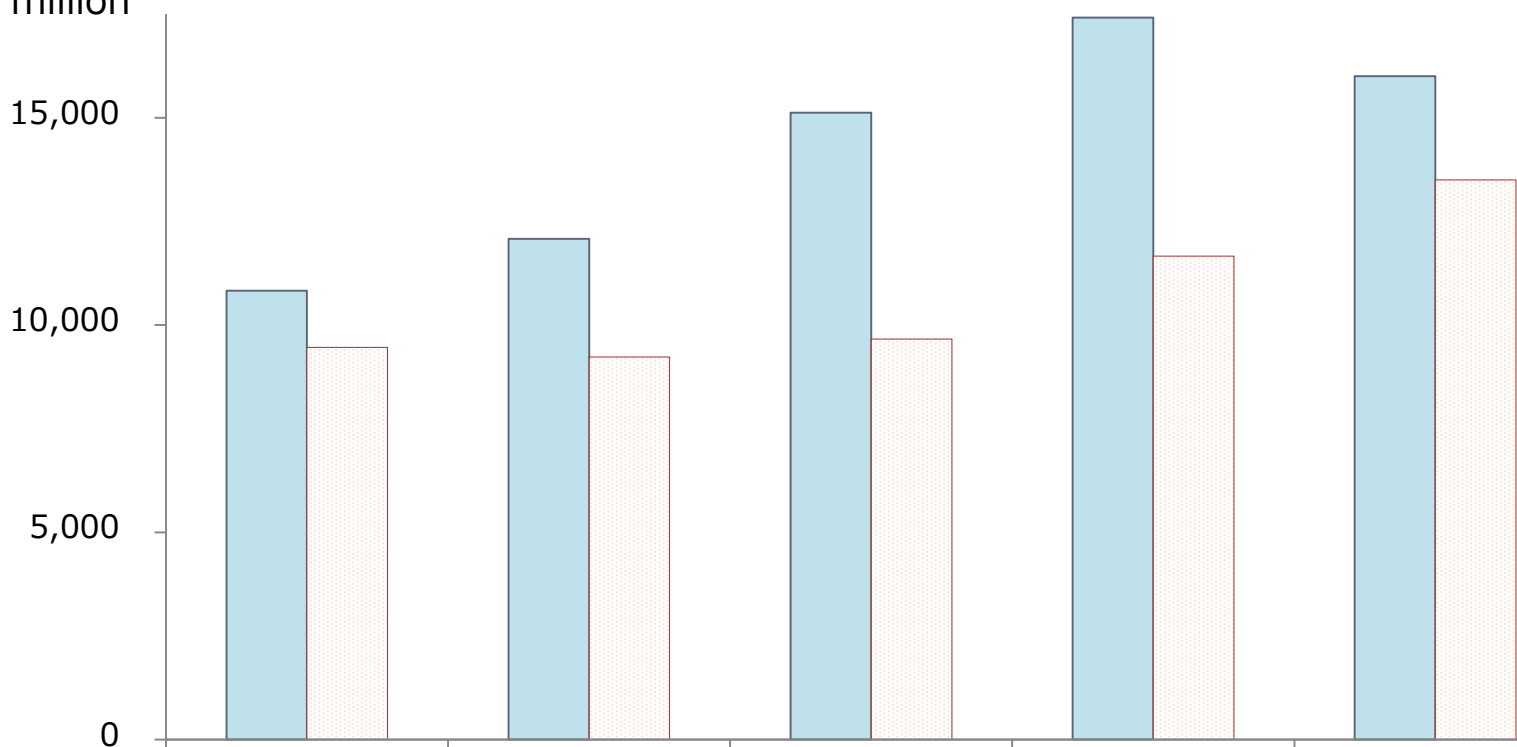
| | | | | | |
|------------------------------|-------|-------|-------|--------|--------|
| ■ R&D costs | 8,588 | 8,735 | 9,327 | 11,829 | 14,700 |
| ■ Rate of R&D costs to sales | 3.9% | 3.9% | 3.9% | 4.0% | 4.6% |

Note : R&D expense are expressed in units of million yen and have been rounded off.

