

### Briefings on Financial Results For the 1st half 0f the Fiscal 2016

Nov 28, 2016

ADEKA Corporation (Securities code: 4401)



### First Half of the Fiscal 2016 Second Quarter Financial Results Overview

[April 1, 2016 – September 30, 2016]

#### Representative Director and President Akio Kohri



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### 1. The 1st Half of the Fiscal 2016 Consolidated Performance

### The 1<sup>st</sup> Half of the Fiscal 2016 Consolidated Performance

#### Consolidated

data

(Unit: 100 million yen)

	1 <sup>st</sup> half FY2015	1 <sup>st</sup> half FY2016	Increase/ decrease	Increase/ decrease ratio (%)
Sales	1,096	1,088	△ 8	riangle 0.7
Operating profit	89	98	8	10.0
Current profit	87	88	1	1.8
Profit attributable to owners of parent	58	60	2	3.8
Net profit per share (yen/share)	¥ 56.8	¥ 59.0	¥ 2.2	
Dividend (yen/share)	¥ 14	¥ 15	¥ 1	

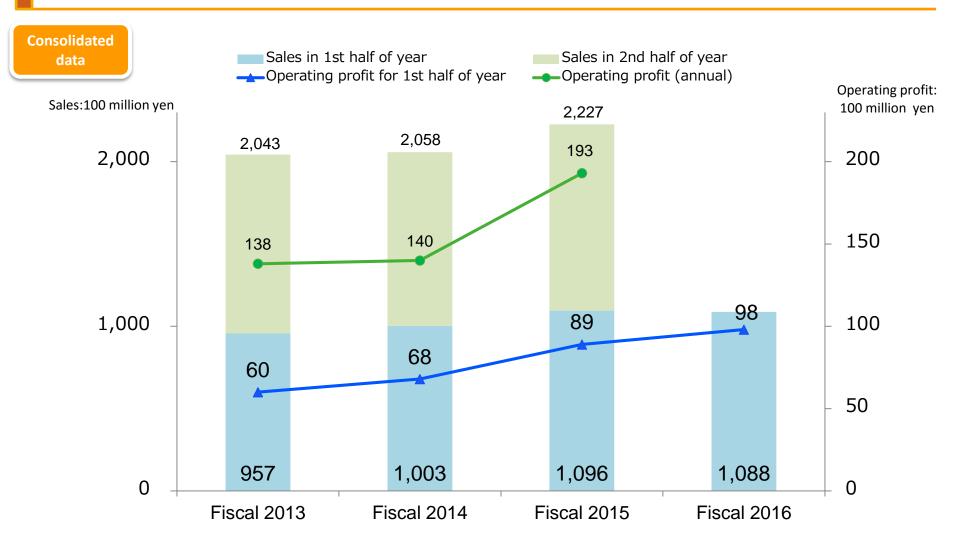
Sales increased in local currency terms at overseas subsidiaries but declined overall, largely affected by currency translation.
 Operating profit, current profit and net profit increased, thanks mainly to the sales expansion of high-functional products.

ADEKA USA CORPORATION (U.S.) and Crown CO., Ltd. were newly consolidated in the first half of FY2016.

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



### **Trends in Consolidated Performance**



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.



#### The 1<sup>st</sup> Half of the Fiscal 2016 Consolidated Performance (By segment)

(Unit: 100 million yen)

	(Unit: 100 million yen)					
Consolidated data		1 <sup>st</sup> half fiscal 2015	1 <sup>st</sup> half fiscal 2016	Increase/ decrease	Increase/ decrease ratio (%)	
	Sales	1,096	1,088	△ 8	△ 0.7%	
	Chemicals		732	△ 36	△ 4.7%	
	Electronics and IT materials	103	97	△ 5	△ 5.7%	
	Functional chemicals	570	550	△ 20	△ 3.6%	
	Commodity chemicals	94	84	△ 10	△ 10.8%	
	Food products	294	316	21	7.4%	
	Other	33	40	6	19.9%	
	Operating profit	89	98	8	10.0%	
	Chemicals	81	87	5	6.9%	
	Electronics and IT materials	22	13	△ 8	△ 39.2%	
	Functional chemicals	49	58	8	16.9%	
	Commodity chemicals	9	15	5	59.4%	
	Food products	5	9	3	74.9%	
	Other	2	1	△ 0	△ 25.9%	

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



#### Segmental Information : Electronics and IT materials

Consolidated

data

#### Electronics and IT materials (decrease in both sales and profit)

- 1. Light curing resins and photoinitiators: Sales of optical films and photoresists remained firm in Japan and overseas.
- 2. Semiconductor materials: Sales of products used for 3D NAND memories remained firm, but high dielectric constant materials corresponding to miniaturized processes of DRAM were affected by the deteriorated market condition of end products such as PCs and smartphones.
- 3. Electronic circuit materials : Overall sales remained low due to overseas customers adjusting their production, while etchants for lead frames increased.

