

The Nippon Synthetic Chemical Industry Co., Ltd.

(4201: Tokyo 1st)

Issue Date: May 27, 2015

Focus on product development in view of expansion of production facilities for core product OPL Film in near future

Enhance capital investment on back of strong demand to further expand core business

The Nippon Synthetic Chemical Industry ("Company") is a specialty chemical manufacturer developing business focused on acetic acid-based products since the successful industrialization of the first organic composition acetic acid in Japan in 1928. (i) Polyvinyl alcohol (PVOH), (ii) Ethylene vinyl alcohol copolymer (EVOH) and (iii) Pressure sensitive adhesive resins (Specialty Polymers) are three main business segments, with "OPL Film, an optical-use PVOH film for polarizing plates and "SOARNOL", EVOH resins mainly used for food packaging materials are two core products supporting earnings of the Company. The Company continues to dominate the markets for both products together with Kuraray and maintains a solid position in the industry.

On the back of growing demand, the Company has been actively expanding the production capacity, including an initiation of the large-scale expansion of production facilities for "OPL Film" in FY2013-3 and for "SOARNOL" in FY2014-3. As to "OPL Film", with increasing needs for thinner films along with thinner/lighter devices year-by-year, thickness of films is now 30μm compared with 75μm in early 2000s, the Company is now focusing on establishment of the technology to produce 20μm-thick films, while also planning an expansion of production lines for wider films, to aim for the future revenue growth.

Operating margin set to improve from the bottom in FY2015-3

The Company reported revenues of 105.2B yen for FY2015-3, a growth in three consecutive years, when excluding the impact of a change in the accounting period of consolidated subsidiaries made in the previous year (*), but suffered from contraction in the operating income and deterioration in the operating margin. The deterioration in profitability was caused by (i) a delay in full-scale operations of the new OPL Film facility from the originally scheduled Q1 FY2015-3 to November 2014 due to a longer-than-expected time consumed to stabilize the quality, and (ii) a sharp increase in prices of vinyl acetate monomers (raw material) partly due to the withdrawal of manufacturers in Europe. However, both issues have been already solved, and the new EVOH facility with lower utility costs is scheduled to start operations in the US in Q2 FY2016-3. The operating margin is expected to improve from the bottom this year, driven by a sales expansion from the enhanced production capacity as well as the plan to seek cost reduction by putting priority on higher operations in the US.

(*) Revenues for FY2014-3 after excluding the impact of a change in the accounting period of consolidated subsidiaries would be 100.2B yen, with the operating income of 14.8B yen and the operating margin of 14.8%.

FY	Revenue	y/y	Operating Income	Operating Margin	Ordinary Profit	Ordinary Profit Margin	Net Income	Net Margin	EBITDA	EPS (yen)
Mar-11 Actual	91,260	101.3%	10,087	11.1%	9,460	10.4%	6,131	6.7%	16,732	62.94
Mar-12 Actual	87,243	95.6%	7,117	8.2%	6,763	7.8%	3,154	3.6%	13,714	32.38
Mar-13 Actual	91,976	105.4%	11,859	12.9%	12,375	13.5%	8,158	8.9%	18,792	83.75
Mar-14 Actual	111,151	120.8%	16,229	14.6%	16,712	15.0%	8,018	7.2%	23,358	82.32
Mar-15 Actual	105,202	94.6%	11,186	10.6%	11,296	10.7%	6,648	6.3%	18,238	68.25
Mar-16 Company Estimate	112,000	106.5%	14,000	12.5%	14,300	12.8%	9,500	8.5%	n.a.	97.54

Basic Report (FY2015-3)

SQUADD Research & Consulting, Inc.

Tomoko Okuyama / Sadao Sakamoto

Company Information	
Name	NIPPON GOHSEI
Equity Code	4201
Market Section	TSE's 1st Section
Location	2-4, Komatsubara-cho, Kita-ku, Osaka
President	Katsumi Kimura
Foundation Date	1927/3/30
Capital	17,989 B yen
Listed Date	May of 1949
URL	http://www.nichigo.co.jp/
Industry	Material >Chemistry >Synthetic Resins
Accounting Period	March