4. Capital investment

Consolidated

¥ million

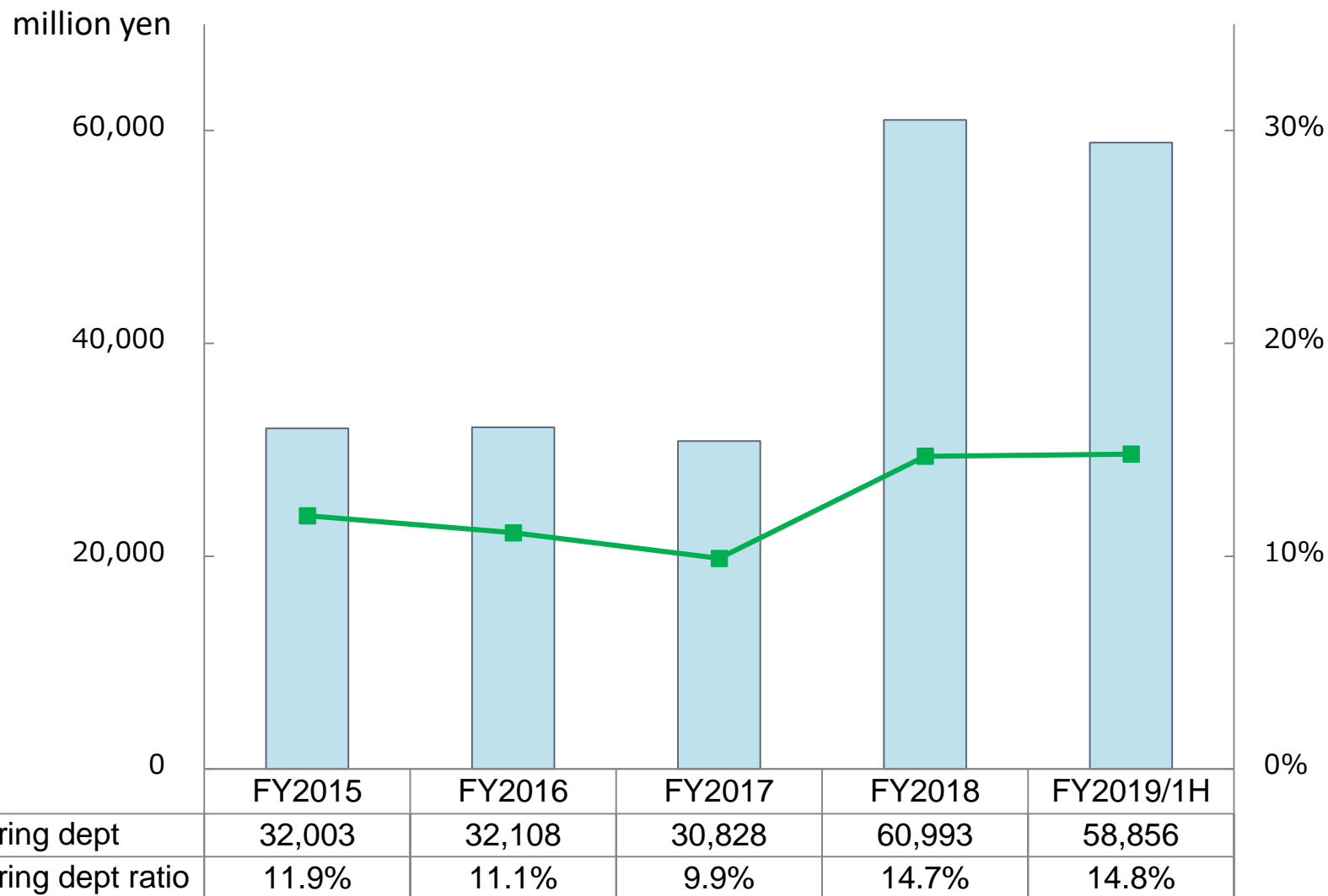


| | FY2015 | FY2016 | FY2017 | FY2018 | Forecast for FY2019 |
|----------------------|--------|--------|--------|--------|---------------------|
| ■ Capital investment | 10,829 | 12,077 | 15,122 | 17,419 | 16,000 |
| ▨ Depreciation costs | 9,459 | 9,230 | 9,666 | 11,659 | 13,500 |

Note : Capital investment and depreciation are expressed in units of million yen and have been rounded off.

