

HOKKO CHEMICAL INDUSTRY CO., LTD.

FINANCIAL SUMMARY

for the year ended November 30, 2016

Contents

I	Corporate Profile	2
II	Result of FY 2016	13
III	Outlook for FY 2017	22
IV	Progress in 3-year Business Plan	26
■	Supplement	33

I Corporate Profile

1. Corporate Data

As of November 30, 2016

Company name	HOKKO CHEMICAL INDUSTRY CO., LTD
Business activities	Crop Protection Business, Fine Chemicals Business
Established	February, 1950
Head office	1-5-4, Nihonbashi Honcho, Chuo-ku, Tokyo
Branches	Sapporo, Sendai, Tokyo, Niigata, Osaka, Okayama, Fukuoka
Factories	Hokkaido, Niigata, Okayama,
Laboratories	Atsugi (Kanagawa) experimental farm: Hokkaido, Shizuoka
Capital	JPY 3,214 million
No. of employee	652 (non-consolidated) / 765 (consolidated)
Consolidated subsidiaries	Hokko Sangyo Co., Ltd. / Biei Hakudo Industry Co., Ltd. / Hokko Pax, Ltd. / Zhangjiagang Hokko Chemical Co., Ltd. (China)

2. Business Activities

Fiscal year ended November 2016



Crop Protection Business

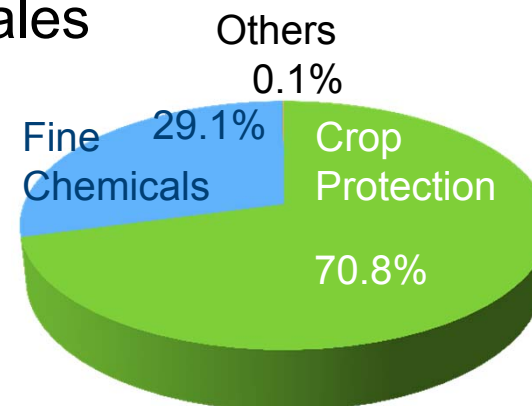
- Manufacturing & Sales of Fungicides, Insecticides, Herbicides etc.



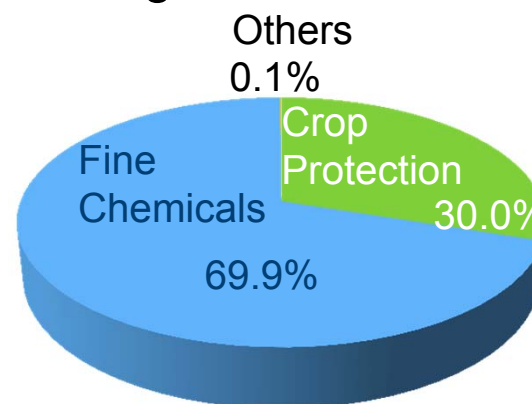
Fine Chemicals Business

- Manufacturing & Sales of raw materials, intermediates and Catalyst ligands for Resins, Pharma & Agro and Electronics business fields

Sales



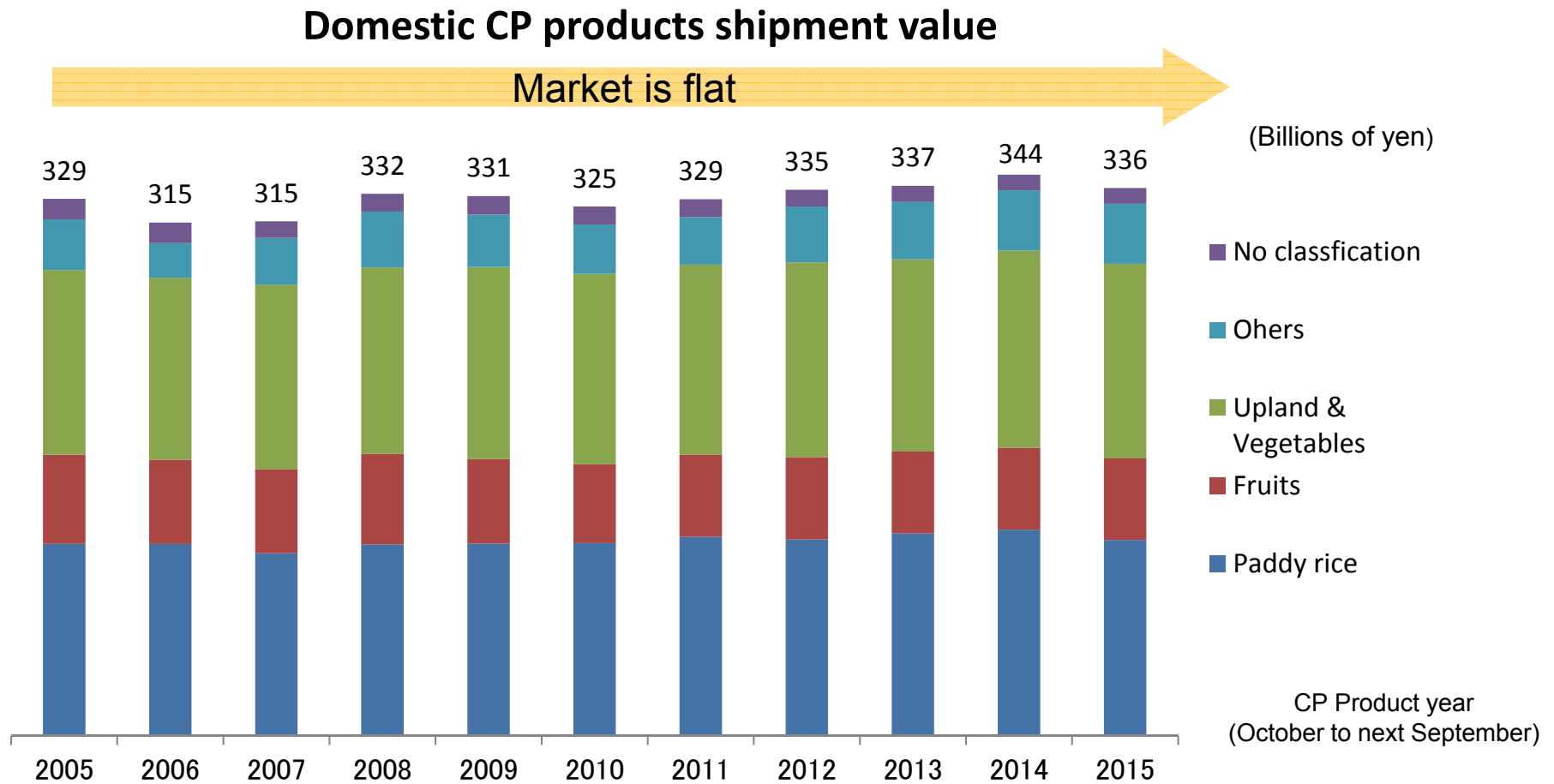
Operating Income



※ Others: sales of petroleum etc.

□ Crop Protection(CP) Business

- Domestic CP product market trends
- ⇒ It has been almost flat in recent years

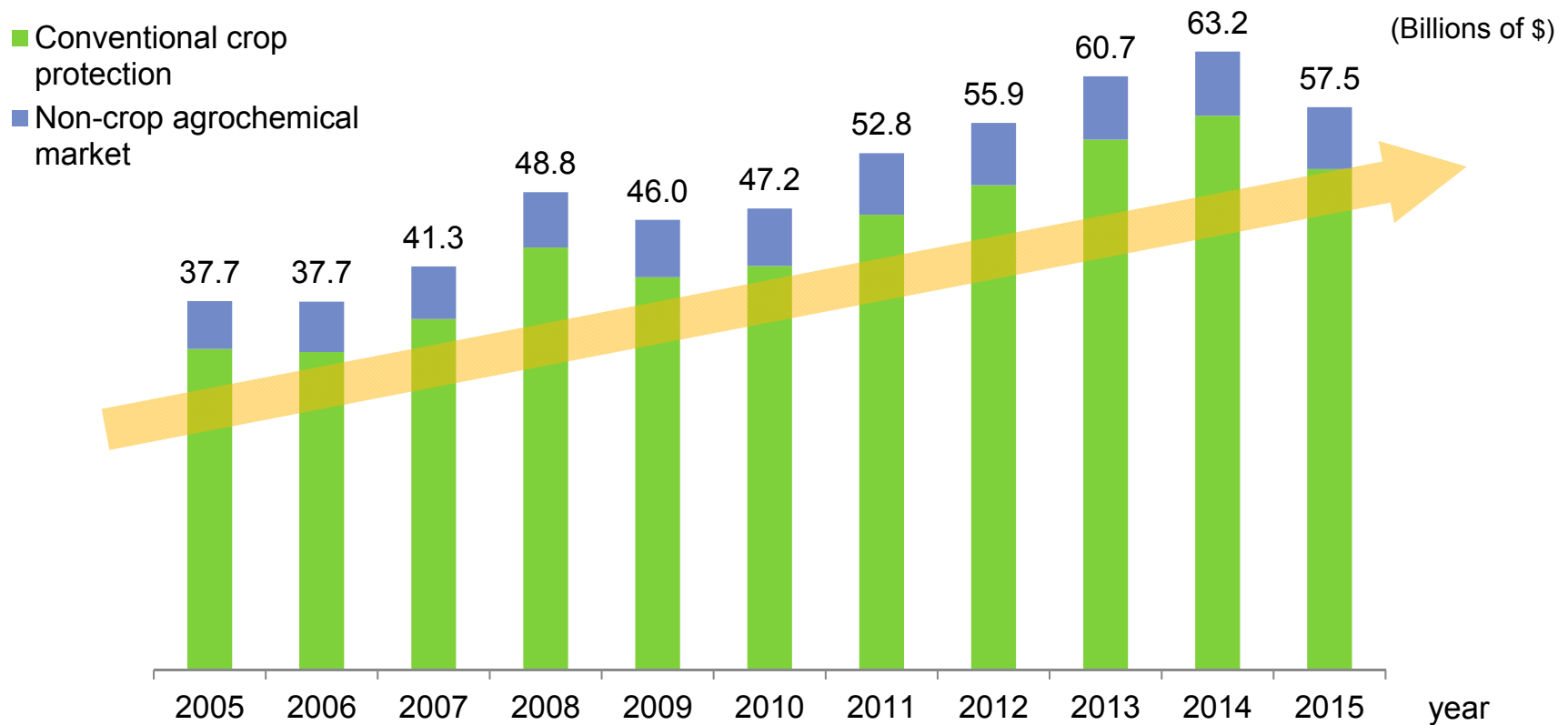


(Source: Japan Crop Protection Association-JCPA)

