



Briefings on Financial Results

For the 1st half of the Fiscal 2017

Nov 28, 2017

ADEKA Corporation
(Securities code: 4401)



First Half of the Fiscal 2017 Second Quarter Financial Results Overview

[April 1, 2017 – September 30, 2017]

Representative Director and President Akio Kohri

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1. The 1st Half of the Fiscal 2017 Consolidated Performance

The 1st Half of the Fiscal 2017 Consolidated Performance

Consolidated
data

(Unit: 100 million yen)

| | 1 st half FY2016 | 1 st half FY2017 | Increase/ decrease | Increase/ decrease ratio (%) |
|--|-----------------------------|-----------------------------|-----------------------|---------------------------------|
| Sales | 1,088 | 1,147 | 58 | 5.3 |
| Operating profit | 98 | 102 | 3 | 3.3 |
| Current profit | 88 | 105 | 16 | 18.9 |
| Profit attributable to owners of parent | 60 | 72 | 11 | 19.3 |
| Net profit per share (yen/share) | ¥ 59.0 | ¥ 70.6 | ¥ 11.6 | |
| Dividend (yen/share) | ¥ 15 | ¥ 17 | ¥ 2 | |

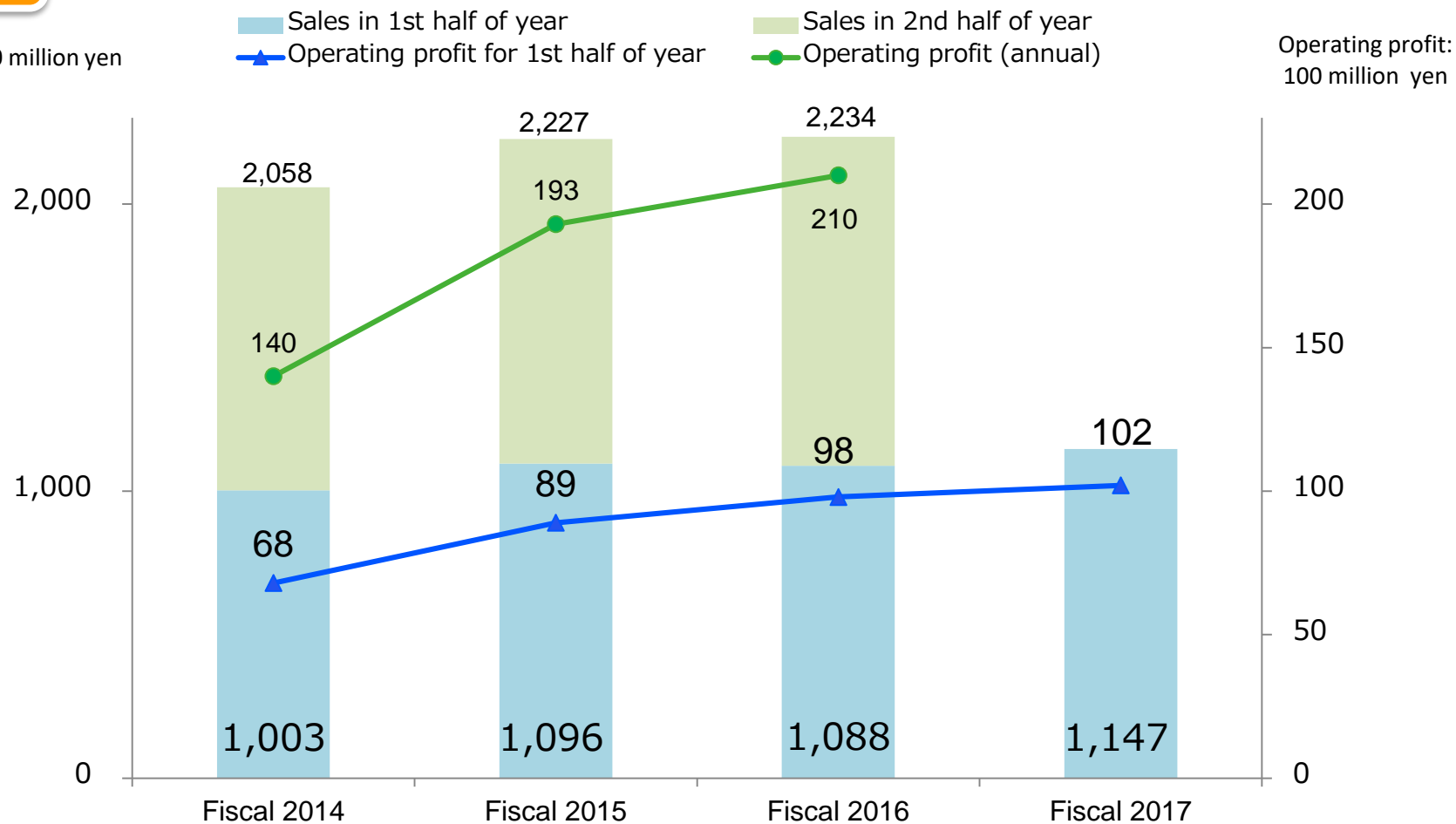
- Sales increased after both chemicals and food products attained brisk sales.
- Operating profit grew overall, following an expansion of sales volume of high functionality products, although profit fell in food products due to a rise in raw material costs.
- Current profit and profit attributable to owners of parent jumped significantly as exchange gains improved.

Note 1 : Figures are expressed in units of 100 million yen and have been rounded off.

Trends in Consolidated Performance

Consolidated
data

Sales: 100 million yen



Note 1 : Figures are expressed in units of 100 million yen and have been rounded off.

The 1st Half of the Fiscal 2017 Consolidated Performance (By segment)

(Unit: 100 million yen)

Consolidated
data

| | 1 st half Fiscal 2016 | 1 st half Fiscal 2017 | Increase/ decrease | Increase/ decrease ratio (%) |
|-------------------------------------|-------------------------------------|-------------------------------------|-----------------------|---------------------------------|
| Sales | 1,088 | 1,147 | 58 | 5.3 |
| Chemicals | 732 | 764 | 32 | 4.5 |
| <i>Electronics and IT materials</i> | 97 | 108 | 10 | 11.0 |
| <i>Functional chemicals</i> | 550 | 568 | 18 | 3.3 |
| <i>Commodity chemicals</i> | 84 | 88 | 3 | 4.4 |
| Food products | 316 | 338 | 22 | 7.0 |
| Other | 40 | 43 | 3 | 7.9 |
| Operating profit | 98 | 102 | 3 | 3.3 |
| Chemicals | 87 | 93 | 5 | 6.4 |
| <i>Electronics and IT materials</i> | 13 | 21 | 7 | 57.7 |
| <i>Functional chemicals</i> | 58 | 58 | 0 | 0.6 |
| <i>Commodity chemicals</i> | 15 | 13 | △ 2 | △ 16.1 |
| Food products | 9 | 6 | △ 2 | △ 26.3 |
| Other | 1 | 2 | 0 | 9.4 |

Note 1: Figures are expressed in units of 100 million yen and have been rounded off.

Electronics and IT materials

Consolidated
data

Electronics and IT materials (increase in both sales and profit)

1. Among electronics and IT materials, resists for liquid crystal displays and photo-initiators enjoyed bullish sales whereas light curing resins for optical films saw sales decline from the year-ago period following a slide in selling prices, which offset growth in sales volume.
2. Among electronic materials, semiconductor materials used in 3D-NANDs and DRAMs attained healthy sales amid strong memory demand. Sales of electronic circuit materials were brisk for etching of printed circuit boards and lead frames.