5. Interest-bearing liabilities

Consolidated



Note : Liabilities with interest are expressed in units of million yen and have been rounded off.

III. For information purposes

1. Overview of non-consolidated and consolidated closing accounts

■ Non-consolidated

■ Consolidated

Unit: 100 million yen

Non-consolidated closing of accounts

| | FY2018/1H | FY2019/1H | YoY change | |
|----------------------|-----------|-----------|------------|---------|
| | | | Amount | Rate(%) |
| Sales | 666 | 643 | △ 22 | △ 3.4 |
| Operating profit | 55 | 43 | △ 12 | △ 22.3 |
| Current profit | 66 | 61 | △ 5 | △ 7.8 |
| NET profit | 50 | 50 | △ 0 | △ 1.3 |
| NET profit per share | 112.3 | 120.6 | | |

NIHON NOHYAKU (10)

| | FY2018/1H | FY2019/1H | YoY change | |
|------------------|-----------|-----------|------------|---------|
| | | | Amount | Rate(%) |
| Sales | — | 261 | 261 | — |
| Operating profit | — | △ 2 | △ 2 | — |

Domestic companies (11)

| | FY2018/1H | FY2019/1H | YoY change | |
|------------------|-----------|-----------|------------|---------|
| | | | Amount | Rate(%) |
| Sales | 470 | 472 | 2 | 0.4 |
| Operating profit | 10 | 10 | △ 0 | △ 5.7 |

Overseas companies (16)

| | FY2018/1H | FY2019/1H | YoY change | |
|------------------|-----------|-----------|------------|---------|
| | | | Amount | Rate(%) |
| Sales | 730 | 676 | △ 54 | △ 7.5 |
| Operating profit | 46 | 46 | 0 | 0.3 |

Consolidation adjustment (deleted)

| | FY2018/1H | FY2019/1H |
|------------------|-----------|-----------|
| Sales | △ 606 | △ 591 |
| Operating profit | △ 6 | △ 7 |

Note : Figures are expressed in units of 100 million yen and have been rounded off.

III. For information purposes

2. Consolidated Subsidiaries - 16 companies in Japan① -

| Segment | Consolidated subsidiary | Capital | Controlling Share : % | Line of business |
|---------------|-------------------------------|--------------|---|---|
| Chemicals | ADEKA CHEMICAL SUPPLY CORP. | ¥ 104million | 100.00 (Indirect ownership: 5.57) | Sales of chemical products, and the development, manufacturing and sales of metal processing oils, etc. |
| Chemicals | ADEKA CLEAN AID CORP. | ¥ 140million | 100.00 | Development and sales of kitchen detergents for commercial use, industrial detergents, etc. |
| Chemicals | OXIRANE CHEMICAL CORP. | ¥ 600million | 51.00 | Manufacturing and sales of epoxy plasticizers, etc. |
| Food products | ADEKA FOOD SALES CORP. | ¥ 42million | 100.00 | Sales of edible processed oils and fats for confectionary and breads, and sales of other foodstuffs, etc. |
| Food products | YONGO CO.,LTD. | ¥ 18million | 92.14 | Wholesaling of ingredients for confectionery and bakery business use. |
| Food products | ADEKA FINE FOODS CORP. | ¥ 50million | 100.00 | Manufacturing and sales of mayonnaise products, oil and fat processed food products and processed products using seafood. |
| Food products | UEHARA FOOD INDUSTRY CO.,LTD. | ¥ 70million | 100.00 | Manufacturing and sales of flour paste products, bean-jams and retort pouch foods. |
| Food products | CROWN CO.,LTD. | ¥ 10million | 100.00 | Wholesale business of food materials such as fatty oils, flour milling and flavors and processed foods. |