□ Crop Protection(CP) Business

- Global CP product market trends
 - ⇒ Market has been expanded by the increasing demand for food

Global CP products shipment value



(Source: Phillips McDougall)

□ Crop Protection(CP) Business

◆ Domestic and overseas business

- Along with matured domestic market and growing global market, overseas sales ratio is increasing

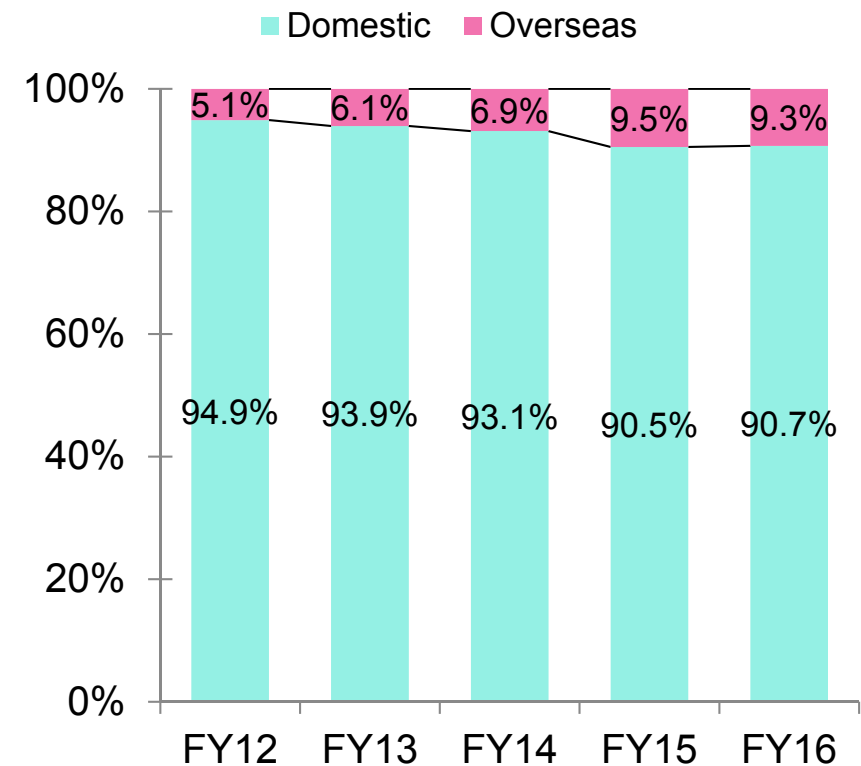
Domestic

- Finished Product supplied to customers through JA (Cooperative Channel)
- Contract formulation for other CP product manufacturers

Overseas

- Finished Product or Active ingredient through trading companies mainly sold in Asia, North and Latin America etc.

Breakdown of CP sales

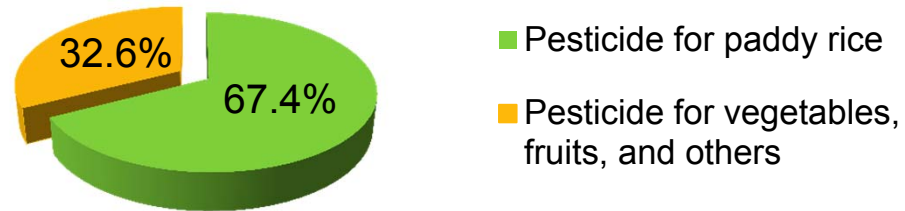


□ Crop Protection(CP) Business

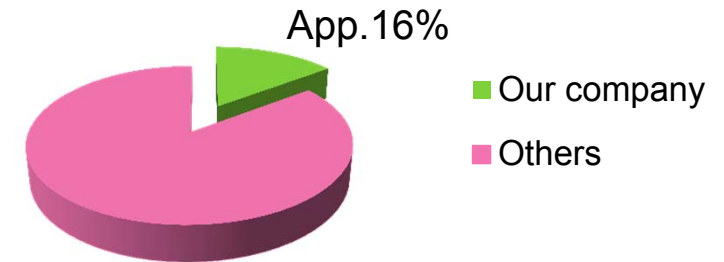
◆ Strength in rice market

Breakdown of CP domestic sales
by fields

(Fiscal year ended November 2016)



Our share in the domestic market of
pesticide for paddy rice (estimated)



◆ Strength of formulation technology

Declining farming population
and increasing population of
aged farmer in Japan

▶ Increase of labor-
saving needs

▶ Focus on developing
formulations to handle
easily



【Main products】

Dr.ORYZE Seedling box treated granules
(September 1997 registration)

- Co-development with Meiji Seika Pharma Co., Ltd
- Highly sophisticated release controlled Probenazole formulation successfully improving performance as a granule of Seedling Box Treatment

◆ Hokko Proprietary Products

Proprietary compound

Active Ingredient	Registration	Crop	Product
Kasugamycin	1965	Rice, Vegetables	Fungicide
Copper oxychloride	1966	All crops	Fungicide
imibenconazole	1994	Vegetables, Fruits	Fungicide
ipfencarbazone	2013	Rice	Herbicide

Joint development

Active Ingredient	Registration	Crop	Product
tefuryltrione	2010	Rice	Herbicide

- Co-development with the National Federation of Agricultural Cooperatives Federation & Bayer CropScience KK

□ Crop Protection(CP) Business

■ ipfencarbazone

- Rice herbicide of triazolinone chemistry ⇒ Registered in August 2013, sales launched in 2014
Received the achievement award (technology) of Pesticide Science Society of Japan (2016)

Features & Effects

High safety to paddy rice, excellent initial efficacy and long residual effect on "*Echinochloa sp*" which is most serious weeds in rice-producing areas

Domestic

- ✓ Sales have increased since its launch in 2014

CP Product year(October to next September)

	2014	2015	2016
Estimated used area (thousand ha)	9	77	145
share※	0.5%	4.5%	8.3%

※Share of paddy rice herbicides the same application window

Source: Japan Plant Protection Association statistical data

Trade name

Winner, Kachiboshi, Kimarite

Overseas

- ✓ We are expanding target countries in Asian rice market. First overseas registration was approved in South Korea and sales were launched in April 2014.
- ✓ Other registration is expected to be in Taiwan in 2018.
- ✓ Initial development work has started in Vietnam, India, Thailand, Indonesia, etc.



□ Crop Protection(CP) Business

■ Kasugamycin

- Fungicide/Bactericide produced by microorganism(*Actinomyces*) isolated from soil of Kasuga shrine in Nara prefecture, Japan ⇒ widely used for more than 50 years since its first registration was approved in 1965

Features & Effects

Mainly used for the control of the most serious disease (Rice blast) and Bacterial diseases on vegetables and fruits.

Domestic

- ✓ Wide application window from seedling box to paddy field by ground spray and aerial application
- ✓ Excellent efficacy against “*Cercospora*” leaf spot on sugar beet and Gray blight, Bacterial shoot blight on tea plant

Major Products

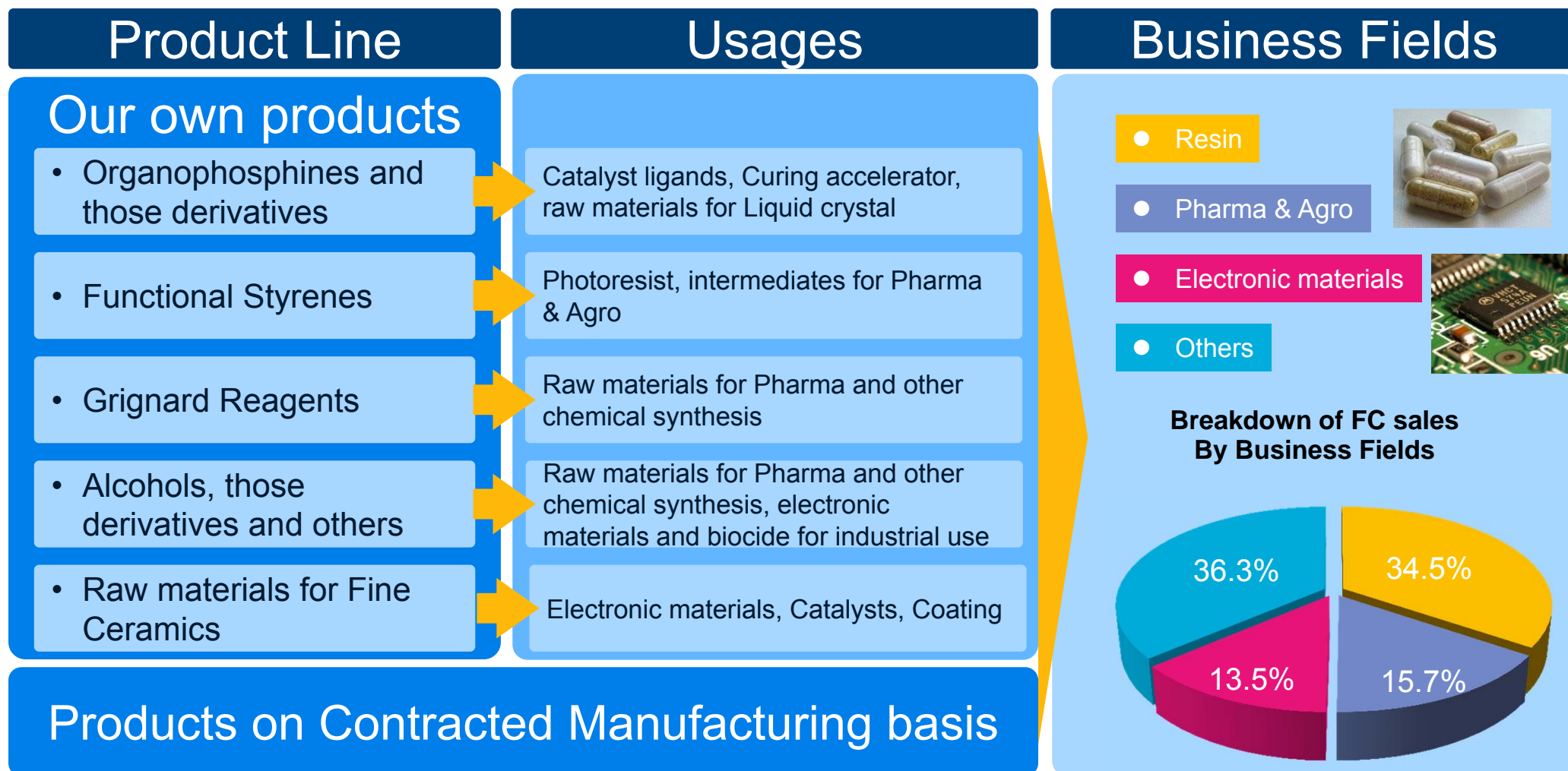
Kasumin, Kasumin-bordeaux, Double-cut

Overseas

- ✓ Registered in 40 countries in the world (Mainly used for the control of Rice blast and bacterial diseases on vegetables and fruits)
- ✓ Registered in USA in 2014 taking more than 10 years for the control of fire blight on apple which gives a serious damage to apple trees in the world, and effective bactericide has been strongly required.
- ✓ We are making effort to expand sales to the growing global market.