(Unit: ¥100 million)

| | 1 st half Fiscal 2016 | 1 st half Fiscal 2017 | Increase/decrease |
|------------------|----------------------------------|----------------------------------|-------------------|
| Sales | 97 | 108 | 10 |
| Operating profit | 13 | 21 | 7 |

Note 1 : Figures are expressed in units of 100 million yen and have been rounded off.

Functional Chemicals

Consolidated
data

Functional chemicals (increase in both sales and profit)

1. With regard to polymer additives, domestic sales of nucleating agents , clarifying Agents, light stabilizers, other additives and PVC plasticizers and stabilizers increased year on year after an increase in the production of synthetic resins used in automobiles. Outside Japan, the sales volume of antioxidants and flame retardant for polyolefin grew and sales of light stabilizers were strong.
2. Among surfactants, lubricant additives for automotive engine oils showed strength in sales in Japan and overseas. In addition, reactive emulsifiers for paints and adhesives achieved bullish sales mainly in overseas markets, while sales of glycol-based moisturizers and other materials for cosmetics were sluggish.
3. Among functional polymers, the sales volume of special epoxy resins for adhesion of electronic parts and for cars increased.

(Unit: ¥100 million)

| | 1 st half Fiscal 2016 | 1 st half Fiscal 2017 | Increase/decrease |
|------------------|----------------------------------|----------------------------------|-------------------|
| Sales | 550 | 568 | 18 |
| Operating profit | 58 | 58 | 0 |

Note 1 : Figures are expressed in units of 100 million yen and have been rounded off.

Commodity Chemicals

Consolidated
data

Commodity chemicals (increase in sales/decreased in profit)

1. There was strong demand for propylene glycols for toiletry and other daily necessity products.
2. With respect to hydrogen peroxide, its derivative for electronic circuits for liquid crystal displays and other applications achieved sales growth, with sales rising from the same period a year earlier.
3. Sales of commodity chemicals as a whole were severely affected by the rise in raw material and fuel prices.

(Unit: ¥100 million)

| | 1 st half Fiscal 2016 | 1 st half Fiscal 2017 | Increase/decrease |
|------------------|----------------------------------|----------------------------------|-------------------|
| Sales | 84 | 88 | 3 |
| Operating profit | 15 | 13 | △ 2 |

Note 1 : Figures are expressed in units of 100 million yen and have been rounded off.

Food Products

Consolidated
data

Food products (increased in sales/decreased in profit)

1. In Japan, sales of margarine, shortenings, whipped cream and other products were strong for use in bakery products, western confectionery items and desserts.
2. In overseas markets, sales expanded in China and in Southeast Asia after a strengthening of the sales and development system and the development of products tailored to local needs.
3. Results were severely affected by the sharp rise in fat, dairy products and other raw material prices.

(Unit: ¥100 million)

| | 1 st half Fiscal 2016 | 1 st half Fiscal 2017 | Increase/decrease |
|------------------|----------------------------------|----------------------------------|-------------------|
| Sales | 316 | 338 | 22 |
| Operating profit | 9 | 6 | △ 2 |

Note 1 : Figures are expressed in units of 100 million yen and have been rounded off.

2. Fiscal 2017 Prospective Performance and Business Strategy

Revision of Earnings Forecast

➤ Revision of Earnings Forecast

- In view of the performance for the first half of fiscal 2017 and recent performance trends, the outlook for the full fiscal year has been revised.
- For the third quarter and later, we assumed the exchange rate to be 110 yen for 1 US dollar and 125 yen for 1 euro.

(Unit: ¥ 100 million)

| FY2017 Prospective Performance | Previous forecast | Revised forecast | Difference |
|---|-------------------|------------------|------------|
| Sales | 2,400 | 2,400 | — |
| Operating profit | 200 | 211 | 11 |
| Current profit | 208 | 225 | 17 |
| Profit attributable to owners of parent | 140 | 154 | 14 |

Note 1: Figures are expressed in units of 100 million yen and have been rounded off.

Fiscal 2017 Prospective Performance

Consolidated
data

(Unit: ¥ 100 million)

| | Fiscal 2017 | | | Fiscal 2016 performance | Increase /decrease | Increase/ decrease ratio (%) |
|--|---------------------------------------|------------------------------------|------------------------|----------------------------|-----------------------|------------------------------------|
| | 1 st half (performance) | 2 nd half (forecast) | Whole FY (forecast) | | | |
| Sales | 1,147 | 1,252 | 2,400 | 2,234 | 165 | 7.4 |
| Operating profit | 102 | 108 | 211 | 210 | 0 | 0.3 |
| Current profit | 105 | 119 | 225 | 218 | 6 | 3.0 |
| Profit attributable to owners of parent | 72 | 81 | 154 | 153 | 0 | 0.5 |
| Net profit per share (yen/share) | ¥ 70.6 | ¥ 79.0 | ¥ 149.6 | ¥ 149.0 | ¥ 0.5 | |
| Dividend (yen/share) | ¥ 17 | ¥ 18 | ¥ 35 | ¥ 35 | ¥ 0 | |

| | | Fiscal 2017 assumption | | Fiscal 2016 Performance |
|-------------------|--------|----------------------------|----------------------|----------------------------|
| | | Beginning of the period | 2 nd half | |
| Exchange Rates | ¥ / \$ | 113.00 | 110.00 | 108.38 |
| | ¥ / € | 120.00 | 125.00 | 118.79 |
| Naphtha | ¥ / KL | 41,000 | 38,000 | 34,675 |

Note 1: Figures are expressed in units of 100 million yen and have been rounded off.

Note 2: The dividend of 35 yen in FY2016 includes a commemorative dividend of 5 yen in commemoration of the 100th anniversary of our founding.

Fiscal 2017 Prospective Performance (By segment)

(Unit: ¥ 100 million)

Consolidated
data

| | 1 st half (a) | 2 nd half (b) | Forecast for Fiscal 2017 (a)+(b) | Fiscal 2016 performance (c) | Increase/ decrease (a+b-c) | Increase/ decrease ratio (%) |
|-------------------------------------|-----------------------------|-----------------------------|--|-----------------------------------|----------------------------------|------------------------------------|
| Sales | 1,147 | 1,252 | 2,400 | 2,234 | 165 | 7.4 |
| Chemicals | 764 | 830 | 1,595 | 1,476 | 118 | 8.0 |
| <i>Electronics and IT materials</i> | 108 | 113 | 222 | 197 | 24 | 12.3 |
| <i>Functional chemicals</i> | 568 | 626 | 1,195 | 1,104 | 90 | 8.2 |
| <i>Commodity chemicals</i> | 88 | 89 | 178 | 174 | 3 | 2.2 |
| Food products | 338 | 376 | 715 | 664 | 50 | 7.7 |
| Other | 43 | 46 | 90 | 93 | △ 3 | △ 3.9 |
| Operating profit | 102 | 108 | 211 | 210 | 0 | 0.3 |
| Chemicals | 93 | 93 | 187 | 183 | 3 | 2.0 |
| <i>Electronics and IT materials</i> | 21 | 22 | 44 | 29 | 14 | 48.5 |
| <i>Functional chemicals</i> | 58 | 59 | 118 | 122 | △ 4 | △ 3.3 |
| <i>Commodity chemicals</i> | 13 | 11 | 25 | 31 | △ 6 | △ 20.8 |
| Food products | 6 | 13 | 20 | 22 | △ 2 | △ 10.6 |
| Other | 2 | 1 | 4 | 4 | △ 0 | △ 15.3 |

Note 1: Figures are expressed in units of 100 million yen and have been rounded off.