Key Indicators As of 2015/5/22	
Stock Price	894 yen
Yearly High	966 yen (2015/5/11)
Yearly Low	662 yen (2015/2/5)
Shares Outstanding	98,369,186 Stock
Unit of Trading	1,000 Stock
Market Cap	87.942 B yen
Dividend (Est)	20.00 yen (FY2016/3)
Div-Yield (Est)	2.24 % (FY2016/3)
EPS (Est)	97.54 yen (FY2016/3)
EPS (Act)	68.25 yen (FY2015/3)
PER (Est)	9.17 times (FY2016/3)
PER (Act)	13.10 times (FY2015/3)
PBR (Act)	1.04 times (FY2015/3)

JPY(M)

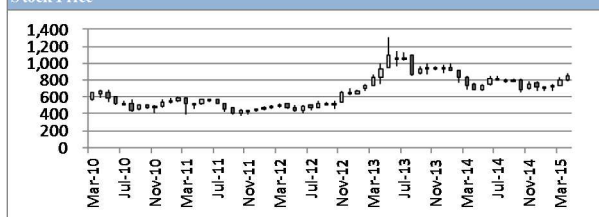
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Brief Investor Summary

JPY(M)

Name(J)	日本合成化学工業株式会社	Company Name(E)	NIPPON GOHSEI	Foundation Date	1927/3/30
Location	2-4,Komatsubara-cho, Kita-ku, Osaka	URL	http://www.nichigo.co.jp/	President	Katsumi Kimura
Market Section	TSE's 1st Section	Equity Code	4201	Company Rating	A- (R&I)
Industry	Material > Chemistry > Synthetic Resins	Capital	17,989 mil yen	Number of Employees	non-consolidated 1,047
Underwriter	SMBC Nikko Sec	Main Bank	Mizuho Bank, Ltd.	(permanent staff)	consolidated 1,679
Auditor	Ernst & Young ShinNihon LLC	Going concern note	none	Average Salary*	non-consolidated (thousand yen) 7,336
Business Profile	NIPPON GOHSEI manufactures and sells chemical products specialized in acetic acid resins, broadly in three segments: "Synthetic Resins", "Organic Synthesis" and "Others". Synthetic Resins is a key segment, contributing to about 74% of revenues and over 98% of operating income. The segment develops Polyvinyl alcohol (PVOH), Ethylene-vinyl alcohol copolymer (EVOH) and Specialty Polymer (pressure sensitive adhesive business). Among them, PVOH film for polarizing plate "OPL Film" and EVOH resin "SOARNOL" are two core products, where the company dominates the market with Kuraray, maintaining a position as the two great rivals.				
Future Outlook	Given solid demand for two core products, the company has been active in capital investment since FY2013-3 to expand the business through enhancement of its production capacity. In addition to the polarizing plate market, demand for products for touch panels is expected to increase, along with diffusion of tablets and smartphones. Demand for EVOH resin currently centered in the developed markets is also expected to expand in the emerging markets. While cultivating demand for the existing products through expansion of applications, the company focuses on fostering another core products following two core products as the next challenge.				

Stock Price



As of 2015/5/22

Close Price	Market Cap	EY	PER	PBR	Div-Yield**
894	87,942	105,867	13.10	1.04	2.24%
FY	Mar-12	Mar-13	Mar-14	Mar-15	Latest
FYE Price	509	839	741	797	n.a.
High Price	573	869	1,306	853	966
Low Price	367	408	686	656	662
EPS	32.38	83.75	82.32	68.25	n.a.
PER	15.72	10.02	9.00	11.68	n.a.
PBR	0.89	1.25	0.94	0.93	n.a.

* Forecast

Income Statement	Mar-12	Mar-13	Mar-14	Mar-15
Revenue	87,243	91,976	111,151	105,202
Gross Profit	21,278	26,662	32,893	27,713
Operating Income	7,117	11,859	16,229	11,186
Ordinary Profit	6,763	12,375	16,712	11,296
Net Income	3,154	8,158	8,018	6,648
Depreciation	6,597	6,933	7,129	7,052
R & D Costs	2,824	3,388	3,458	3,575
Interest Expenses	273	224	200	64
EBITDA [i]	13,714	18,792	23,358	18,238
CAPEX [ii]	8,028	10,772	20,263	14,512
EBITDA-CAPEX	5,686	8,020	3,095	3,726