□ Fine Chemicals(FC) Business

- Supplying in a wide range of business fields with products made using our core synthesis technology, Grignard reaction (See 'Supplement')
- Sales of our own products and Contracted manufacture



□ Fine Chemicals(FC) Business

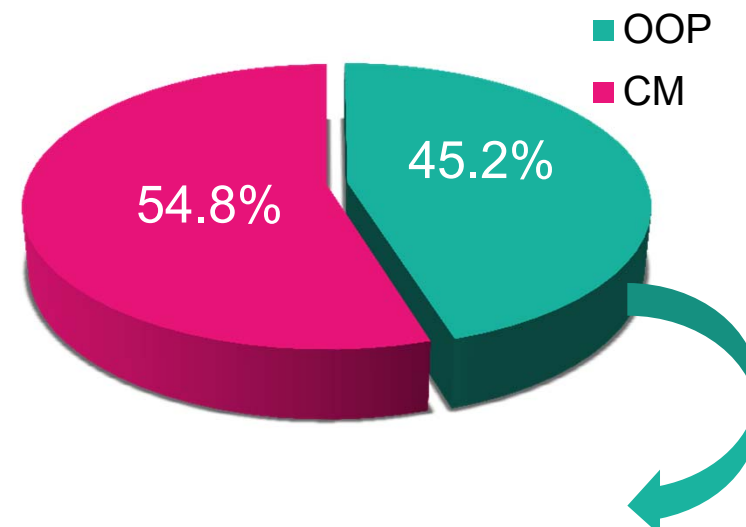
◆ Our Own Products (OOP)

- Major product is TPP (Tri Phenyl Phosphine: Organophosphorus compound)
 - Supplying to a variety of business fields
 - One of leading manufacturers (See 'Supplement')

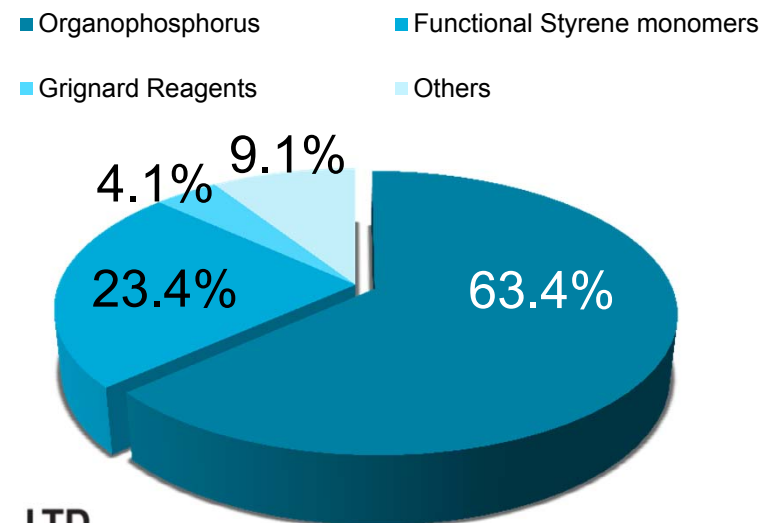
◆ Contracted manufacture (CM)

- Based on accumulated know-how through its long experience, conducting contracted manufacture in close relationship with each customer in a variety of fields.
- Corresponding to a wide range of needs mainly with Grignard base technologies, of which capacity is one of largest in the world.

Breakdown of FC sales (OOP / CM)



Breakdown of FC sales (OOP)



II Result of FY 2016

Consolidated Result

Millions of yen

	FY2013		FY2014		FY2015		FY2016		change	%
Net Sales	38,795	100%	42,416	100%	42,251	100%	40,117	100%	△2,134	△5.0%
Operating Income	248	0.6%	1,364	3.2%	2,497	5.9%	2,464	6.1%	△32	△1.3%
Ordinary Income	801	2.1%	1,790	4.2%	2,956	7.0%	2,777	6.9%	△179	△6.1%
Net Income	487	1.3%	997	2.4%	1,900	4.5%	1,965	4.9%	+65	+3.4%

※Average Exchange Rate : FY2015 ¥120.33 /US\$, FY2016 ¥110.01 /US\$

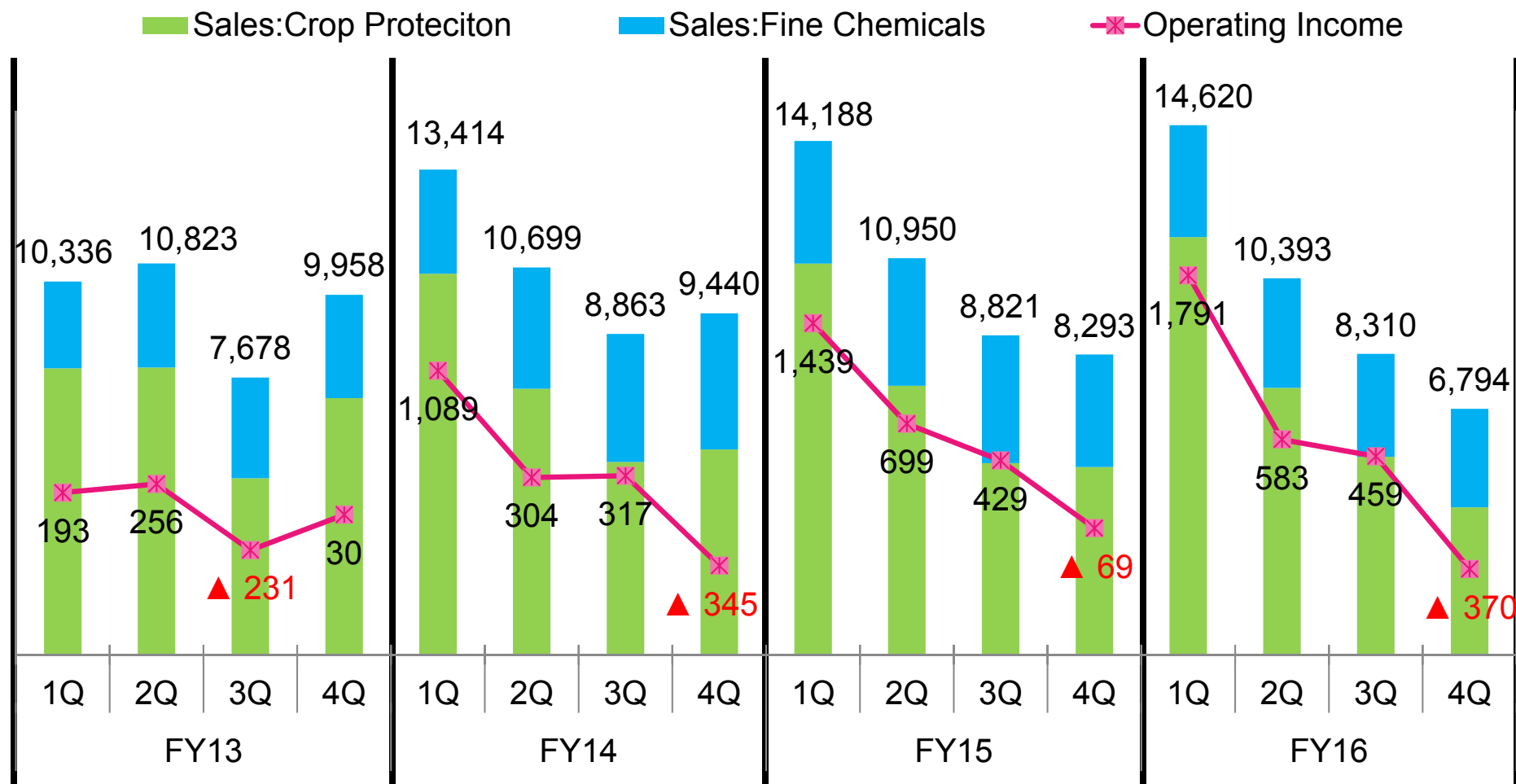
- Sales primarily fell because of the effect of the decline in product demand in our fine chemicals business.
- While we made progress in reducing COGS and other expenses, operating income fell because of the decrease in sales.
- Ordinary income decreased further in part because of foreign exchange losses caused by a strengthening yen.
- Net income increased because of the fall in the corporation tax, etc.

Note: Concerning changes in the display method

While we used to book abandonment losses for part of the inventory assets as non-operating expenses, from the 2016 fiscal year, we have changed this to book them as part of the cost of goods sold. Following this, we have displayed the numbers for the 2013-2015 fiscal years after recalculating operating income and operating income for crop protection business by segment based on the same standard. There has been no change to the way of displaying sales, ordinary income and net income.