Fiscal 2017 Business Strategy - 1

➤ Electronics and IT materials

- IT materials: We will focus on sales expansion and acquisition of new customers for light curing resins for optical films in view of the growth of liquid crystal displays on a size basis. We will also introduce a new high brightness type and high sensitivity type of photoinitiators and strive to increase sales of resists for color filters.
- Electronic materials: We will work to expand sales of semiconductor materials for 3D-NANDs, which are in high demand for smartphones and servers, and DRAMs, circuits of which are becoming finer and finer. We will also launch new materials and strive to develop next-generation film materials.

➤ Functional chemicals

- Polymer additives: Amid brisk resin production in Japan, we will expand sales of nucleating agents, clarifying Agents and light stabilizers, other high-functional additives, antioxidants, plasticizers, stabilizers and flame retardants. Overseas, we will boost sales of high-functional additives and a packaged granular additives in Europe and in the United States after their production capacity was increased. Mainly in Asia, we will focus on the cultivation of markets of plasticizers and stabilizers and the acquisition of new customers for flame retardants.
- Surfactants: We will increase sales of engine oil additives as well as reactive emulsifier for paints and adhesives. We will also focus on increase cases of adoption of glycol-based moisturizers and other cosmetic ingredients.
- Functional polymers: Amid toughening of regulations on volatile organic compounds (VOCs), we will expand sales of VOC-free water-based resins, chiefly in Asia. For structural additive, demand for which is expected to grow in line with automotive weight reduction, we will increase sales of special epoxy resins.

Fiscal 2017 Business Strategy - 2

➤ Commodity chemicals

- Hydrogen peroxide: We will aim to boost sales of high value-added derivatives, such as high purity hydrogen peroxide for use in semiconductor manufacturing processes and persulfates for use in metal surface treatment. In addition, we will press ahead with expanding their applications.
- Propylene glycols: In this domain, we have the largest market share in the domestic market. We will work to increase their sales for Heat-not-burn cigarettes, toiletry and other daily necessity items.
- Industrial materials: We will strive to increase sales of water swelling sealing materials for waterstops in civil engineering and construction purposes in order to meet domestic Olympic-related construction needs and other needs for infrastructure construction in Japan and overseas.

➤ Foods products

- We will focus mainly on promotion of strategic products and new products for attaining sales expansion in the confectionery, bread-baking, Western confectionery and dessert markets and for solidifying the domestic business foundations.
- Particularly in China and Southeast Asia, we will expand sales of processed oils and processed food products for which facilities were reinforced and we will work intensively on developing products geared to local needs.
- We will endeavor to cultivate the functional food markets and to increase sales of health foods in a bid to broaden the horizons of our food products business.
 - ✓ Functional food: Natural milk-derived materials and others that increase the milk flavor and richness
 - ✓ Health food: A kind of dietary fiber that is expected to produce some effects including suppression of rises in blood sugar levels

3. The 1st Half of the Fiscal 2017 Topics

Business development in China (Chemicals)

【ADEKA FINE CHEMICAL (ZHEJIANG) CO.,LTD.】

- Established the company in January 2017 * 100% investment by ADEKA (CHINA) CO.,LTD.
- A groundbreaking ceremony for plant construction took place in October 2017
- The plant is due to be inaugurated in January 2020

Main production items

- PVC Stabilizers
- Plasticizers
- Flame Retardants
- Viscosity adjusting agent for paint
- Water Borne Resins
- Hardeners for Epoxy Resins



▲ A groundbreaking ceremony for plant construction took place.

Capital investment for growth

➤ Polymer additives

| | |
|----------|---|
| Jan 2017 | U.S.-based AMFINE CHEMICAL CORP. increases the production capacity of high-functional additives and commences commercial operation. |
| Jan 2017 | France-based ADEKA PALMAROLE SAS increases the production capacity of a packaged granular additives and commences commercial operation. |
| Feb 2017 | The Mie Plant embarks on the construction of a plant for manufacturing high-functional additives for plastics. (It will come into commercial operation in January 2018.) |
| Sep 2017 | Thailand-based ADEKA FINE CHEMICAL (THAILAND) CO., LTD. increases its production capacity of PVC stabilizers. |

➤ Food products

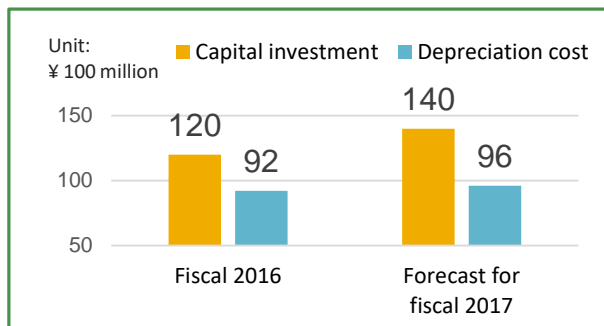
| | |
|----------|---|
| Aug 2017 | Singapore-based ADEKA (SINGAPORE) PTE. LTD. constructs a new processed food production line and put it into commercial operation. |
|----------|---|

➤ Electronics and IT materials

| | |
|----------|---|
| Jan 2017 | South Korea-based ADEKA KOREA CORP. constructs a production plant for dielectric materials. |
|----------|---|

➤ Surface Specialties

| | |
|----------|---|
| Jun 2017 | The Chiba Plant embarks on the construction of a plant for manufacturing special non-ionic surface-active agents. (It will come into commercial operation in August 2018.) |
|----------|---|



Note 1: Figures are expressed in units of 100 million yen and have been rounded off.



▲ Strengthened PVC stabilizer production facilities in Thailand



▲ The new processed food line in Singapore (exterior view of the production building)

Efforts for improvement in functionality rating and quality

【Polymer Additives】

- The ADEKA STAB FP-2000 Series intumescent flame retardant became the world's first functional material to obtain the UL Verified Mark in May 2017.

Inspection result

A sample prepared by adding the FP-2000 Series to polypropylene is confirmed to reduce smoke generation by 99% and carbon monoxide emission by 89% in comparison with polypropylene blended with a brominated flame retardant.

It was decided that it would be adopted for chairs installed at the venues of Rugby World Cup 2019.

- * It is a mark issued for performance objectively verified through scientific assessment conducted by UL LLC, a third-party safety science institution based in the United States.

99% Less Smoke
Density and
89% Less CO
Emissions Under
Flaming Conditions
as compared to
Br Treated PP



【Foods】

- ADEKA FOODS (ASIA) in Malaysia acquires certification for food safety and security.
- Acquired Kosher certification with some shortenings (August 2017)

These products have been recognized as high safety food compliant with Jewish religious laws by rabbis, or Jewish spiritual leaders, following a close check of the raw ingredients and the manufacturing process.

- Certification of International Food Safety Management System "FSSC 22000" (October 2017)

The food safety management system is recognized to meet the strict hygiene management standards and requirements such as food defense and to be at a high level as a food safety management system.



Fostering New Businesses (Polymer additives)

➤ Antistatic agent for Polyolefin 「ADK STAB AS-301E」

Antistatic agent

Polyolefin and other resins are used for a wide range of applications, including automotive interiors and the housings of electric products. However, they are so high in insulation that they are likely to retain static electricity.

An antistatic agent is added to prevent a malfunction of electric products, damage to electronic circuits and hygienic deterioration caused by deposited dust.

- For polyolefin and other resins, an additive has been developed that gives a long-lasting antistatic function even if a small amount is added. In a basic formula, the amount of this additive is around 10% to 20% smaller than the conventional additive and it causes very little coloring of resins.) This additive has been commercially available since May 2017.
- We will propose it for use in a packaging material for electronic components and foods and in garments to be worn in clean rooms.