III. For information purposes

2. Consolidated Subsidiaries - 16 companies in Japan② -

| Segment | Consolidated subsidiary | Capital | Controlling share : % | Line of business |
|--------------|--|----------------|--|--|
| Life science | NIHON NOHYAKU CO.,LTD. | ¥14,939million | 51.00 | Agrochemicals, Wood Preservative, Agricultural Materials, Pharmaceuticals & Veterinary Products |
| Life science | NICHINO RYOKKA CO.,LTD. | ¥160million | 100.00 (Indirect ownership: 100.00) | Sales of Chemical/Pesticides for Professional Turf, Planning for GOLF Courses and Amenity Areas |
| Life science | NICHINO SERVICE CO.,LTD. | ¥3,400million | 100.00 (Indirect ownership: 100.00) | Production and Logistic Services of Agrochemical, Cultivation & Management of Experimental Field/Laboratories |
| Life science | NIHON ECOTECH CO.,LTD. | ¥20million | 100.00 (Indirect ownership: 100.00) | Agrochemical Residue Analysis, Chemical Substance Safety Testing, and Related Activities |
| Life science | AGRIMART CORP. | ¥50million | 100.00 (Indirect ownership: 100.00) | Sales of Termite Control Agents/Devices, Pest Control Agents/Devices |
| Others | ADEKA LOGISTICS CORP. | ¥ 50million | 100.00 | General and principal contracting of logistics for the company, warehousing, leasing of vehicles, etc. |
| Others | ADEKA ENGINEERING & CONSTRUCTION CORP. | ¥ 130million | 100.00 | Design, construction, and construction supervision of facility plants, and facilities maintenance. |
| Others | ADEKA LIFE-CREATE CORP. | ¥ 65million | 100.00 (Indirect ownership: 20.00) | Trading, brokerage and management of real estate, property and life insurance agency, sales in the OA equipment area, and management of buildings and company-owned apartments |

III. For information purposes

3. Consolidated Subsidiaries - 21 overseas companies^① -

| Country | Segment | Consolidated subsidiary | Capital | Controlling Share : % | Line of business |
|---------|---------------|--|------------------|--|---|
| U.S. | Chemicals | ADEKA USA CORP. | US\$1 million | 100.00 | Sales of chemical products. |
| U.S. | Chemicals | AMFINE CHEMICAL CORP. | US\$16 million | 60.00 | Manufacturing and sales of polymer additives. |
| U.S. | Chemicals | AM STABILIZERS CORP. | US\$8.5 million | 100.00 (Indirect ownership: 100.00) | Manufacturing and sales of polymer additives. |
| U.S. | Life science | NICHINO AMERICA, INC. | US\$0.7million | 100.00 (Indirect ownership: 100.00) | Sales and R&D of agrochemicals in America |
| BLAZIL | Life science | SIPCAM NICHINO BRASIL S.A. | R\$223million | 50.00 (Indirect ownership: 50.00) | Production and sales of agrochemicals in Blazil |
| GERMANY | Chemicals | ADEKA Europe GmbH | €0.5 million | 100.00 | Sales of chemical products. |
| FRANCE | Chemicals | ADEKA POLYMER ADDITIVES EUROPE SAS | €3million | 100.00 (Indirect ownership: 100.00) | Manufacturing and sales of polymer additives. |
| CHINA | Chemicals | ADEKA (CHINA) CO., LTD. | US\$31 million | 100.00 | Sales of chemical products. |
| CHINA | Chemicals | ADEKA FINE CHEMICAL (SHANGHAI) CO., LTD. | US\$20.50million | 100.00 | Manufacturing and sales of polymer additives, functional resins, electronic materials and similar products. |
| CHINA | Chemicals | ADEKA FINE CHEMICAL (CHANGSHU) CO., LTD. | US\$21.54million | 50.00 | Manufacturing and sales of polymer additives. |
| CHINA | Food products | ADEKA FOODS (CHANGSHU) CO., LTD. | US\$23 million | 70.00 | Manufacturing and sales of processed oils and fats, processed foods. |