Consolidated Result - quarterly sales and profit

Millions of yen



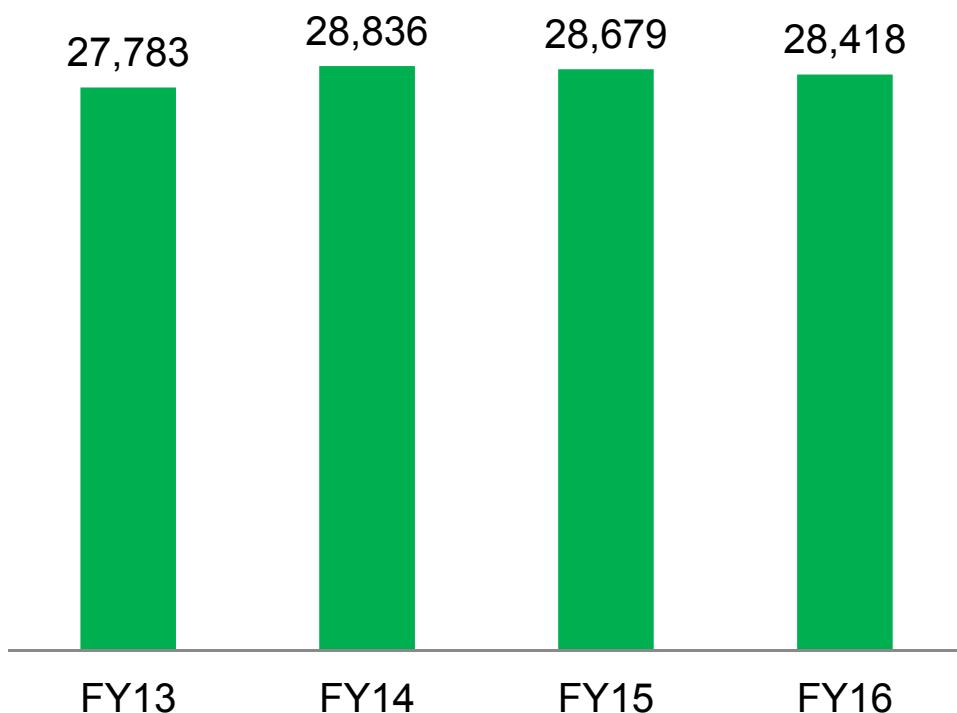
- Because demand for crop protection products is largely seasonal, our company's sales and profit have a tendency to follow this pattern by peaking in Q1 and decreasing from Q2 onwards.

□ Results by segment

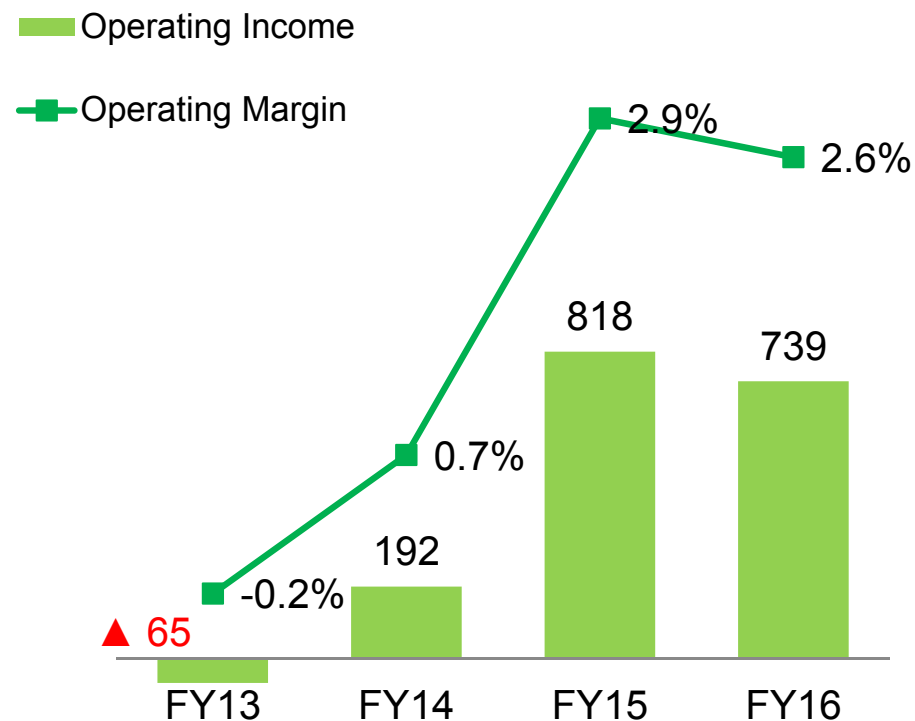
Crop Protection Business

Millions of yen

Sales



Operating Income



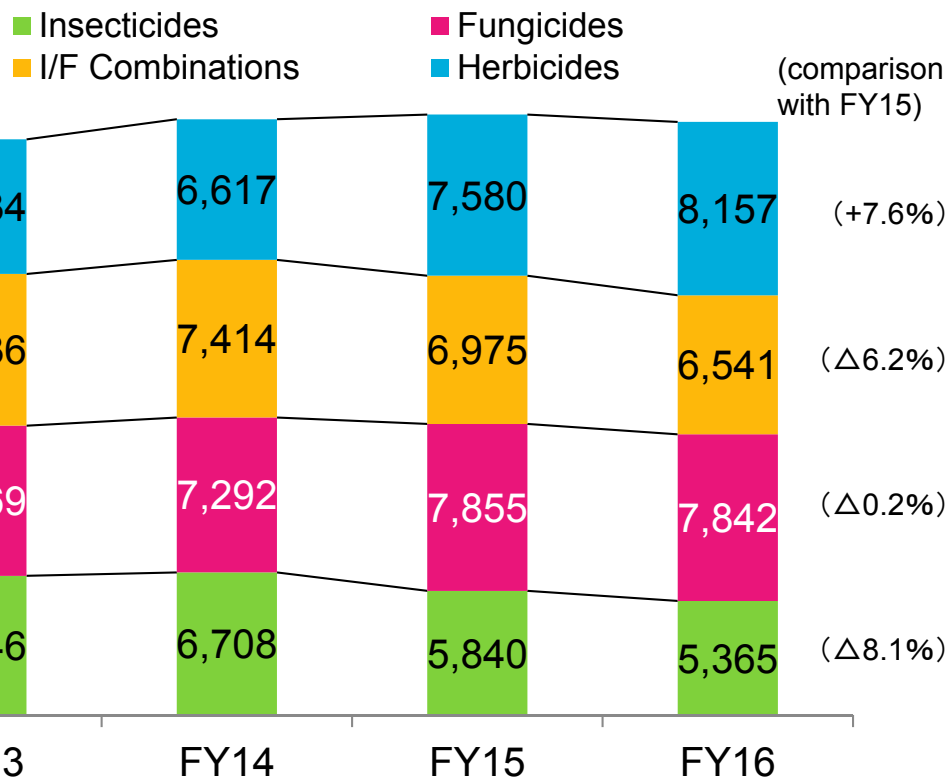
FY 2016 (compared with FY 2015) : Sales Δ 0.9%, Operating Income Δ 9.6%

- While sales decreased slightly for the 2015 fiscal year, factors, such as an increase in sales of products containing proprietary compound, the effect of a weak yen and our withdrawal from unprofitable businesses led to an increase in profitability.
- During the 2016 fiscal year, domestic sales of paddy rice herbicides grew because of sales promotions of new products containing ipfencarbazone, but sales of other products decreased. While orders increased for overseas sales, the effect of the strong yen led to a decrease in sales.

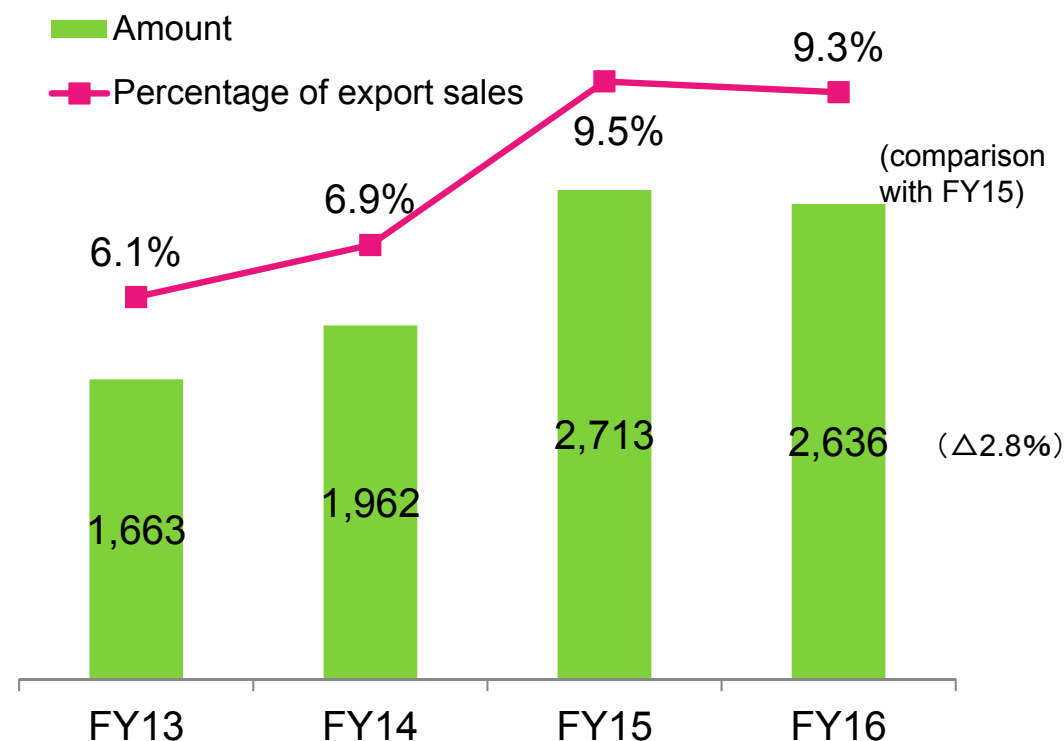
Crop Protection Business

Millions of yen

Sales by Products (non-consolidated)