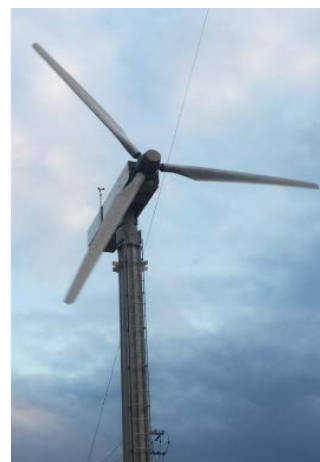
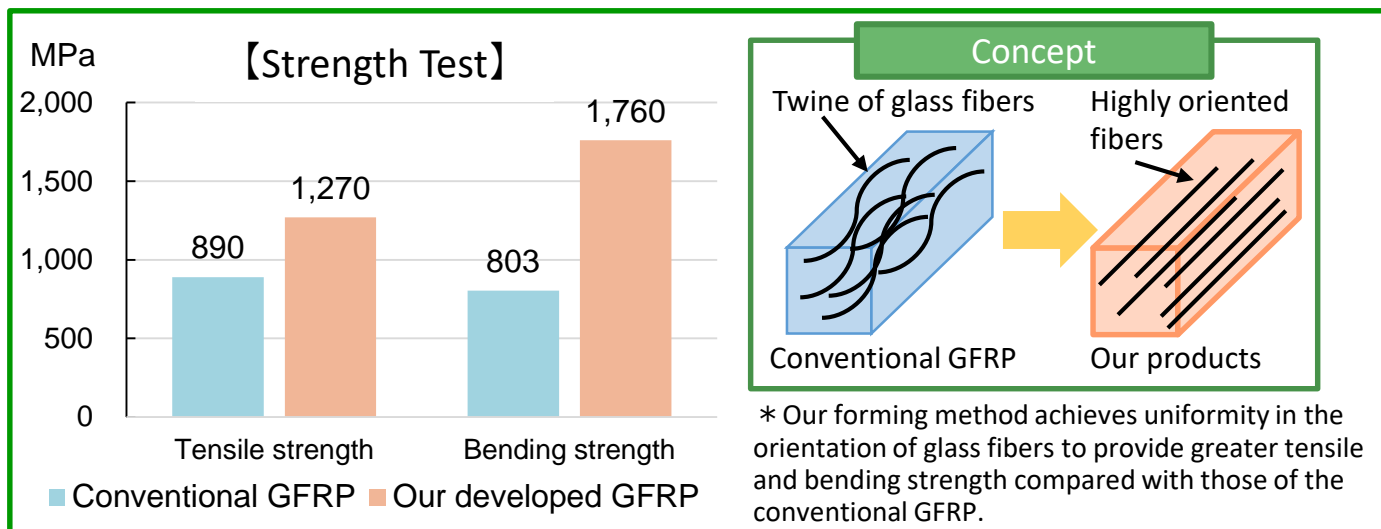


▲ 「ADK STAB AS-301E」

Fostering New Businesses (Functional Chemicals)

➤ Material for forming wind turbine blades

- Our glass fiber reinforced plastic (GFRP) is characterized not only in that the epoxy resin itself is high in strength but in that a unique forming method is employed to achieve uniformity in orientation of glass fibers for providing a high level of strength.



▲Strength confirmation at NEDO

【Recent Achievements and Others】

◆ NEDO Project: *Advanced Practical Research and Development of Wind Power Generation*

A five-meter-long wind turbine blade for a 30 kW wind turbine was produced to confirm that it would withstand a load at a wind speed of 80 m/s.

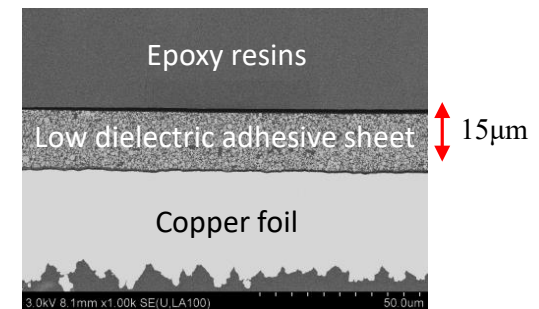
◆ A talk on the simulation of weight reduction in blades for megawatt class wind turbines in 38th Wind Energy Symposium 2016 * Joint announcement of GH Craft Ltd. and Wind Energy Institute of Tokyo, Inc.

- ✓ After a high level of strength was achieved, an attempt was made to minimize the mass. As a result of verification with a 33-meter blade for a two-megawatt class wind turbine, it attained a blade weight reduction of up to 20%.
- ✓ In addition, a 30% elongation of the weight-reduced model blade suggested an increase in power generation of up to 40% (under a condition with a wind speed of 6 m/s).

Fostering New Businesses (Electronics and IT materials)

- Low dielectric adhesive sheet for high density multilayer substrates for high-speed transmission
 - The low dielectric adhesive sheet was developed on the basis of the unique resin design incorporating the long-cultivated epoxy resin technology.

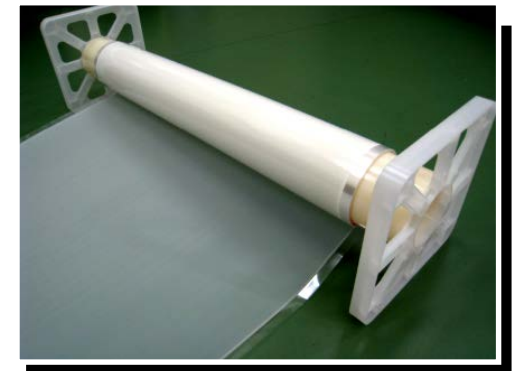
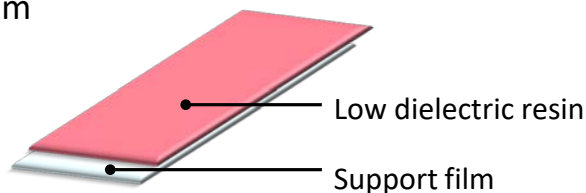
Amid the increase in capacity and speed of information networks and the spread of the Internet of Things (IoT), high-speed processing of big data is required. Under these circumstances, high density multilayer substrates for high-speed transmission are used in many different applications including communication servers, system boards and supercomputers.



▲ A cross-sectional SEM * image of the substrate

Characteristics

- ✓ Excelling in adhesive strength, insulation properties, heat resistance, thinness of the film, processing precision at the time of thermal press lamination and electric characteristics
- ✓ Shaped like a roll with thermosetting low dielectric resin coated on the support film