(Unit: ¥100 million)

	1 <sup>st</sup> half fiscal 2015	1 <sup>st</sup> half fiscal 2016	Increase/decrease
Sales	103	97	△ 5
Operating profit	22	13	△ 8

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



#### Segmental Information : Functional Chemicals

Consolidated

data

#### Functional chemicals (decreased in sales/increased in profit)

- 1. Polymer additives: Highly functional additives such as nucleating agents and clarifiers as well as PVC stabilizers remained firm, both in Japan and overseas, due to the recovery of automobile and housing-related demand. However, they were affected by exchange rates due to the appreciation of the yen.
- 2. Surfactants: The sales Glycol-based moisturizer for cosmetics and reactive emulsifier for paints and adhesives increased , especially in overseas markets.
- 3. Lubricants: The sales additives for automobile engine oil increased in the domestic and overseas markets.
- 4. Functional polymer : Water-based urethane and highly-functional special epoxy resin for the car was extended, especially in overseas markets.

(Unit: ¥100 million)

			(01112: +±00 11111011)
	1 <sup>st</sup> half fiscal 2015	1 <sup>st</sup> half fiscal 2016	Increase/decrease
Sales	570	550	△ 20
Operating profit	49	58	8
Note 1 · Figures are expressed in units o	f 100 million ven and have been round	led off	



#### Segmental Information : Commodity Chemicals

Consolidated

data

#### Commodity chemicals (decreased in sales/increased in profit)

- 1. Propylene glycols: Demand for those for daily necessities such as toiletries remained firm.
- 2. Hydrogen peroxide: Hydrogen peroxide remained solid thanks to the expansion of demand for hydrogen peroxide derivatives for daily necessities such as toiletries, in addition to our continuous efforts to reduce the costs for production and logistics bases.

(Unit: ¥100 million)

	1 <sup>st</sup> half fiscal 2015	1 <sup>st</sup> half fiscal 2016	Increase/decrease
Sales	94	84	△ 10
Operating profit	9	15	5

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



#### Segmental Information : Food Products

Consolidated

data

#### Food products (increase in both sales and profit)

- 1. For the domestic market, the sales of margarine, shortenings for bakery products, western confectioneries, and desserts remained strong.
- 2. For the Overseas market, sales grew because the market expanded in China and Southeast Asia as a result of strengthening the sales and development systems and developing products that meet local needs.

(Unit: ¥100 million)

	1 <sup>st</sup> half fiscal 2015	1 <sup>st</sup> half fiscal 2016	Increase/decrease
Sales	294	316	21
Operating profit	5	9	3

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





### 2. The 1st Half of the Fiscal 2016 Topics

### Accelerate Overseas Expansion 1

### [China]

- The company form of a Chinese operating company was changed to a holding company.
  - The company form of ADEKA (SHANGHAI) CO., LTD., a sales company of chemical products, etc., has become a holding company, and this has enabled us to streamline our operations and efficiently reinvest profits gained.
  - The new company name is ADEKA (CHINA) CO., LTD. (August 2016).

### Establishment of ADEKA FINE CHEMICAL (ZHEJIANG) CO., LTD.\*

(in the process of establishment)

- We plan to establish a new manufacturing base in Pinghu, Jiaxing, Zhejiang, China, and concluded a memorandum of agreement for investment with the Dushan Port Economic Development Zone Administration Committee in Zhejiang (August 2016).
- A new plant constructed by ADEKA FINE CHEMICAL (ZHEJIANG) CO., LTD., which is to be established, will manufacture polymer additives and other products. Its annual production capacity will be 20,000 tons (planned).

\* Wholly-owned subsidiary of ADEKA (CHINA) CO., LTD.



### Accelerate Overseas Expansion 2

### [Vietnam]

- Establishment of the Representative Office in Ho Chi Minh City
  - To further expand and enhance the company's global business, we Established a representative office in Ho Chi Minh City, Vietnam, and began operations on October 1, 2016.
  - Major duties are Conducting market research on chemicals and food, etc.

Population	Approximately 93.4 million people
Regime	Socialist Republic
GDP	Approximately US \$ 198.8 billion
GDP / person	Approximately US \$ 2,171
Economic growth rate	6.68%
Inflation rate	0.63%



Note 1 : Figures are as of 2015. Quoted from HP of the Ministry of Foreign Affairs of Japan.