[i] EBITDA=Operating Income+Depreciation

[ii] CAPEX=Capital Expenditure on CF Statement

Balance Sheet	Mar-12	Mar-13	Mar-14	Mar-15
Cash and Deposits	4,879	8,433	5,785	7,312
Accounts Receivable	24,213	25,120	24,478	27,375
Inventory	17,528	19,788	24,134	23,074
Other Current Assets	2,842	3,711	2,510	2,955
Total Current Assets	49,464	57,054	56,907	60,716
Tangible Assets	43,436	48,762	66,511	73,078
Intangible Assets	665	489	496	407
Investments and Other Assets	6,195	5,873	6,193	7,909
Total Fixed Assets	50,296	55,125	73,200	81,394
Total Assets	99,761	112,180	130,107	142,110
Current Liabilities	28,289	33,148	38,822	41,992
Non-Current Liabilities	15,475	13,587	14,515	16,398
Total Liabilities	43,764	46,735	53,337	58,390
Stockholders' Equity	59,254	66,222	72,481	77,111
Other Net Assets	(3,258)	(778)	4,289	6,609
Total Net Assets	55,996	65,444	76,770	83,720
Interest Bearing Debt	11,977	10,040	15,350	25,237

Cash flow Statement	Mar-12	Mar-13	Mar-14	Mar-15
CF from Operating Activities	9,223	16,365	14,150	9,552
CF from Investing Activities	(8,575)	(10,557)	(20,033)	(14,618)
Free CF	648	5,808	(5,883)	(5,066)
CF from Financing Activities	(2,872)	(3,319)	1,996	6,263
Translation Adjustments	(142)	425	954	330
Net CF	(2,367)	2,914	(2,933)	1,527

EV: Enterprise Value, EV=MarketCap + (Interest Bearing Debt—Cash and Deposits—Securities)

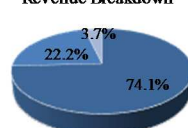
Major Shareholders	Share
Mitsubishi Chemical	50.4%
Japan Trust Service TB	5.6%
State Street Bank and Trust	3.6%
Japan Master Trust TB	2.6%
Asset Management Service TB	1.5%
Others	36.3%
Total	100.0%

As of 2014/4/30

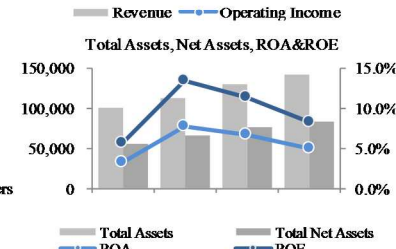
* FY2014-3



Revenue Breakdown



■ Synthetic Resins ■ Organic Synthetic ■ Others



Segment Information	Revenue	Share%	Profit	Net Margin
FY2015-3				
Synthetic Resins	77,944	74.1%	11,381	14.6%
Organic Synthetic	23,371	22.2%	5	0.0%
Others	3,887	3.7%	189	4.9%
Adjustment	-	-	(389)	0.0%
Total	105,202	100.0%	11,186	10.6%

FY2014/3	1Q	2Q	3Q	4Q	Total
Quarterly					
Revenue	24,242	25,197	25,459	36,253	111,151
Operating Income	3,980	3,822	3,571	4,856	16,229
Operating Margin	16.4%	15.2%	14.0%	13.4%	14.6%
FY2015/3					
Quarterly					
Revenue	26,068	26,461	25,662	27,011	105,202
Operating Income	3,504	2,961	2,155	2,566	11,186
Operating Margin	13.4%	11.2%	8.4%	9.5%	10.6%
Revenue Growth y/y	107.5%	105.0%	100.8%	74.5%	94.6%