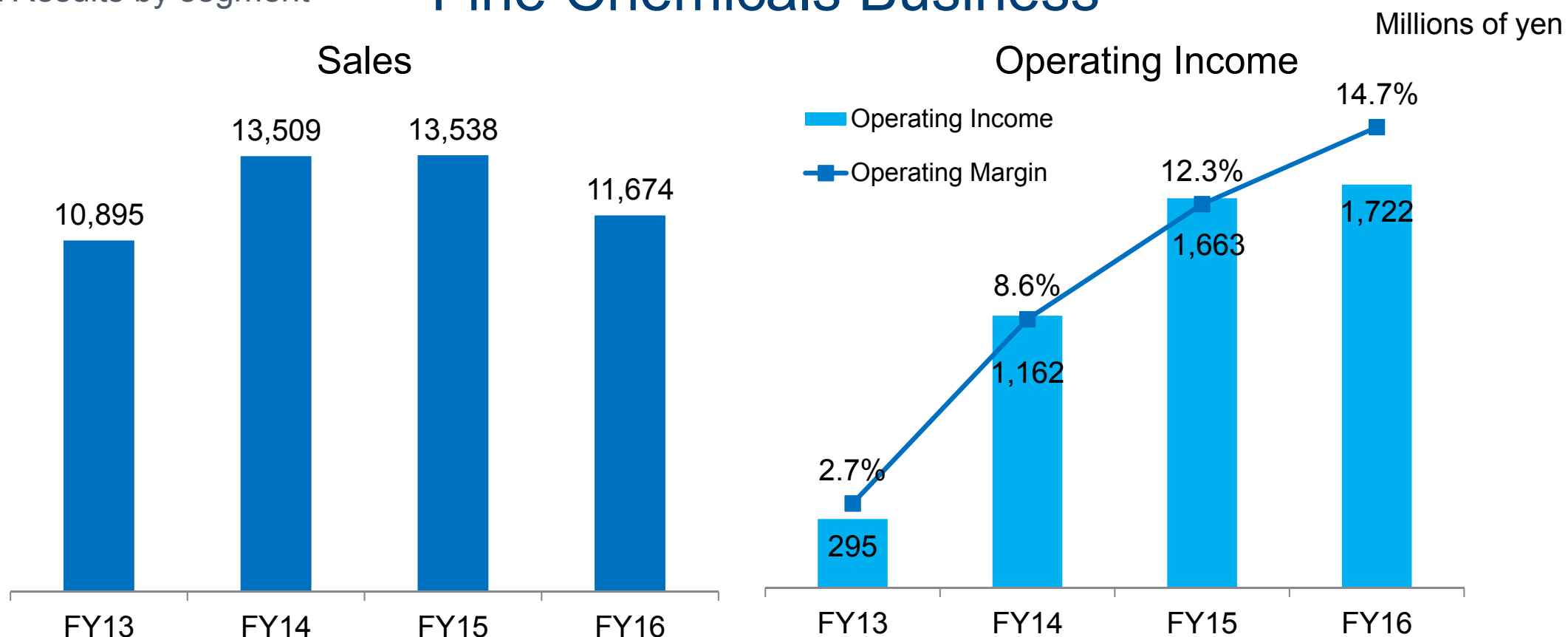
Exports (non-consolidated)



- Sales of herbicides (domestic / exports) increased because of sales promotions for new products containing ipfencarbazone, proprietary compound.
- While sales of fungicides increased, primarily because of an increase in orders from overseas of products containing kasugamycin, proprietary compound, in the 2016 fiscal year the number of orders increased but sales decreased because of the effect of exchange rates (exports).

□ Results by segment

Fine Chemicals Business



FY 2016 (compared with FY 2015) : Sales Δ 13.8%, Operating Income +3.5%

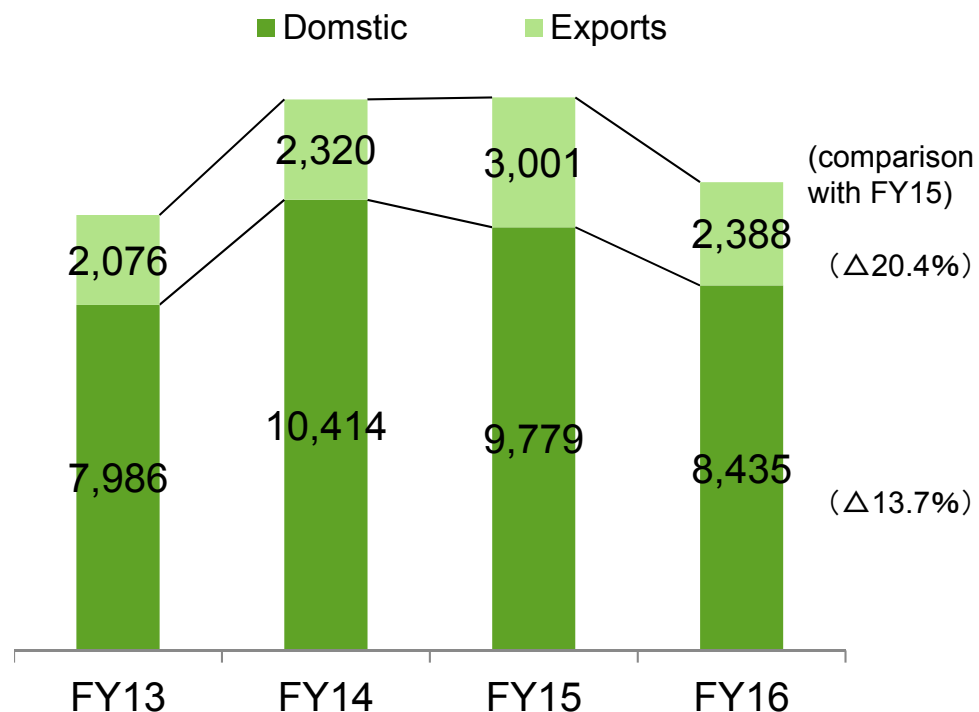
- While sales for the 2015 fiscal year stayed flat, factors such as the effect of a weak yen and withdrawal from unprofitable businesses led to an increase in profitability.
- In the 2016 fiscal year, a global downturn in demand led to sales falling because of sluggish orders with decreases in our core areas, such as resin additives and pharmaceutical and agrochemical intermediates, but operating income increased because of reductions in COGS and other expenses

□ Results by segment

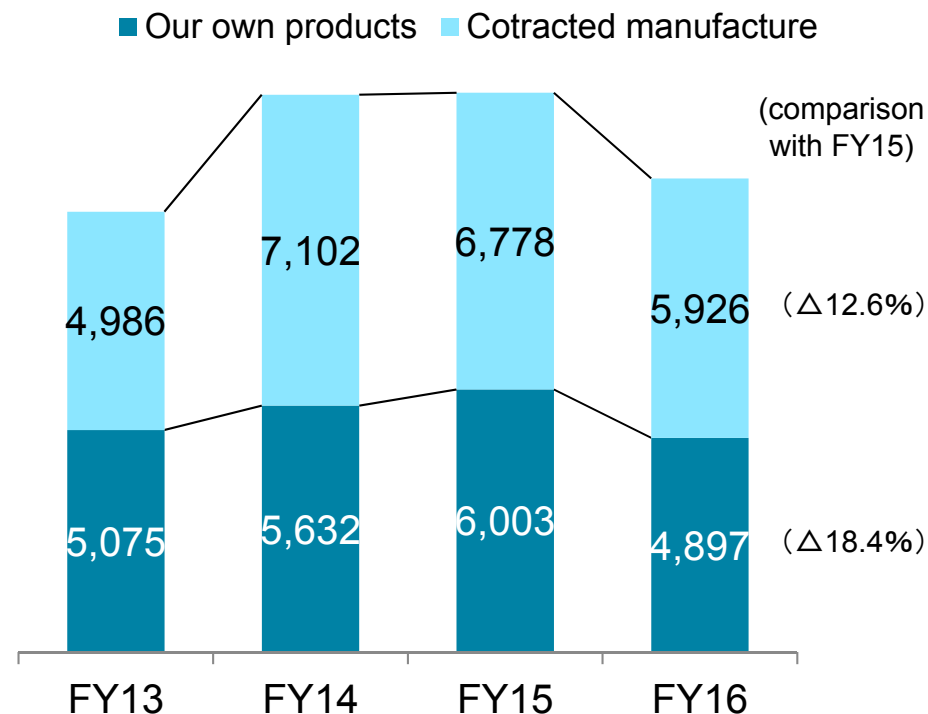
Fine Chemicals Business

Millions of yen

Domestic / Exports (non-consolidated)



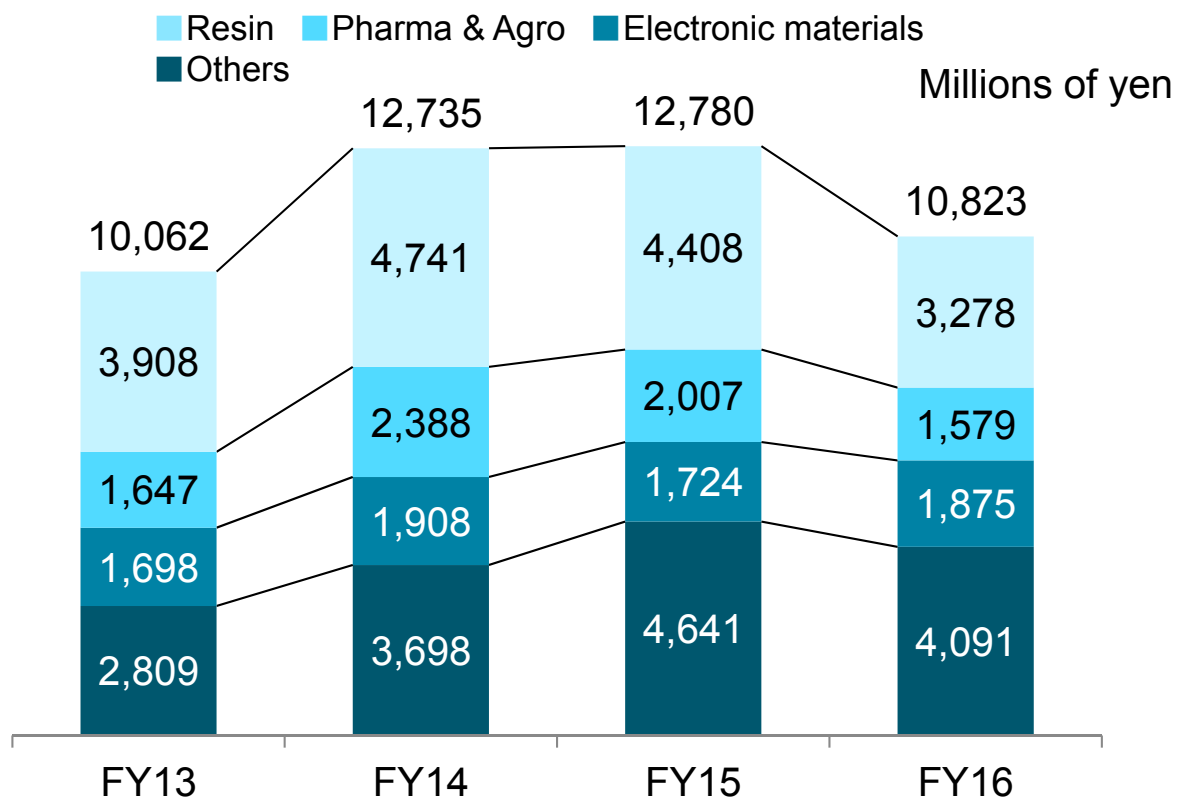
Our own products / Contracted manufacture (non-consolidated)



- While we have seen a continued increase in export sales, in the 2016 fiscal year these decreased because of a global downturn in demand and the effect of exchange rates.
- The split between sales of our own products and consigned products has been roughly half and half.