### **Capital Investment**

#### 〈Ongoing foreign investment〉

- Polymer additives
  - At AMFINE CHEMICAL CORPORATION in the United States, the expansion of facilities for producing highly functional additives began.
  - At ADEKA PALMAROLE SAS in France, the expansion of facilities for producing a packaged granular additives began.
- Electronics and IT materials
  - At ADEKA KOREA CORPORATION, the expansion of facilities for producing High dielectric material began.



<sup>▲</sup> AMFINE CHEMICAL CORPORATION



ADEKA PALMAROLE SAS



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▲ ADEKA KOREA CORPORATION
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**Completion time** 

All will be completed in January 2017.

### Strengthen Domestic Base

- We acquired additional shares in CROWN CO., LTD. and made it a consolidated subsidiary.
  - CROWN CO., LTD. sells food materials such as fatty oils for breadmaking, confectionery production and Western confectionery, and has strength in a wide range of products and detailed customer services. Since its founding, CROWN CO., LTD. has been selling processed oil and fats as well as processed foods including whipped cream as a distributor in the Kansai region.
  - We will strengthen our domestic business base by converting CROWN CO., LTD., which has a solid operating base in the retail market in the Kansai region, into a subsidiary.

Company Name	CROWN CO., LTD.
Location	3-6-35, Nishitenma, kita-ku, Osaka
Description of business	Wholesale business of food materials such as fatty oils, flour milling and flavors and processed foods.
Capital	10 million yen
Date of establishment	May 1, 1962

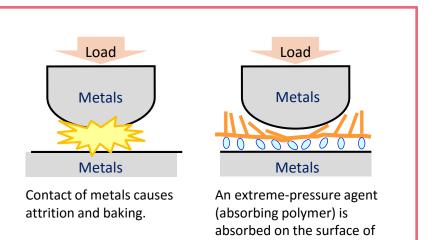


### Fostering New Businesses (Functional Chemicals)

### Development of SAPS free extreme-pressure agent

#### Extreme-pressure agent

It is a kind of lubricant additive widely used for preventing friction and baking inside engines. While commonly used extreme-pressure agents contain SAPS (sulfated ash, phosphorus and sulfur) effective for curbing attrition, reducing the volume of SAPS used is desirable because it causes metal decay and sludge.

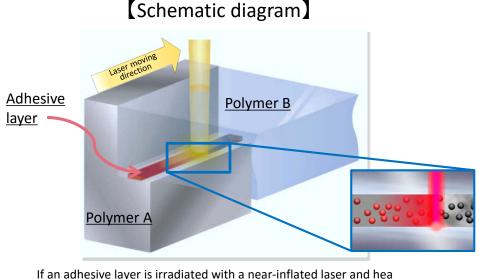


metal and prevents damage.

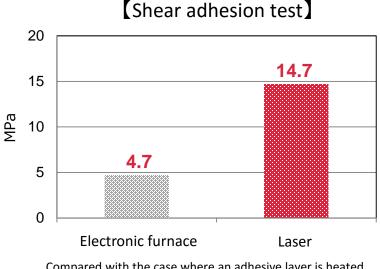
- Through joint research, Masayoshi Muraki, a professor at Shonan Institute of Technology, and Dr. Kenta Nakamura at the Tokyo Metropolitan Industrial Technology Research Institute developed a SAPS-free extreme-pressure agent.
- They have confirmed that the SAPS-free extreme-pressure agent outperforms existing extreme-pressure agents to which sulfated ash, sulfur and phosphorus are added, and have developed it for a broad range of uses including gear oil and engine oil, as well as machine oil and grease. They seek to find practical application for the agent by fiscal 2018.
- The researchers won the Technology Award of the Japanese Society of Tribologists in fiscal 2015.

### Fostering New Businesses (Functional Chemicals)

- Development of a laser curing adhesive system (joint development with Denso Corporation, which received a technical development award in 2016)
  - We have developed an epoxy resin adhesive system that can be cured at high speed with near-inflated laser radiation.
  - It is possible to shorten the time and significantly reduce power consumption and costs compared with existing adhesive methods that use an electronic furnace. The system is also characterized by less damage to integrated components by heat, because local heating is possible.
  - The system will contribute to the high functionality and weight saving of automobiles and the shortening of the manufacturing process of precision electronic devices.



If an adhesive layer is irradiated with a near-inflated laser and hea ted locally, photothermal conversion materials produce heat in an instant, and adhesives are cured.