*Blue: Company estimate

Key Indicator	Mar-12	Mar-13	Mar-14	Mar-15
Revenue Growth y/y (%)	-4.4%	5.4%	20.8%	-5.4%
Operating Income (%)	8.2%	12.9%	14.6%	10.6%
Ordinary Profit (%)	7.8%	13.5%	15.0%	10.7%
Net Income (%)	3.6%	8.9%	7.2%	6.3%
EBITDA/Revenue (%)	15.7%	20.4%	21.0%	17.3%
COGS/Total Revenue (%)	75.6%	71.0%	70.4%	73.7%
SG&A/Total Revenue (%)	16.2%	16.1%	15.0%	15.7%
R&D Expense/Revenue (%)	3.2%	3.7%	3.1%	3.4%
ROA (%)	3.2%	7.7%	6.6%	4.9%
ROE (%)	5.7%	13.4%	11.3%	8.3%
Current Ratio	174.9%	172.1%	146.6%	144.6%
Capital Ratio (%)	56.1%	58.3%	59.0%	58.9%
D/E ratio (times)	0.21	0.15	0.20	0.30
Interest Bearing Debt / EBITDA (times)	0.87	0.53	0.66	1.38
Valuation	Mar-12	Mar-13	Mar-14	Mar-15
Market Cap (B JPY)	50,070	82,532	72,892	78,400
EV (B JPY)	57,168	84,139	82,457	96,325
EV/Revenue (times)	0.66	0.91	0.74	0.92
EV/EBITDA (times)	4.17	4.48	3.53	5.28

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1. Business Overview

1-(1) Segment Composition

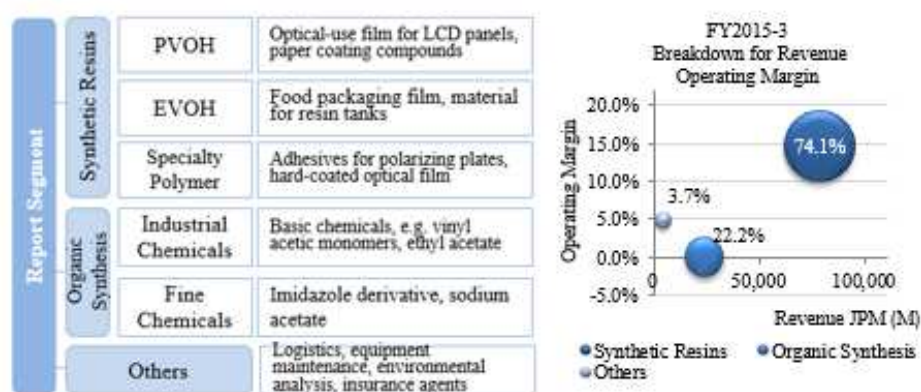
Synthetic Resins segment accounts for about 75% of revenues and over 95% of operating income.

◆ Synthetic resins as core business

The Nippon Synthetic Chemical Industry Co., Ltd. (the "Company") is a specialty manufacturer of acetic acid-type resins, comprising of three segments: (i) Synthetic Resins, (ii) Organic Synthesis, and (iii) Others. (i) Synthetic Resins consisted 74% (77.9B yen) of total revenues in FY2015-3 (105.2B yen), with the remaining 26% divided into (ii) Organic Synthesis (about 22%, 23.4B yen) and (iii) Others (about 4%, 3.9B yen).

(i) Synthetic Resins generated about 98% of total operating income, serving as a major source of income. Other two segments are mostly running at a break-even (except in FY2011-3). A trend over the past five years also shows that (i) Synthetic Resins drive the business as the Company's core segment, contributing to 70-75% of revenues and over 95% of operating income.

Synthetic Resins business stands on three pillars: (1) PVOH (polyvinyl alcohol or PVA), (2) EVOH (ethylene vinyl alcohol copolymer) and (3) Specialty Polymers (pressure sensitive adhesive resins), each consisting (1) PVOH: 40%+, (2) EVOH: 40%- and (3) Specialty Polymers: around 20% of the segment revenues, respectively.



Bubble indicates revenue, % indicates Operating Margin share.
Source: summary of financial results and financial results materials.

◆ Business Results by Segment

		JPY(M)					
		Company estimate*					
		Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
Revenue	Synthetic Resins	64,946	61,510	67,113	83,560	77,944	84,000
	Organic Synthesis	22,932	22,034	20,643	23,754	23,371	24,000
	Others	3,381	3,699	4,219	3,836	3,887	3,800
	Total	91,260	87,243	91,976	111,151	105,202	112,000
Operating Income	Synthetic Resins	10,234	7,244	11,837	16,407	11,381	13,900
	Organic synthesis	(131)	35	174	49	5	300
	Others	200	231	243	218	189	100
	Sub total	10,303	7,512	12,254	16,675	11,575	14,300
	Adjustment	(216)	(395)	(395)	(446)	(389)	(400)
	Total	10,087	7,117	11,859	16,229	11,186	14,000
Operating Margin	Synthetic Resins	15.8%	11.8%	17.6%	19.6%	14.6%	16.5%
	Organic synthesis	-0.6%	0.2%	0.8%	0.2%	0.0%	1.3%
	Others	5.9%	6.2%	5.8%	5.7%	4.9%	2.6%
	Total	11.1%	8.2%	12.9%	14.6%	10.6%	12.5%