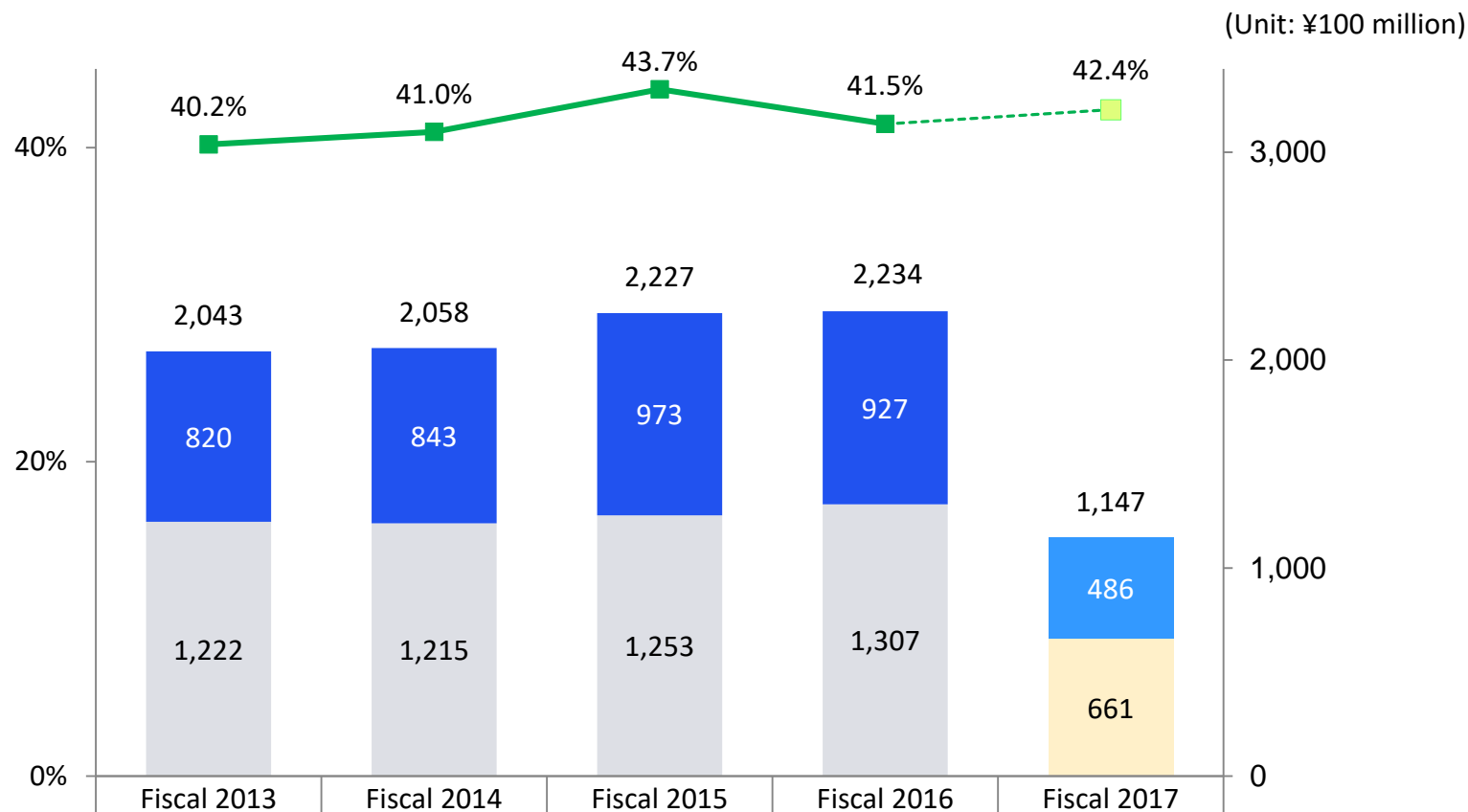


▲ Exterior view of the product

* Scanning electron microscope

4. For Reference

Overseas Sales (for reference purposes)



Note 1: The data for the first half of FY 2014 has been readjusted by applying the accounting method change retroactively.

Note 2: Figures are expressed in units of 100 million yen and have been rounded off.

Supplemental Documents for Financial Results Overview

- I. Supplemental documents for consolidated financial performance
- II. Management indexes
- III. For information purposes:
 - Overview of information on financial results of single-base and consolidated subsidiaries
 - Overview of ADEKA Group
(consolidated subsidiaries/affiliated company accounted for by the equity-method)
 - Major products by the business segments

Director and Managing Operating Officer Haruhiko Tomiyasu

I . Supplementary Data for the Consolidated Closing of Accounts

1. Consolidated Balance Sheet

| | As of Mar 31, 2017 | As of Sep 30, 2017 | increase/ decrease |
|---|--------------------|--------------------|-----------------------|
| Assets | | | |
| Current assets ① | 155,901 | 158,987 | 3,085 |
| Fixed assets | 134,583 | 139,848 | 5,264 |
| Tangible fixed assets ② | 80,121 | 82,898 | 2,776 |
| Intangible fixed assets | 3,982 | 3,867 | △ 114 |
| Investment and other assets ③ | 50,479 | 53,082 | 2,602 |
| Total assets | 290,485 | 298,835 | 8,350 |
| Liabilities | | | |
| Current liabilities ④ | 67,845 | 72,822 | 4,977 |
| Long-term liabilities ⑤ | 34,682 | 30,737 | △ 3,944 |
| Total liabilities | 102,528 | 103,560 | 1,032 |
| Net assets | | | |
| Shareholders' equity | 166,755 | 172,048 | 5,292 |
| Capital stock | 22,899 | 22,944 | 44 |
| Capital surplus | 19,926 | 19,993 | 67 |
| Retained earnings | 124,520 | 129,663 | 5,142 |
| Treasury stock | △ 590 | △ 553 | △ 37 |
| Accumulated other comprehensive income | 13,321 | 15,039 | 1,717 |
| Valuation difference on available-for-sale securities | 8,919 | 10,623 | 1,704 |
| Reserve for land revaluation | 4,276 | 4,276 | — |
| Translation adjustment | 2,604 | 2,475 | △ 129 |
| Adjustments for retirement Benefits | △ 2,477 | △ 2,355 | 142 |
| Minority interests | 7,879 | 8,187 | 308 |
| Total net assets | 187,956 | 195,275 | 7,318 |
| Total liabilities and net assets | 290,485 | 298,835 | 8,350 |

(Unit: ¥ million)

POINT①

Increase in current assets

Increase in cash and deposits 3,368

POINT②

Increase in tangible fixed assets

Increase in machinery, equipment and vehicles 1,101

POINT③

Increase in investments and other assets

Increase in investment securities 1,904

POINT④

Increase in current liabilities

Decrease in long-term debts payable 4,536

POINT⑤

Decrease in long-term liabilities

Decrease in long-term debts payable △ 4,363

Note1: Figures are expressed in units of million yen and have been rounded off.

Note2: Accumulated depreciation of tangible fixed assets 165,786 million yen.

I . Supplementary Data for the Consolidated Closing of Accounts

2. Cash Flow Statement (Summary)

Consolidated
data

(Unit: ¥ million)