Compared with the case where an adhesive layer is heated locally by an electronic furnace, about threefold adhesive strength was shown.

\* Polyphenylene sulfide resin is used.





# 3. Fiscal 2016 Prospective Performance and Business Strategy

### **Revision of Earnings Forecast**

#### Revision of Earnings Forecast

- Although operating profit, current profit and profit attributable to owners of parent in the first half of FY2016 exceeded the results forecasts announced on May 12, 2016, we have revised our full-year forecasts downward based on trends in exchange rates and demand from the third quarter.
- We have revised the exchange rates we assumed for the revision to a 12-yen appreciation against the US dollar and a 10-yen appreciation against the euro from the previous forecast, to 103 yen to the US dollar and 115 yen to the euro.

FY2016 Prospective performance	Previous forecast	Revised forecast	Difference
Sales	2,310	2,215	△ 95
Operating profit	194	185	△ 9
Current profit	198	181	△ 17
Profit attributable to owners of parent	135	123	△ 12

(Unit: ¥ 100 million)

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



### **Revision of Dividend Forecast**

#### Revision of Dividend Forecast

In commemoration of the 100th anniversary of our founding, we have revised the yearend dividend per share for the fiscal year ending March 31, 2017 to 20 yen, which is the sum of the ordinary dividend of 15 yen previously forecast and a commemorative dividend of 5 yen. The annual dividend per share will be 35 yen combined with an interim dividend of 15 yen. (This is to be submitted to the 155th ordinary general meeting of shareholders to be held in June 2017.)

	Previous forecast	Revised forecast	Performance	Increase /decrease
Interim dividend	¥ 15	_	¥ 15	¥ 0
Year-end dividend	¥ 15	¥ 20 (Including a commemorative dividend of 5 yen)	—	¥ 5
Annual dividend	¥ 30	¥ 35 (Including a commemorative dividend of 5 yen)	_	¥ 5



### FY2016 Prospective Performance

(Unit: ¥ 100 million)

	(OIIIt. ‡ 100 IIIIIIOII)						
Consolidatec data			Fiscal 2016		Fiscal 2015	Increase	Increase/
		1 <sup>st</sup> half (performance)	2 <sup>nd</sup> half (forecast)	Whole FY (forecast)	performance	/decrease	decrease ratio (%)
Sales		1,088	1,126	2,215	2,227	△ 12	riangle 0.6
Operating pro	ofit	98	86	185	193	△ 8	△ 4.1
Current profi	Current profit		92	181	195	△ 14	△ 7.5
	Profit attributable to owners of parent		62	123	132	△ 9	△ 7.2
Net profit per (yen/share)	r share	¥ 59.0	¥ 60.2	¥ 119.1	¥ 128.4	¥ ∆ 9.2	
Dividend (yer	n/share)	¥ 15	¥ 20	¥ 35	¥ 30	¥ 5	
		Fiscal 2016	assumption	Fiscal 20	015		
			2 <sup>nd</sup> Half	Performa			
Exchange	¥⁄\$	115.00	103.00		119.14		
Rates	¥∕€	125.00	115.00	1	31.08		
Naphtha	¥ ⁄ KL	40,000	35,000	Z	12,800		

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



### Fiscal 2016 Prospective Performance (By segment)

(Unit:¥ 100 million)

On and Palace de					· · · · · · · · · · · · · · · · · · ·	,
Consolidated data	1 <sup>st</sup> half (a)	2 <sup>nd</sup> half (b)	Forecast for Fiscal 2016 (a)+(b)	Fiscal 2015 performance (c)	Increase/ Decrease (a+b-c)	Increase/ decrease ratio (%)
Sales	1,088	1,126	2,215	2,227	△ 12	△ 0.6
Chemicals	732	747	1,480	1,538	△ 58	△ 3.8
Electronics and IT materials	97	112	210	217	△ 7	△ 3.4
Functional chemicals	550	549	1,100	1,136	△ 36	△ 3.2
Commodity chemicals	84	85	170	184	△ 14	△ 7.8
Food products	316	333	650	611	38	6.3
Other	40	44	85	77	7	9.0
Operating profit	98	86	185	193	△ 8	△ 4.1
Chemicals	87	70	158	171	△ 13	△ 7.8
Electronics and IT materials	13	15	29	47	△ 18	△ 39.3
Functional chemicals	58	45	104	98	5	5.5
Commodity chemicals	15	9	25	24	0	0.5
Food products	9	12	22	16	5	36.0
Other	1	3	5	5	riangle 0	△ 9.1

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



### FY2016 Business Strategy

Electronics and IT materials

- Semiconductor materials: We will focus on the sales expansion of film-forming materials corresponding to the 3D NAND memories and strengthen sales of products for DRAM and logic semiconductors.
- Photosensitive materials such as light curing resins and photoinitiators: We aim to acquire new customers and build a cost-competitive production system.