Fine Chemicals Business

Sales by Business Fields
(non-consolidated)



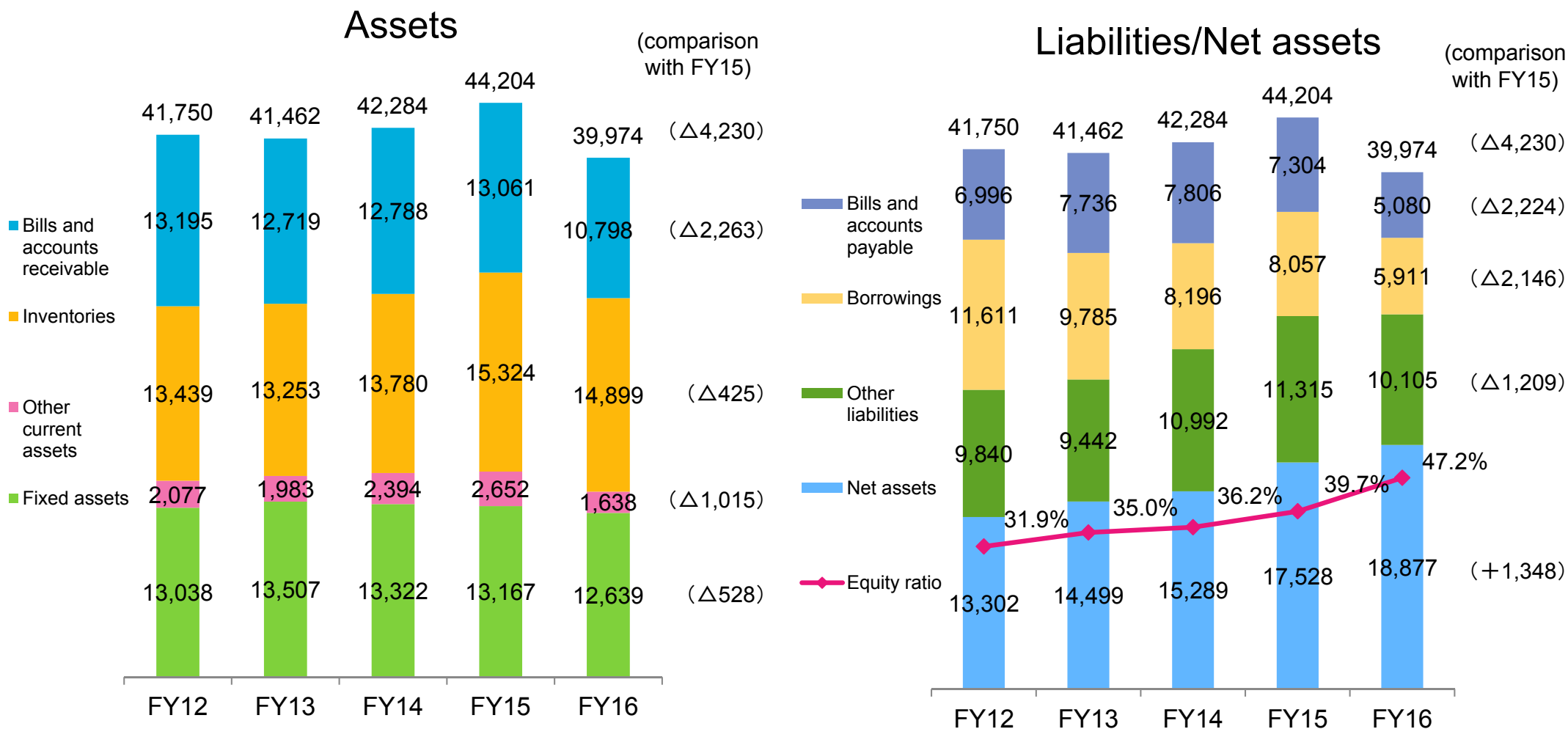
FY2016 compared with FY2015
by Business Fields (non-consolidated)

Business Fields	Comparison with FY15	
R e s i n	↓	Δ25.6%
Pharma & A g r o	↓	Δ21.3%
Electronic materials	↑	+8.8%
O t h e r s	↓	Δ11.8%
T o t a l	↓	Δ15.3%

- While sales of electronic materials increased for the fiscal year 2016, a global downturn in demand led to a decrease in our core areas such as resin additives and pharmaceutical and agrochemical intermediates.

Change in consolidated B/S

Millions of yen



- Through building up our profitability we have improved our equity ratio from 39.7% at the end of the previous fiscal year to 47.2% now.

III Outlook for FY 2017

□ Earnings outlook

Millions of yen

	FY2016 result		FY2017 outlook		change	%
Net Sales	40,117	100%	40,200	100%	+83	+0.2%
Operating Income	2,464	6.1%	2,250	5.6%	△214	△8.7%
Ordinary Income	2,777	6.9%	2,900	7.2%	+123	+4.4%
Net Income	1,965	4.9%	2,000	5.0%	+35	+1.8%

※Exchange Rate : FY2016 actual ¥110.01 /US\$, FY2017 outlook ¥100.00 /US\$

- Sales are generally expected to remain flat due to such factors as trends in the domestic pesticide market and the economic downturn.
- While operating income is expected to decrease because of research development expenditures in our crop protection business and other SGA, ordinary income is expected to increase because of improvements in exchange rate profitability.

□ Earnings outlook by segment

◆ Crop Protection Business

Millions of yen

	FY2016 result		FY2017 outlook		change	%
Net Sales	28,418	100%	28,598	100%	+180	+0.6%
Operating Income	739	2.6%	597	2.1%	△142	△19.2%

● Outlook for the 2017 fiscal year

- With exports, while the shipment quantity is expected to increase, trends in the domestic pesticide market mean that overall sales are generally expected to remain flat.
- Operating income is expected to decrease because of SGA, such as research and development expenditures.

● Main activities in the 2017 fiscal year

- For domestic sales, we will strengthen the spread of our core products, such as paddy rice herbicides and paddy rice seeding box treatment.
- For overseas sales, we are focusing on expanding the number of countries in which our own company developed products are registered, and bringing the new manufacturing plant in Niigata, which was completed in the previous fiscal year, into full-scale operation to manufacture products for export satisfactorily.

□ Earnings outlook by segment

◆ Fine Chemicals Business

Millions of yen

	FY2016 result		FY2017 outlook		change	%
Net Sales	11,674	100%	11,576	100%	△98	△0.8%
Operating Income	1,722	14.7%	1,647	14.2%	△75	△4.3%

● Outlook for the 2017 fiscal year

- Sales are generally expected to remain flat because of the global downturn in demand.
- Operating income is forecast to be slightly down, brought down despite an expected increase in sales of high-profit items by the increase in SGA.

● Main activities in the 2017 fiscal year

- On the sales side, we will focus on creating business opportunities by proactively exhibiting at and participating in exhibitions and academic conferences.
- On the production side, we will improve our productivity in order to increase our production capability and yield for new products and products that increase sales.