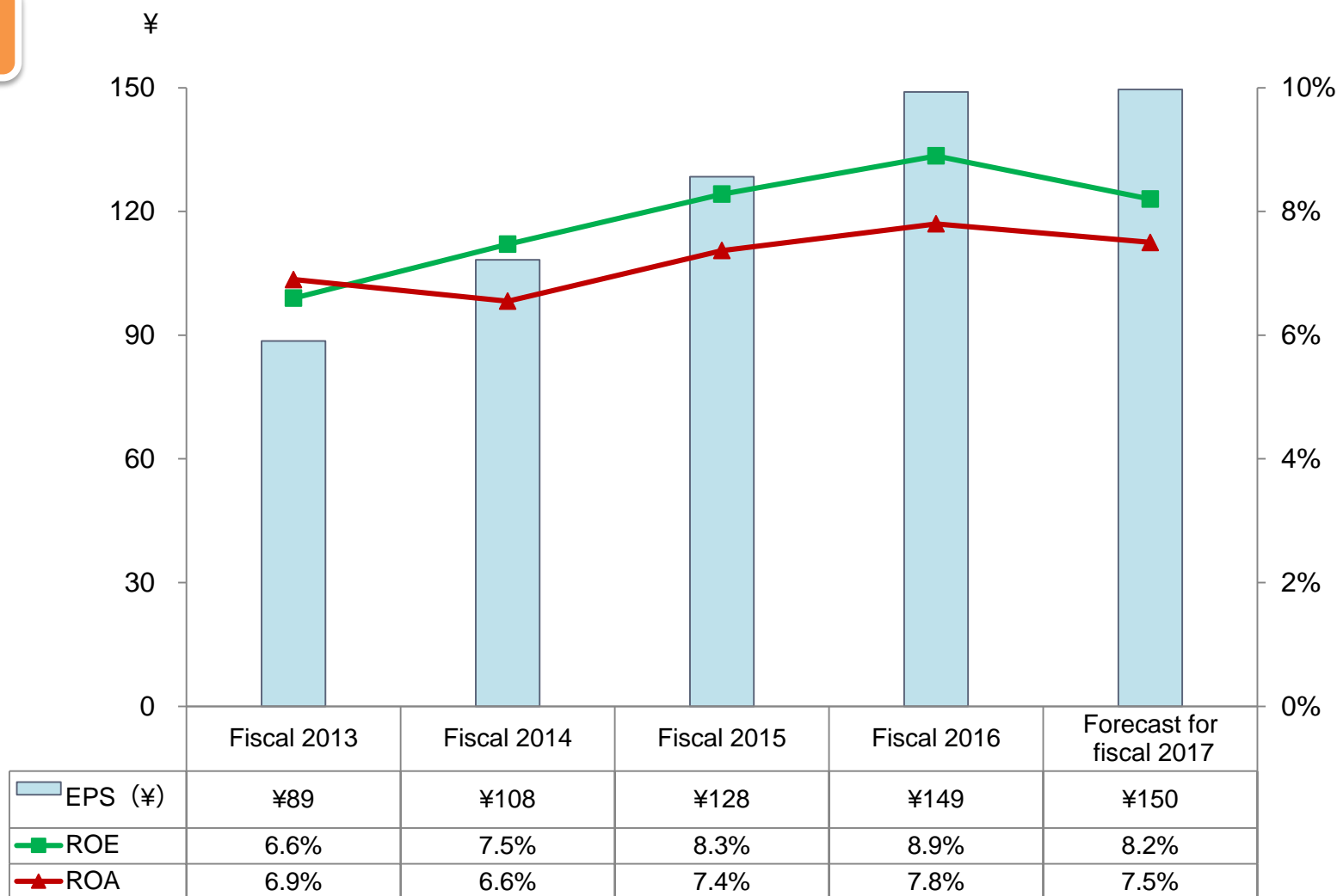
| | 1 st half FY2016 (from Apr 1, 2016 to Sep 30, 2016) | 1 st half FY2017 (from Apr 1, 2017 to Sep 30, 2017) |
|--|---|---|
| Cash flows from operating activities | 9,295 | 6,882 |
| Cash flows from investing activities | △ 8,539 | △ 7,217 |
| Cash flows from financing activities | △ 2,597 | △ 2,613 |
| Effect of exchange-rate changes on cash and cash equivalents | △ 2,630 | 57 |
| Net increase/decrease in cash and cash equivalents (increase) | △ 4,471 | △ 2,909 |
| Cash and cash equivalents at the beginning of period | 49,981 | 50,762 |
| Cash and cash equivalents from newly consolidated subsidiaries | 89 | — |
| Cash and cash equivalents at the end of period | 45,599 | 47,852 |

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

II . Management Indexes, etc.

1. Profitability

Consolidated
data

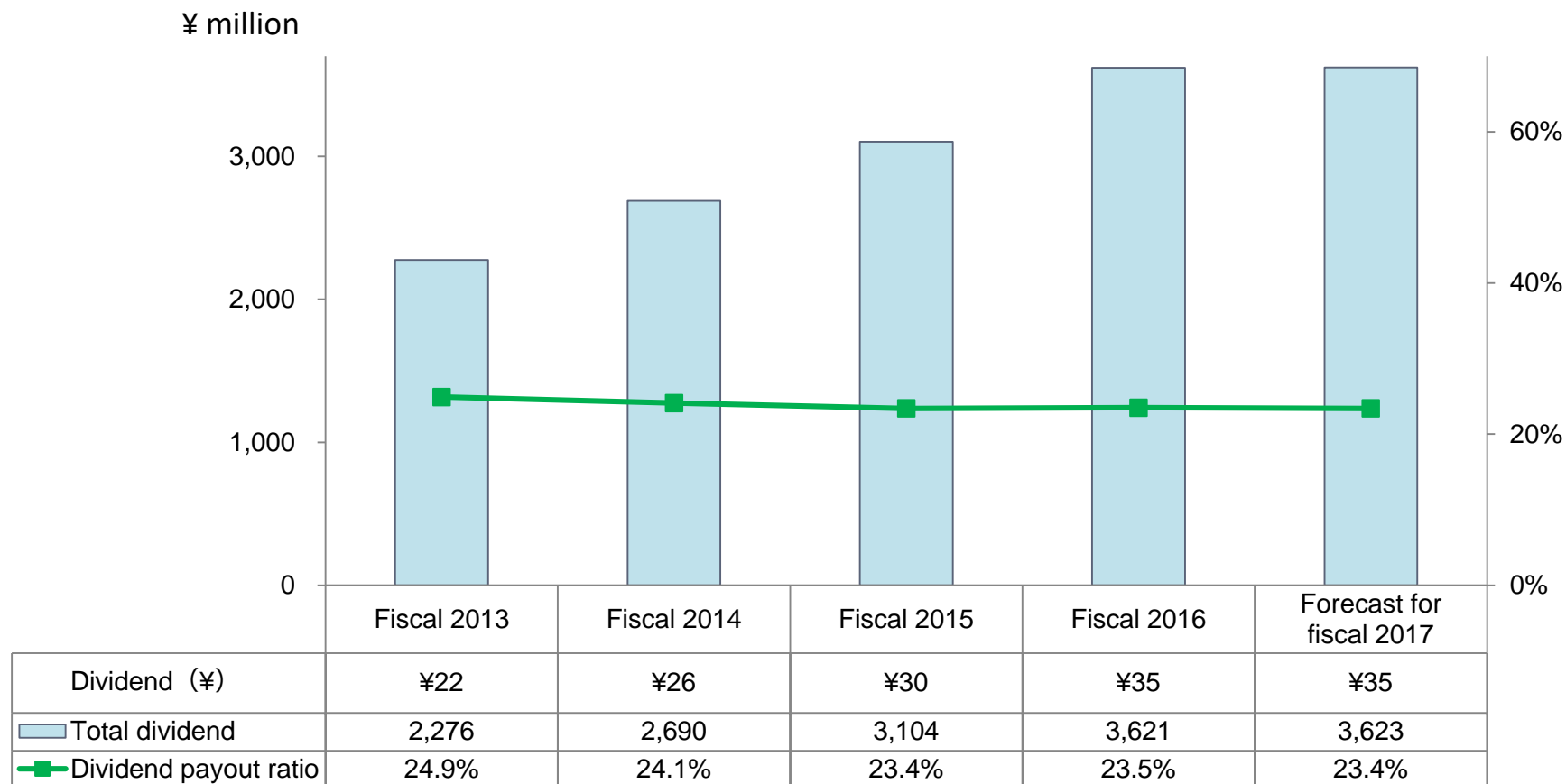


Note: The data of FY2014 has been readjusted by applying the accounting method change retroactively.

II . Management Indexes, etc.

2. Dividend payout ratio and dividends

Consolidated
data



Note 1: Dividends in FY2016 include a commemorative dividend of 5 yen in commemoration of the 100th anniversary of our founding.

Note 2: The data of FY2014 has been readjusted by applying the accounting method change retroactively.