Functional chemicals

- Polymer additives: We will expand sales of high-functional adhesives such as nucleating agents and ultraviolet absorbers, as well as flame retardants and general-purpose antioxidants, on a global level. We also aim to increase the adoption of new products such as high-functional light stabilizers.
- Lubricant additives: We aim to increase sales of engine oil additives, mainly overseas where automobile sales are strong. Cosmetic raw materials: We will expand sales of highly transparent gelling agents that will add resilience to skincare products in Japan and Europe, and aim to expand the adoption of novel glycols, mainly overseas.
- Functional polymers: We will enhance sales of waterborne resins for paints and electronic material resins for electronic devices.

Commodity chemicals

- Propylene glycols: We will promote sales expansion and market development for high-functional products for cosmetics, etc.
- Hydrogen peroxide: We will continue to reduce costs and focus on the sales expansion of hydrogen
  peroxide derivatives.

Foods products

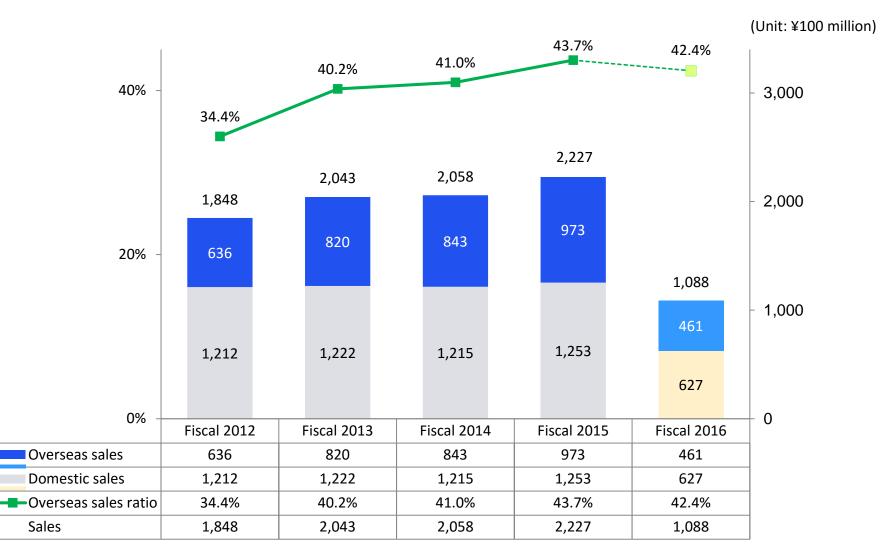
- For the domestic market, focus on expanding sales of strategic products, to increase our market share in the bread-baking, baking and confectionery industries. At the same time, we plan to implement cost reduction efforts, such as the consolidation of product lines.
- For overseas, we will promote sales expansion and market development in China and Southeast Asia by enhancing the sales and development systems.





### 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



#### ${\rm I}$ . Supplementary Data for the Consolidated Closing of Accounts

#### 1. Consolidated Balance Sheet

	As of Mar 31, 2016	As of Sep 30, 2016	increase/ decrease	
Assets				POINT①
Current assets ①	145,076	143,107	riangle 1,969	Decrease in current assets
Fixed assets	124,962	123,791	△ 1,170	Decrease in cash and deposits
Tangible fixed assets ②	78,529	76,723	riangle 1,805	
Intangible fixed assets	3,818	3,738	△ 80	POINT <sup>2</sup>
Investment and other assets ③	42,613	43,328	715	<u>Decrease in tangible fixed assets</u>
Total assets	270,038	266,898	△ 3,140	Decrease in buildings and structu
Liabilities				6
Current liabilities ④	65,991	59,940	riangle 6,050	Decrease in machinery, equipmer and vehicles
Long-term liabilities 5	33,461	35,513	2,052	
Total liabilities	99,452	95,454	△ 3,998	DOTHE
Net assets				POINT③
Shareholders' equity	153,363	157,980	4,617	Increase in investments and other
Capital stock	22,899	22,899	_	Increase in investment securities
Capital surplus	19,926	19,926	—	
Retained earnings	110,764	115,440	4,675	POINT④
Treasury stock	△ 227	△ 285	△ 58	Decrease in current liabilities
Accumulated other comprehensive income	9,945	6,645	△ 3,299	Decrease in bill payable and acco payable
Valuation difference on available-for-sale securities	4,490	4,951	460	Decrease in short-term debts pay
Reserve for land revaluation	4,276	4,276	—	
Translation adjustment	4,082	159	△ 3,923	POINT(5)
Adjustments for retirement Benefits	△ 2,904	△ 2,741	162	Increase in long-term liabilities
Minority interests	7,276	6,817	△ 459	Increase in long-term debts paya
Total net assets	170,586	171,444	857	5 17
Total liabilities and net assets	270,038	266,898	△ 3,140	