IV Progress in 3-year Business Plan

Progress in current 3-year Business Plan

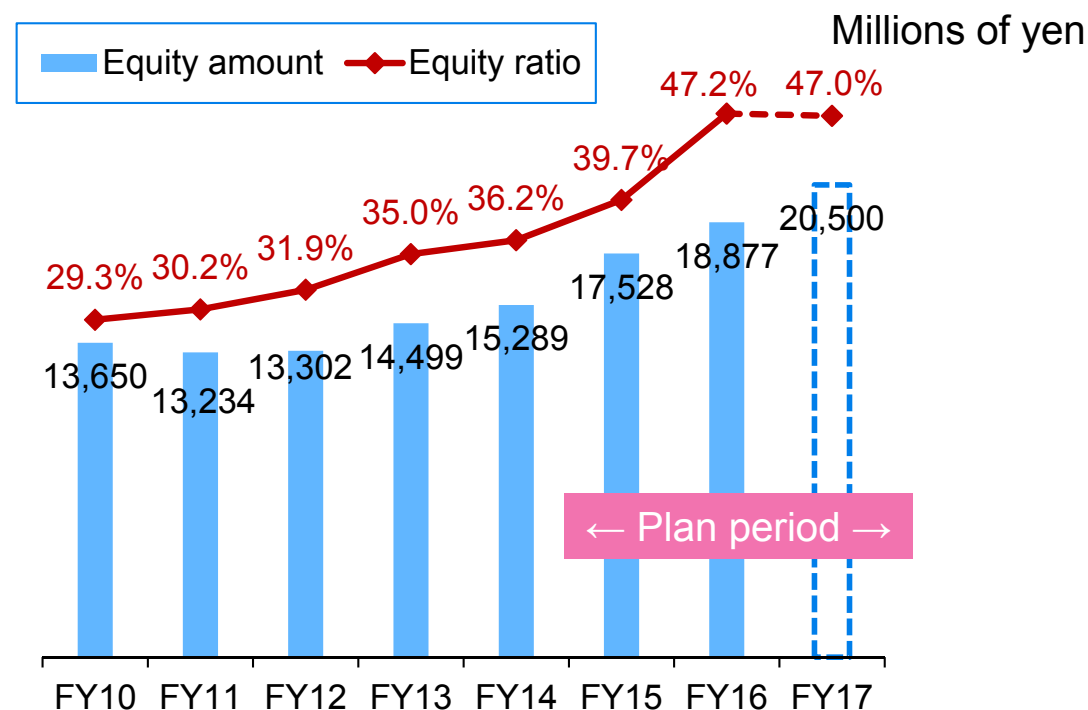
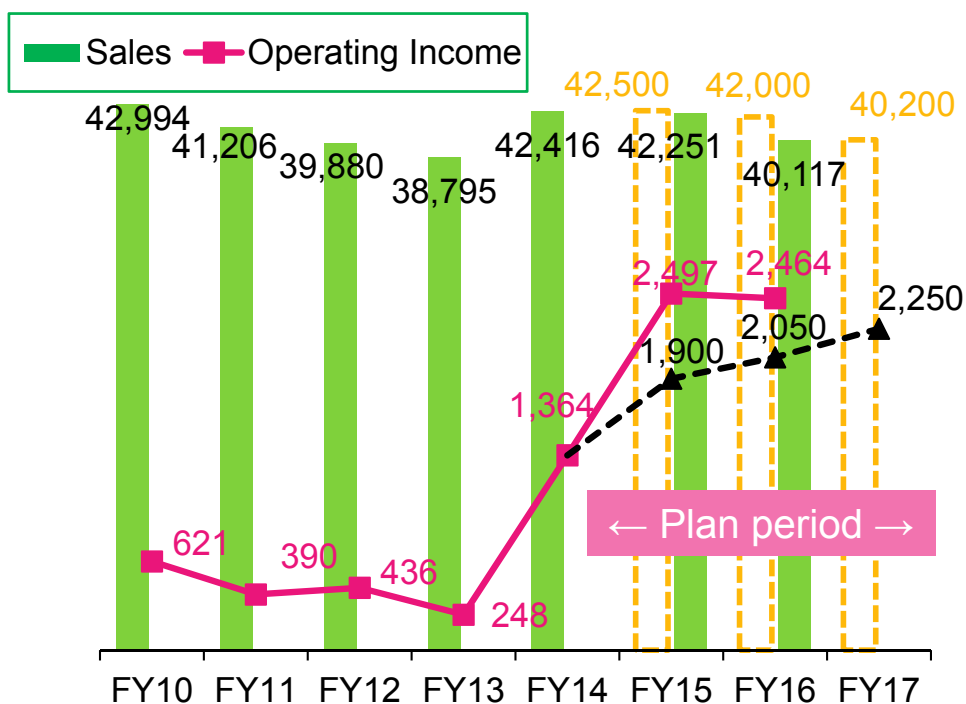
<Plan period>
The fiscal year
2015 – 2017

Gist
of
plan

- We will grow our business while expanding the three pillars of organization, equipment, and development
- We will not be dependent on sales growth, but will promote the transition to a profitable structure

[Most important goal] Strengthen financial base
(improve equity ratio)

From the 2016 fiscal year, we have changed the abandonment losses for part of inventory assets from non-operating expenses to book them as part of COGS, and so we have recalculated the operating income for before the 2015 fiscal year also based on the same standard.



Comparison
with plan

- During the 2015 fiscal year (the first year), while overall sales in our crop protection business were below the plan, sales of high-profit items and overseas sales grew higher than planned, and additionally the effect of a weak yen led to an increase in profit, and in our fine chemicals business primarily sales were above the plan, which also increased profit.
- For the 2016 fiscal year (the second year), while a global downturn in demand – primarily in our fine chemicals business – led to sluggish growth in orders and thus overall sales were below the plan, the decrease in raw materials costs because of the strong yen and increases in productivity lead to a reduction in production costs, which caused profit to be above the plan.

Initiatives during the plan period ◆ Crop Protection Business

Domestic

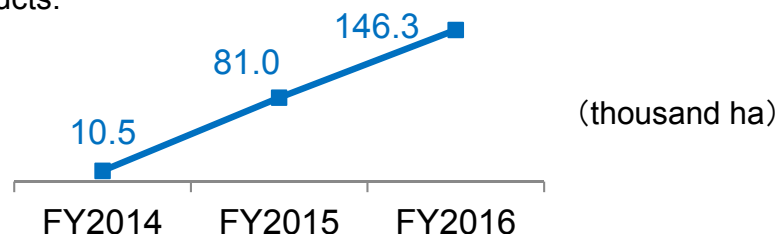
Outline

- Keeping sales in shrinking market
- Registration approval of various types of the formulation containing proprietary compound
- Manufacturing to minimize cost

Progress in FY2015 and FY2016

Sales

- Promotion of products containing proprietary compound
- Domestic Sales have been keeping flat in the shrinking market being compensated by increasing sales of ipfencarbazone products.



Initiatives in FY2017(Final Year)

- Continue to focus on disseminating ipfencarbazone products and maintain domestic sales

Registration

- Preparation of newly registered formulation containing proprietary compound
- Number of registered products containing ipfencarbazone has been increasing successfully.

FY2014	FY2015	FY2016
13 items	15 items	16 items

- Other product registration
- Registration of new product was approved for Rice Seedling Box Treatment using our original technology . (November 2016)

- Continue to register new ipfencarbazone products
- Expected number of registration as of the end of November 2017 : 18 items
- Other product registration
- Plan to register jointly developed products with other companies to strengthen portfolio of horticultural segment.

Manufacturing

- Promote production capacity upgrading and automation in order to improve production efficiency etc.

- Same as described left

□ Initiatives during the plan period ◆ Crop Protection Business

Overseas

Outline

- Enhancement to sales promotion to meet growing overseas demand
- Capital investment for manufacturing of products for export

Progress in FY2015 and FY2016

Initiatives in FY2017(Final Year)

Sales

- Sales of Kasugamycin

- Expanded as rice blasticide in Asia

【Ref.】 Rice Cultivated Area of the World (million ha)

(source: Phillips McDougall)

India	China Rep.	Indonesia	Thailand	Vietnam	Japan	Total
43.00	30.21	12.16	9.46	7.66	1.51	159.04

- Sales in USA have been growing steadily for controlling fire blight on apple and sales for kiwi fruits in New Zealand have been started.

- Hokko Chemical America Corporation

- Subsidiary was established in USA in order to promote Kasugamycin in USA and Latin America.

- Keeping effort to expand sales of Kasugamycin.

- Start of development and sales promotion by Hokko Chemical America Corporation. (February 2017)

Registration

- Registration of Kasugamycin expands to Russia, Uzbekistan. During these 10years, the number of countries where Kasugamycin is registered has been increasing in North America, Eastern Europe and Africa etc. And it becomes 40 countries.

- Preliminary work to obtain registration for sales approval of ipfencarbazone in Asian countries

- Effort to expand countries in Eastern Europe, Africa in which Kasugamycin is registered
- Working to get registration for sales approval of ipfencarbazone in Taiwan, China, India etc.

Manufacturing

- Operation has been started at the new manufacturing plant of Kasugamycin which was completed in Niigata in November 2016.

- Manufacturing Kasugamycin satisfactorily at the new plant to meet growing demand

□ Initiatives during the plan period ◆ Fine Chemicals Business

Outline

- Establishment of overseas (EU, China and USA) sales network system
- Development and Supply of materials corresponding to market needs
- Creation of new businesses

Progress in FY2015 and FY2016

Sales

- Partnership with domestic and overseas customers for sales promotion
 - Reinforcement of business activities by partnering with domestic manufacturers and trading companies in EU
- Continual action of collecting market information and research of new business opportunities in China
- Development of sales activities based on our strength with diverse lineup of catalyst ligands & curing accelerators

Initiatives in FY2017(Final Year)

- Continuation of establishment of overseas sales network system, especially in China and USA
- Continuation of sales promotion focusing on our original new compounds such as catalyst ligands and curing accelerators

R&D

Manufacturing

- Development of new products
 - Launch our own product for Pharma & Agro, Catalysts (for synthesis of API)
 - Patent application of new compounds (curing accelerators)
- Development of new Contracted manufacturing businesses
 - Through expansion of our core technologies and utilization of own catalyst ligands etc., promotion of contracted manufacturing business on our proposal basis with process improvement as well as by user's prescriptions
- Improvement of development speed
 - Promote early development and industrialization of new products (own products / consigned products) through effective use of pilot plant enhanced (2 series) and high vacuum distillation equipment

- Continuous consideration toward introduction of equipment that contributes to expansion of core technologies
- Promotion of consigned product development by utilizing our original catalyst ligand
- Speed-up of new products development through effective utilization of facilities

□ Initiatives during the plan period

□ Business structural reforms

Main initiatives		Profit-raising Effect *Note (Rough estimate of yearly results for the 2015 – 2016 fiscal year)
Withdrawal of unprofitable items / from unprofitable businesses	<ul style="list-style-type: none"> Cancel production of octyl tin in the fine chemicals business 	App. JPY200 million
	<ul style="list-style-type: none"> Hokko Sangyo Co., Ltd. Withdrew from home gardening crop protection business Hokko Pax, Ltd. Withdrew from crop protection consignment packing and processing business 	
Cost reductions	<ul style="list-style-type: none"> Continue initiatives to create production bases* and planned production *Means production using separate types of formulations for each factory, such as powdered formulations and liquid formulations 	App. JPY300 million
	<ul style="list-style-type: none"> Thorough operation of initiatives* by aiming to install suitable equipment that contributes to reducing production costs *Initiatives of aiming to install suitable equipment through constructing an activity framework, establishing methods for surveying and analyzing standard prices, and strengthening negotiations with outside parties 	
	<ul style="list-style-type: none"> Restructuring into an appropriate organization according to the nature and size of operations 	
	<ul style="list-style-type: none"> Making improvements through continually reviewing freight storage fees 	

*Note: Because the timing and nature of initiatives varies with each item, the standards for each item also vary for the calculated amounts of the profit-raising effect, such as amounts where comparisons have been made with the fiscal years prior to the plan period or amounts of losses or expenses for businesses or organizations that have been cancelled or changed. The calculated amounts of the profit-raising effect are totals that include such other initiative items.

□ Towards the establishment of the next 3-year Business Plan

- Under the new 3-year Business Plan starting from December 2017, we aim to construct a sustainable growth model by 2020, being the last year of the plan and the 70th year since the company's founding.