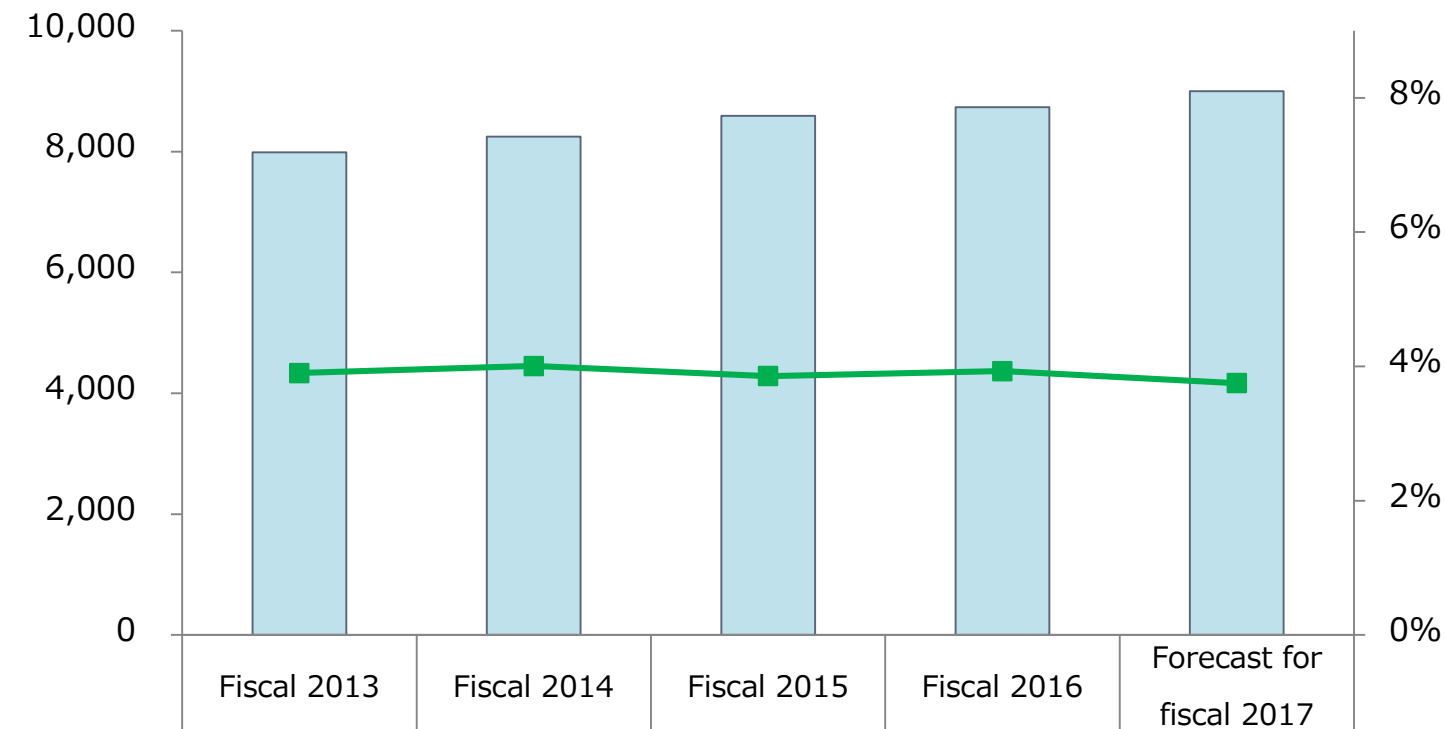
Note 3: Figures are expressed in units of million yen and have been rounded off.

II . Management Indexes, etc.

3. Research and development costs

Consolidated
data

¥ million



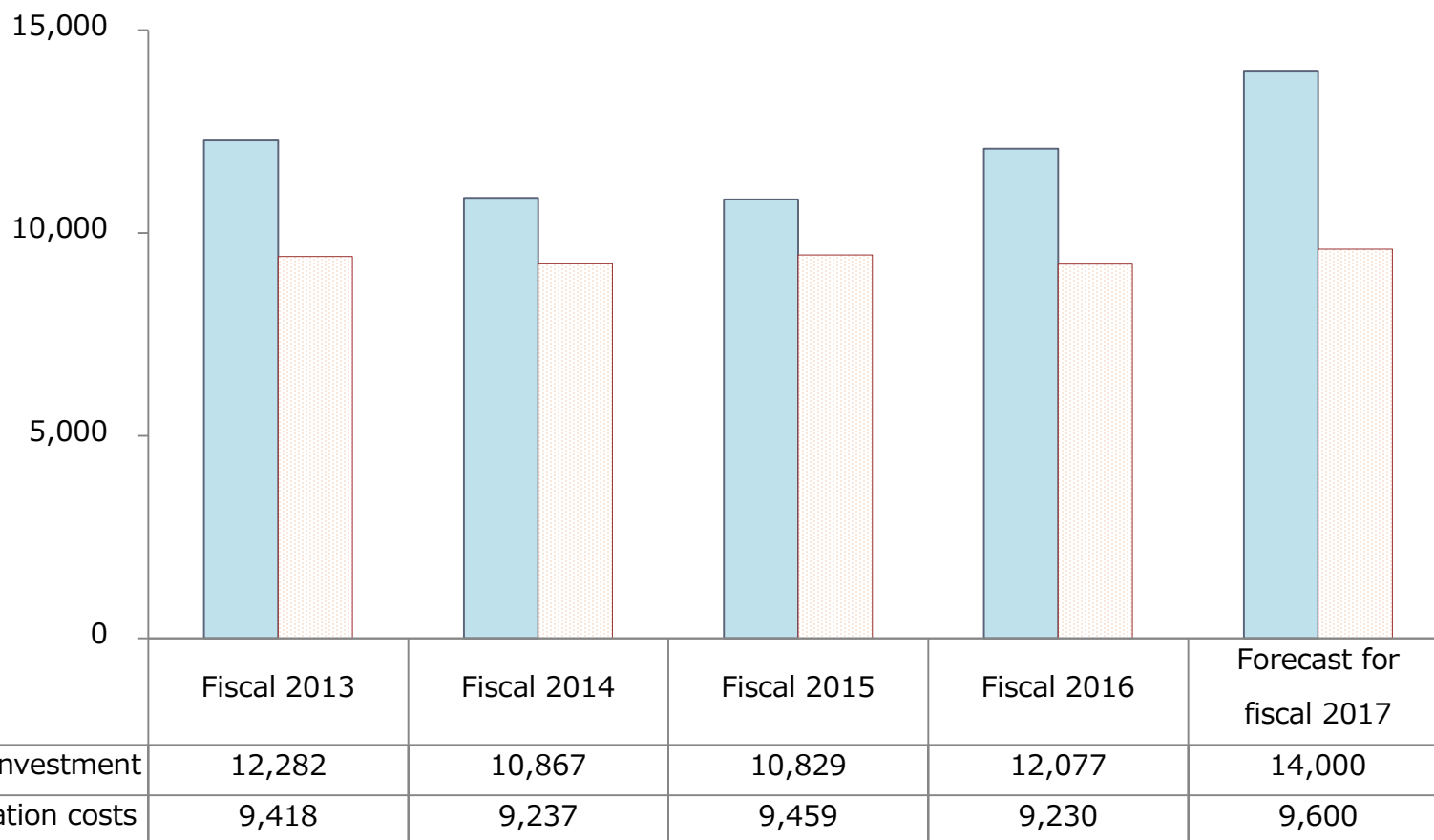
| | | | | | |
|--|-------|-------|-------|-------|-------|
| ■ Research and development costs | 7,988 | 8,247 | 8,588 | 8,735 | 9,000 |
| —■— Rate of research and development costs to sales | 3.9% | 4.0% | 3.9% | 3.9% | 3.8% |

Note : Research and development expense are expressed in units of million yen and have been rounded off.