Note1: Figures are expressed in units of million yen and have been rounded off. Note2: Accumulated depreciation of tangible fixed assets 159,199 million yen.

	(Unit: ¥ million)
OINT①	
Decrease in current assets	
Decrease in cash and deposits	∆ <b>2,278</b>
OINT@	
Decrease in tangible fixed assets	
Decrease in buildings and structures	△ 734
Decrease in machinery, equipment and vehicles	△ 303
OINT3	
ncrease in investments and other asse	<u>ets</u>
ncrease in investment securities	566
OINT@	
Decrease in current liabilities	
Decrease in bill payable and account payable	riangle 2,603
Decrease in short-term debts payable	△ 1,581
OINT <sup>5</sup>	
ncrease in long-term liabilities	
ncrease in long-term debts payable	1,715



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#### I . Supplementary Data for the Consolidated Closing of Accounts 2. Cash Flow Statement (Summary)

Consolidated

data

(Unit: ¥ million)

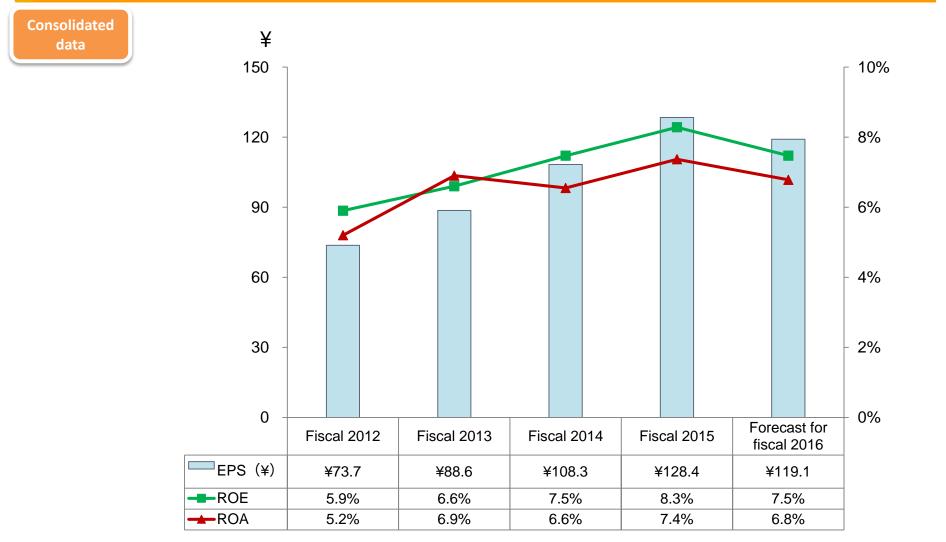
	1 <sup>st</sup> half FY2015 (from Apr 1, 2015 to Sep 30, 2015)	1 <sup>st</sup> half FY2016 (from Apr 1, 2016 to Sep 30, 2016)
Cash flows from operating activities	7,688	9,295
Cash flows from investing activities ①	△ 5,403	△ 8,539
Cash flows from financing activities	△ 1,792	△ 2,597
Effect of exchange-rate changes on cash and cash equivalents	222	△ 2,630
Net increase/decrease in cash and cash equivalents (increase)	715	△ 4,471
Cash and cash equivalents at the beginning of period	41,697	49,981
Cash and cash equivalents from newly consolidated subsidiaries	577	89
Cash and cash equivalents at the end of period	42,990	45,599

**POINT** The main factor for net cash used for investing activities was the fact that purchases of securities exceeded the proceeds from sales of securities.