◆ Target state by 70th year

- To have established a stable revenue base in existing businesses
- To have developed new revenue areas in relation to existing businesses
- To have established a sound financial base
- To be striving for efficient capital management

◆ Direction of plan to achieve target state

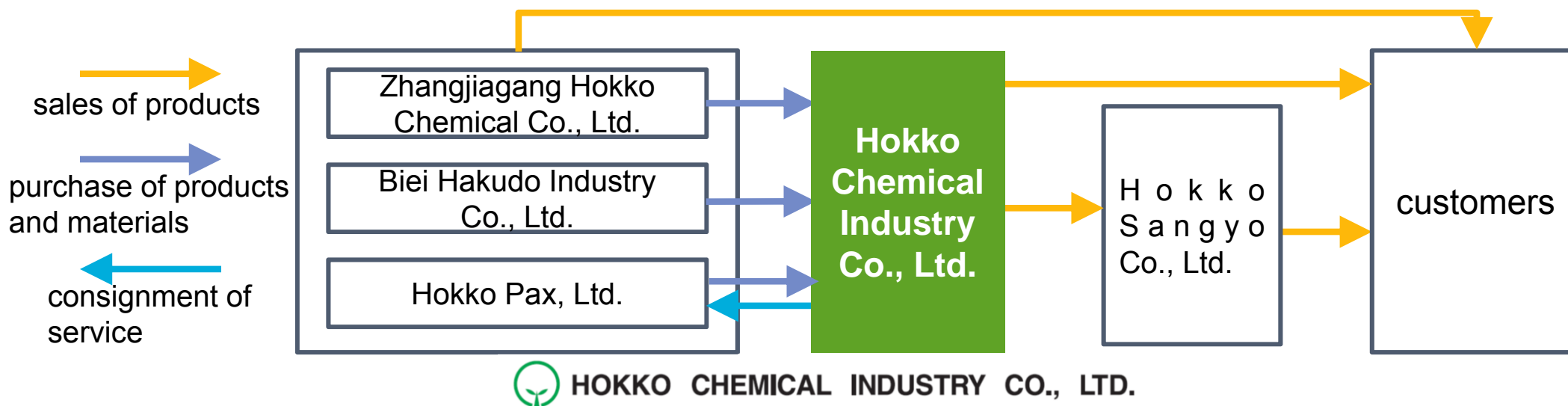
- Evolution/deepening of existing businesses
 - Strengthening of R&D abilities for the early creation of own company agrochemical active ingredients
 - Strengthening of overseas sales
 - Further optimization of production system
- Expansion of business areas and regions
 - Construction of new businesses with M&A and alliances as options
- New capital policy
 - Establishment of optimal balance between liabilities and capital
 - Clarification of distributions policy and standards combining stable dividends and increasing distributions according to profit trends



■ Supplement

□ Consolidated subsidiaries

Company name	Location	Main business activities
Zhangjiagang Hokko Chemical Co., Ltd.	Jiangsu(China)	manufacturing and sales of fine chemical products
Biei Hakudo Industry Co., Ltd.	Tokyo, Hokkaido	manufacturing and sales of copper substrates, clay, and balloon
Hokko Pax, Ltd.	Tokyo, Okayama	sales of petroleum products, service of our company's employee benefits
Hokko Sangyo Co., Ltd.	Tokyo	sales of fine chemical products



□ Grignard reaction

- Generic name of reaction involving organomagnesium halogen compounds (Grignard reagents) developed in France in 1900 by Victor Grignard (later received a Nobel Prize in chemistry). Grignard reagents are highly reactive and are applied to a wide range of organic synthesis reactions.
- It currently occupies an important position in the synthesis of Pharmaceutical and Agrochemical intermediates, OLED raw materials, styrene compounds, boron compounds, phosphorus compounds, etc.
- Comparing with other organometallic (lithium, sodium, etc.) reactants, they are less flammable and easier to handle, so they are widely used industrially, but it is difficult to control the heat generation during synthesis of reagents, so there are few companies doing mass synthesis of the Grignard reagent.

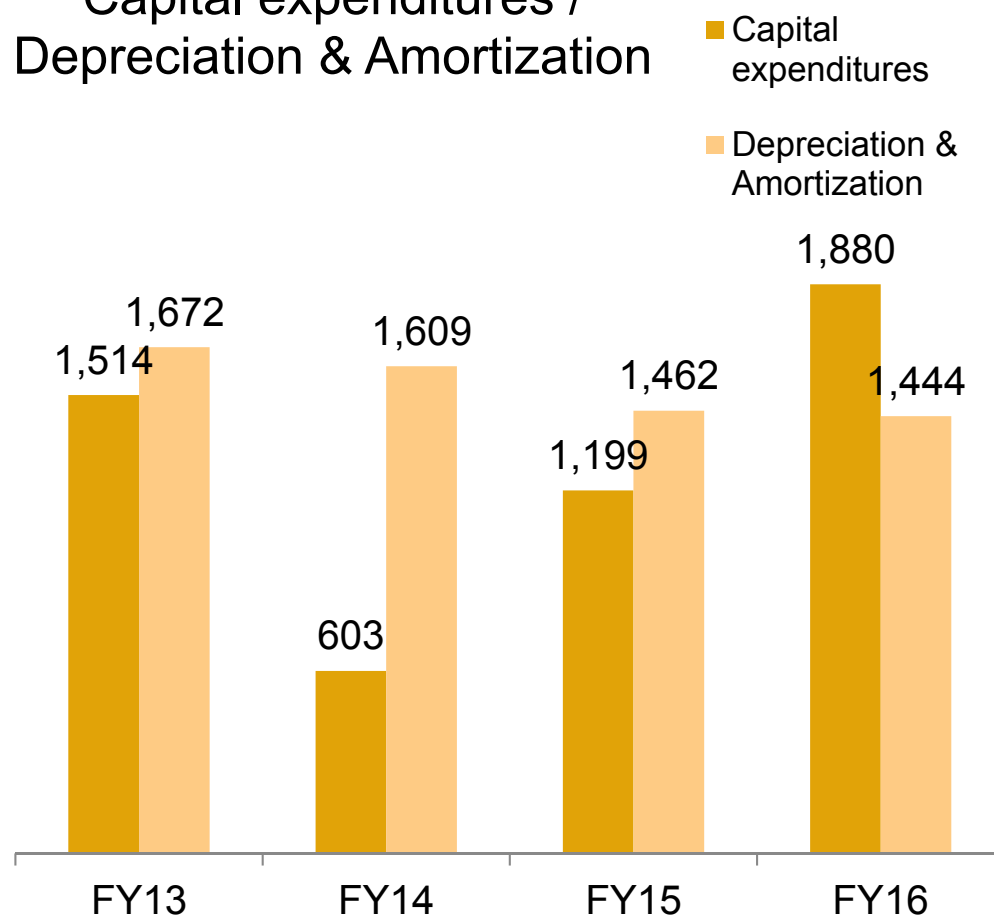
□ TPP (Tri Phenyl Phosphine)

- World demand is more than 5,000 tons and it is increasing trend in recent years.
- Rival manufacturers are a major European company and start-up companies in China.
- It is widely used in the fields of vitamins, pharmaceutical and agricultural chemicals, petrochemicals, electric materials, etc.

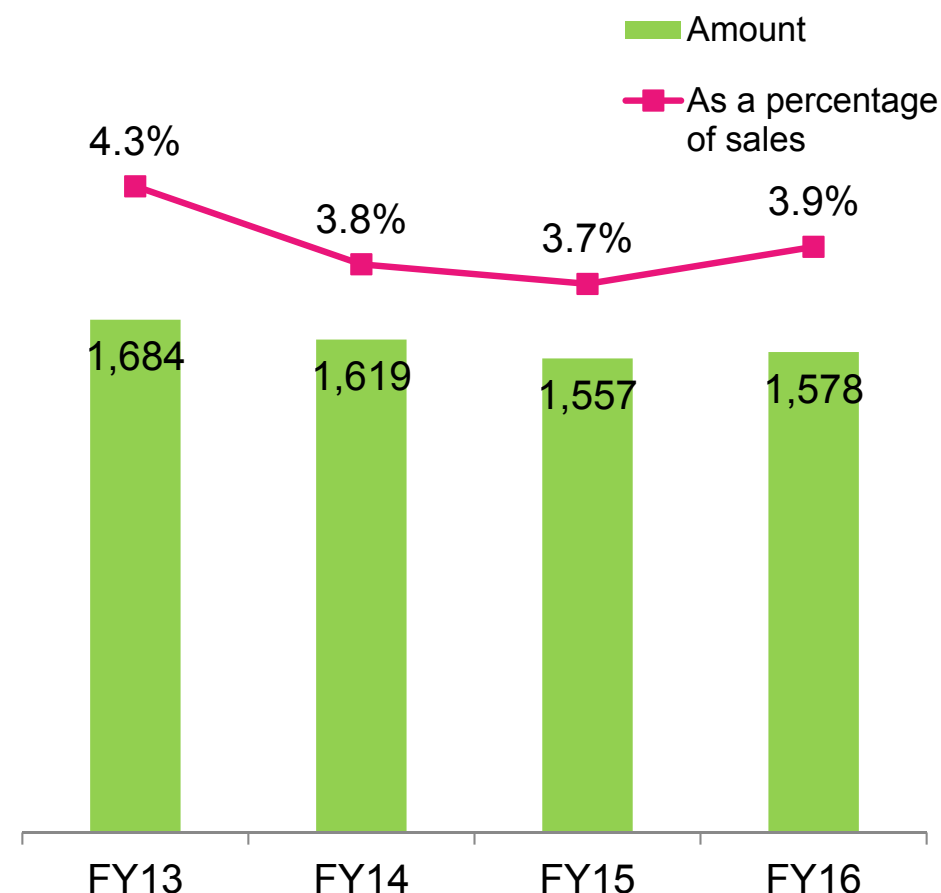
Capital expenditures / R & D expenditures

Millions of yen

Capital expenditures / Depreciation & Amortization



R & D expenditures



- Capital expenditures of a total of JPY 4.5 billion is planned for the current 3-year Business Plan period (fiscal year 2015 - 2017).



The earnings forecasts described in these materials have been estimated on the basis of currently available information, and it is possible that the actual financial performance will differ because of a variety of factors going forward.

Contact

HOKKO CHEMICAL INDUSTRY CO., LTD.

Planning & Management Department

TEL: 03 3279 5151

FAX: 03 3279 5195