4. Capital investment

Consolidated
data

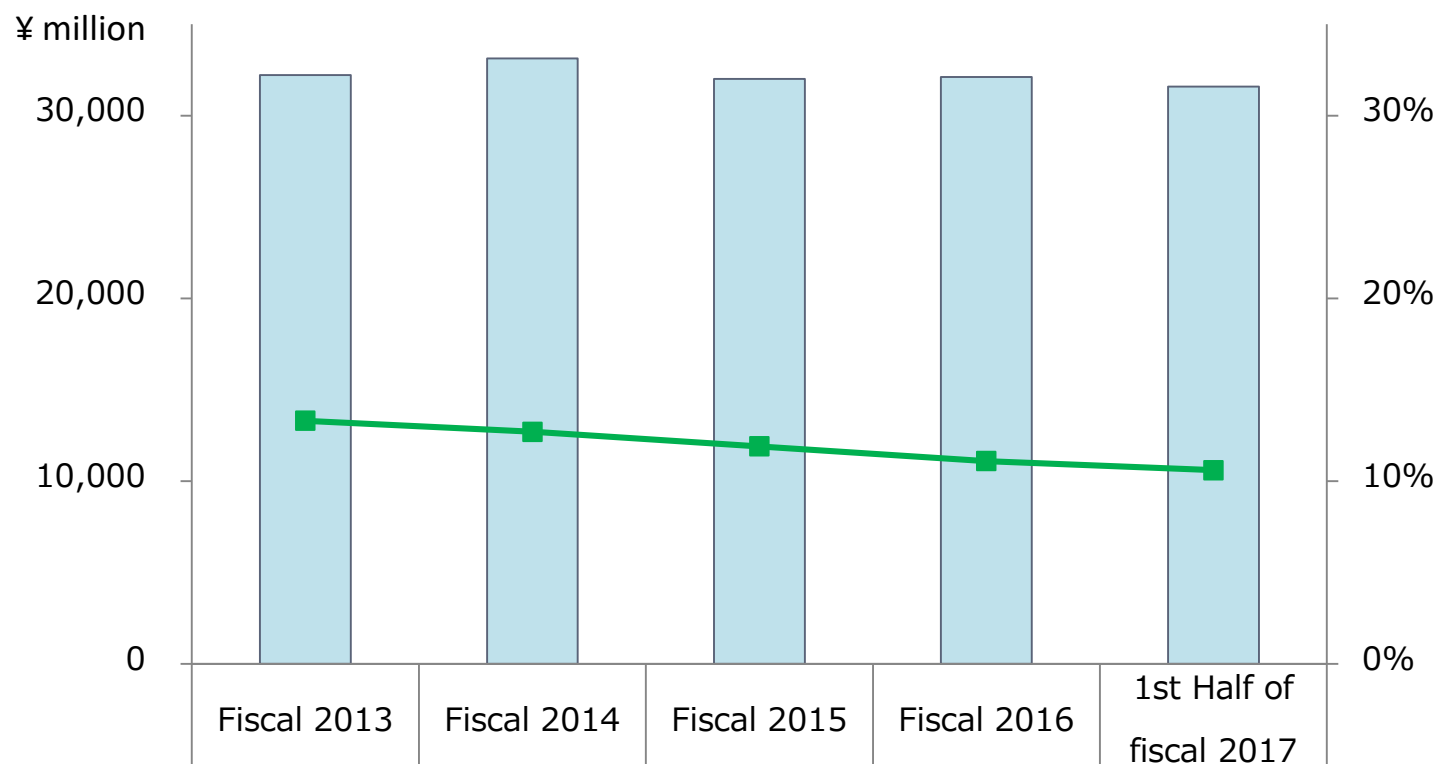
¥ million



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

5. Interest-bearing liabilities

Consolidated
data



| | | | | | |
|--|--------|--------|--------|--------|--------|
| Liabilities with interest | 32,222 | 33,123 | 32,003 | 32,108 | 31,588 |
| Degree of dependence on interest-bearing liabilities | 13.3% | 12.7% | 11.9% | 11.1% | 10.6% |

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

(Unit: ¥100 million)

| Non-consolidated closing of accounts | | | | |
|--------------------------------------|---|---|-----------------------|------------------------------------|
| | Results in 1 st half Fiscal 2016 | Results in 1 st half Fiscal 2017 | Increase/ decrease | Increase/ decrease ratio (%) |
| Sales | 607 | 633 | 26 | 4.4% |
| Operating profit | 57 | 59 | 1 | 3.3% |
| Current profit | 52 | 65 | 13 | 25.4% |
| NET profit for the Term | 38 | 50 | 11 | 30.3% |
| NET profit per share for the Term | 37.6 | 49.0 | | |

| Domestic companies (11)note1 | | | | |
|------------------------------|---|---|-----------------------|------------------------------------|
| | Results in 1 st half Fiscal 2016 | Results in 1 st half Fiscal 2017 | Increase/ decrease | Increase/ decrease ratio (%) |
| Sales | 383 | 437 | 54 | 14.1% |
| Operating profit | 7 | 9 | 1 | 25.7% |

| Overseas companies (16) note2 | | | | |
|-------------------------------|---|---|-----------------------|------------------------------------|
| | Results in 1 st half Fiscal 2016 | Results in 1 st half Fiscal 2017 | Increase/ decrease | Increase/ decrease ratio (%) |
| Sales | 582 | 618 | 35 | 6.1% |
| Operating profit | 36 | 39 | 2 | 6.7% |

| Consolidation adjustment accounts (deleted) | | |
|---|--|--|
| | Results in 1 st half Fiscal 2016 | Results in 1 st half Fiscal 2017 |
| Sales | △ 484 | △ 542 |
| Operating profit | △ 2 | △ 5 |

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

III For information purposes

2. Consolidated Subsidiaries (11 companies in Japan)

| Segment | Consolidated subsidiary | Capital | Controlling share(%) | Line of business |
|---------------|--|--------------|---|--|
| Chemicals | ADEKA CHEMICAL SUPPLY CORP. | ¥ 104million | 98.04 (Indirect ownership: 3.61) | 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 | 51.00 | Wholesale business of food materials such as fatty oils, flour milling and flavors and processed foods. |
| 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 | 90.00 (Indirect ownership: 10.00) | 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 |

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

III. For information purposes

3. Consolidated Subsidiaries (16 overseas companies)

| 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 | 60.00 (Indirect ownership:60.00) | Manufacturing and sales of polymer additives. |
| GERMANY | Chemicals | ADEKA Europe GmbH | €0.5 million | 100.00 | Sales of chemical products. |
| FRANCE | Chemicals | ADEKA PALMAROLE SAS | €3 million | 90.00 (Indirect ownership:90.00) | 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\$15 million | 70.00 | Manufacturing and sales of processed oils and fats, processed foods. |
| 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. |
| 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. | S\$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. | RM45million | 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 |
|--|-----------------|-------------------|---|
| NIHON NOHYAKU CO., LTD. | ¥10,939 million | 24.21% | Manufacturing and sales of agrichemicals and other products. |
| 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. |

※ There was no change in the number of equity method-applicable companies.

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

III. For information purposes

5. Core products of each business category

| Business category | | Core products |
|--------------------|------------------------------|--|
| Reportable segment | 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 | Additives for polyolefins, PVC plasticizers/stabilizers, Flame retardants, Epoxy resins, Polyurethanes, Water-borne resins, Surfactants, Lubricant additives, Kitchen detergent, Cosmetic ingredients, and others. |
| | Commodity chemicals | Polypropylene glycol, Hydrogen peroxide and derivative products, Water-swelling sealing materials, and others. |
| | Food products business | 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. |
| 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.