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



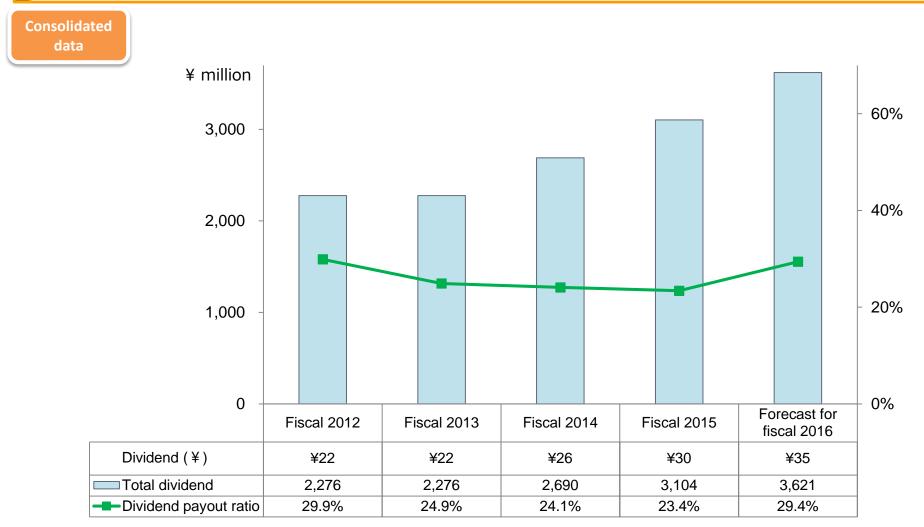
#### I . Management Indexes, etc. **1. Profitability**



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



#### I . Management Indexes, etc. 2. Dividend payout ratio and dividends

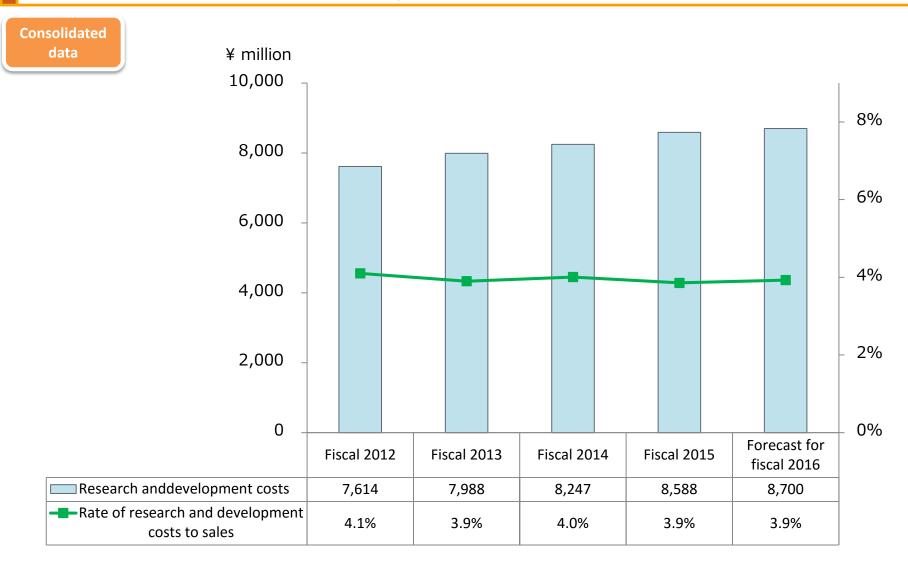


Note 1: Dividends in FY2016 include a commemorative dividend of 5 yen in commemoration of the 100th anniversary of our founding.

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.

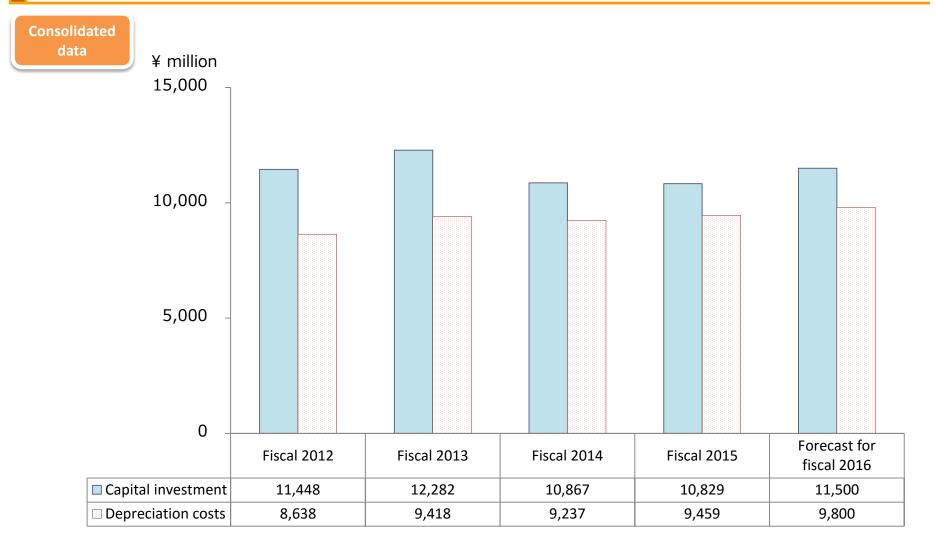
#### I . Management Indexes, etc. 3. Research and development costs