III. For information purposes

3. Consolidated Subsidiaries - 21 overseas companies^② -

| Country | Segment | Consolidated subsidiary | Capital | Controlling Share : % | Line of business |
|-------------|---------------|---|------------------|--|---|
| TAIWAN | Chemicals | CHANG CHIANG CHEMICAL CO., LTD. | NT\$30 million | 50.50 | Sales of polymer additives and plasticizers |
| TAIWAN | Chemicals | ADEKA FINE CHEMICAL TAIWAN CORP. | NT\$200 million | 100.00 | Manufacturing and sale of chemical products |
| TAIWAN | Life science | TAIWAN NIHON NOHYAKU CO.,LTD | NT\$40million | 26.01 (Indirect ownership: 26.01) | Sales and R&D of agrochemicals in Taiwan |
| INDIA | Life science | NICHINO INDIA PVT. LTD. | ₹3.27million | 99.94 (Indirect ownership: 99.94) | Production, sales and R&D of agrochemicals in India |
| INDIA | Life science | NICHINO CHEMICAL INDIA PVT. LTD. | ₹10.5million | 100.00 (Indirect ownership: 100.00) | Production and sales of agrochemicals in India |
| SOUTH KOREA | Chemicals | ADEKA KOREA CORP. | ₩15 billion | 100.00 | Manufacturing and sale of chemical products. |
| THAILAND | Chemicals | ADEKA FINE CHEMICAL (THAILAND) CO.,LTD. | ฿ 350 million | 81.00 | Manufacturing and sale of chemical products. |
| SINGAPORE | Chemicals | ADEKA (ASIA) PTE.LTD. | US\$ 0.8 million | 100.00 | Sales of chemical products. |
| SINGAPORE | Food products | ADEKA (SINGAPORE) PTE.LTD. | US\$ 8 million | 90.00 | Manufacturing and sales of processed oils and fats, frozen piecrusts and related food products. |
| Malaysia | Food products | ADEKA FOODS (ASIA) SDN.BHD. | RM90million | 60.00 | Manufacturing and sales of processed oils and fats. |

III. For information purposes

4. Equity method - applicable companies -

| Two equity method-applicable companies | Capital | Controlling Share : % | Line of business |
|---|----------------|---|---|
| CO-OP CLEAN CO., LTD. | ¥80 million | 46.88 | Development and sales of soap, detergents and similar products. |
| SHOWA KOSAN CO.,LTD. | ¥550 million | 20.81 | Sale of synthetic resins, chemical products, industrial materials, electronic materials and environmental concerns. |
| AGRICULTURAL CHEMICALS (MALAYSIA) SDN. BHD. | MYR2.05million | 24.18 (Indirect ownership: 24.18) | Production and sales of agrochemicals in Malaysia |
| SIPCAM EUROPE S.P.A. | €36.94million | 20.00 (Indirect ownership: 20.00) | Production and sales of agrochemicals in Europe |

5. Core products of each business segments

| Business category | | Core products | |
|-------------------|---------------|---|--|
| Reporting segment | Chemicals | Polymer Additives | Additives for polyolefins, PVC plasticizers/stabilizers, Flame retardants, and others. |
| | | Electronics and IT materials | High-purity materials for semiconductors, AFES System and etching agents, Photo(Light)/heat curing materials, photoinitiators, Imaging materials, and others. |
| | | Functional Chemicals | Epoxy resins, Polyurethanes, Water-borne resins, Surfactants, Lubricant additives, Kitchen detergent, Cosmetic ingredients, Polypropylene glycol, Hydrogen peroxide and derivative products, Water-swelling sealing materials, and others. |
| | Food products | Margarines, Shortenings, Oil and fats for chocolate, Oils and fats for frying, Whipping cream, Enriched milk products, Fillings, Frozen pie crusts, Mayonnaise dressing, functional foods, and others. | |
| | Life science | Agrochemicals, Agricultural materials, Pharmaceuticals & Veterinary products, Wood preservative, and others. | |
| Other business | | Designing of equipment plants, Construction and construction management, Maintenance of equipment, Logistic services, Warehousing, Leasing of vehicles, Real estate and insurance business, and others. | |

Notice on Forecast Performance and Business Plans

The forecast performance and business plans specified in this document have been prepared based on information available as of the date of publication, as well as on various prerequisites; therefore, the actual results may differ from these forecasts or plans depending on various factors that may arise hereafter.