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



#### II . Management Indexes, etc. 4. Capital investment

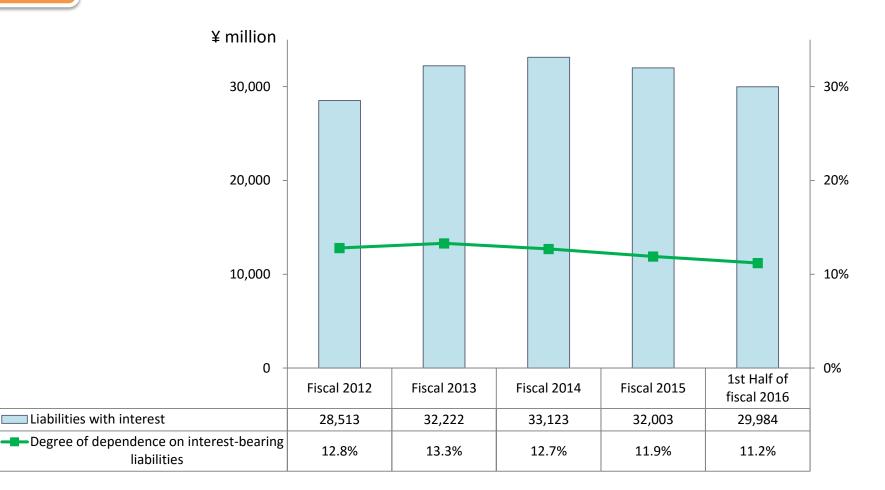


Note : Capital investment and depreciation are expressed in units of million yen and have been rounded off.



#### I . Management Indexes, etc. 5. Interest-bearing liabilities

Consolidated data



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



#### ${\rm I\!I\!I}$ . For information purposes

1. Overview of non-consolidated and consolidated closing accounts

(Unit: ¥100 million)

								(01111-1-1	
	Non-consol	idated closing	g of accoun	ts		Domestic	companies	(11)note1	
	Results in 1 <sup>st</sup> half fiscal 2015	Results in 1 <sup>st</sup> half fiscal 2016	Increase/ decrease	Increase/ decrease ratio (%)		Results in 1 <sup>st</sup> half fiscal 2015	Results in 1 <sup>st</sup> half fiscal 2016	Increase/ decrease	Increase/ decrease ratio (%)
Sales	610	607	∆3	△0.6%	Sales	374	383	9	2.5%
Operating profit	55	57	2	3.6%	Operating profit	5	7	1	29.1%
Current profit	56	52	∆3	<b>△6.8%</b>		Overseas	companies	(16) note2	
NET profit for the Term	41	38	△2	△6.7%		Results in 1 <sup>st</sup> half fiscal 2015	Results in 1 <sup>st</sup> half fiscal 2016	Increase/ decrease	Increase/ decrease ratio (%)
NET profit		00			Sales	598	582	△16	△2.7%
per share for the Term	40.3	37.6			Operating profit	33	36	3	10.8%
			ļ		Cons	olidation ac	ljustment a	ccounts (de	eleted)
							lts in scal 2015		ults in iscal 2016
					Sales		△486		△484
					Operating		^ <b>1</b>		^ <b>ว</b>

profit

Note 1 : Add CROWN CO., LTD. in the scope of consolidation from fiscal 2016.

Note 2 : Add ADEKA USA CORPORATION of USA in the scope of consolidation from fiscal 2016.

Note 3 : Figures are expressed in units of 100 million yen and have been rounded off.



riangle 2

 $\triangle 4$ 

## I 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.

## I. 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 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.	fĭ 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.	



## I. 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.

\* 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.



## I. For information purposes 5. Core products of each business category

Business category		Core products
Reportable segment Commodit	Electronics and IT materials	High-purity materials for semiconductors, AFES System and etching agents, photo curing resins, recording materials, Imaging materials, and others.
	Functional chemicals	Additives for polyolefins, PVC plasticizers/stabilizers, Flame retardants, Epoxy resins, Polyurethanes, Water-borne resins, Surfactants, Lubricant, Metal working fluid, Cosmetic materials, and others.
	Commodity chemicals	Polypropylene glycol, Hydrogen peroxide, Industrial fats and oil-induced 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.



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.