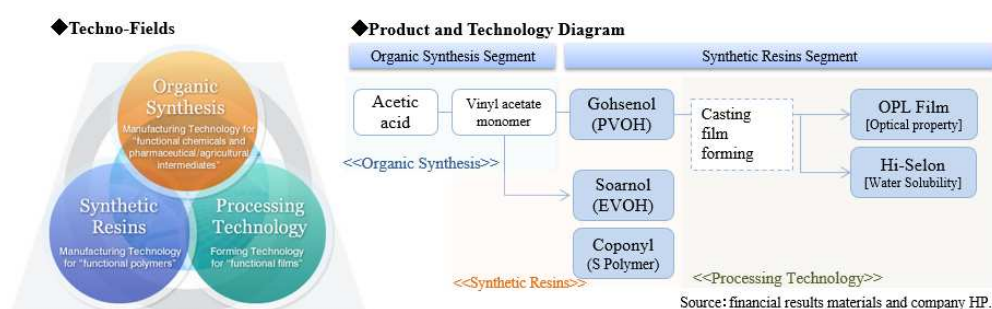
Source: summary of financial results and financial results materials.

1-(2) Overall Business Picture

◆ Expanding business with focus on acetic acid-based products since foundation

The Company has developed business focused on acetic acid-based products since the successful industrialization of the first organic composition acetic acid in Japan in 1928. Based on three techno-fields: "Organic Synthesis", "Synthetic Resins" and "Processing Technology", the Company seeks to develop high value-added products by "deepening core technologies", "combining and integrating existing technologies" and "actively challenging to new fields".

Out of the "Synthetic Resins" which drives the Company's business, three main businesses: (1) PVOH (polyvinyl alcohol), (2) EVOH (ethylene vinyl alcohol copolymer) and (3) Specialty Polymers (pressure sensitive adhesive resins) are summarized below.



◆Main Product of Synthetic Resin Business

PVOH		Specialty Polymer
Gohsenol Gohsenx Gohsenol EG		Biodegradable and water-soluble synthetic resin, used as material for adhesive, paper, emulsifiers and suspension agents, fiber, and films as well as additive to processing agent for pharmaceuticals and cosmetics.
IT and Electronic use Materials OPL Film		Optical-use PVOH film. It is used to make polarizing film, an indispensable element of LCD displays.
Functional Film Hi-Selon		Water-soluble PVOH film. It is an optimal film for packaging with excellent heat-sealing property and printability.
EVOH・EVA*		BVOH**
Soarnol G. Soarnol		Ethylene-vinyl alcohol copolymer. It is used for film, bottles and tubes for food packaging as well as construction material and gasoline tanks.
Soarlite		EVOH for engineering plastic.
Soarblen		EVA that contains more vinyl acetate used for PVC modifier.
Soaresin		Resin used as an agent for modifier of resin or as a stabilizer for extrusion.
		Nichigo G-Polymer
		Amorphous vinyl alcohol type resin. It is a high-function new material that has higher gas barrier property than EVOH as well as moldability and biodegradability.

*EVA: ethylene-acetic acid vinyl alcohol copolymer
**BVOH: Butendiol vinyl alcohol copolymer

Source: financial results materials and company HP.

1-(3) Synthetic Resins:

a. GOHSENOL

Also used as a raw material of various synthetic resin products such as "OPL Film".





◆GOHSENOL: water soluble and biodegradable synthetic resins

"GOHSENOL" (polyvinyl alcohol), a base product in the PVOH business, is produced by polymerizing and saponifying vinyl acetate monomers. "GOHSENOL" is one of few water-soluble synthetic resins, has superior features in film formation, adhesiveness, surface activity and safety, and used for a variety of fields and applications including fiber processing, pharmaceuticals and cosmetics, plastics, construction materials, paper processing, raw material for intermediate membrane of automobile front glasses. In addition, with a biodegradable property, and certified as "GreenPla (*)" by Japan BioPlastics Association, it attracts attention as an environment-friendly material.

The Company's other products such as "OPL Film" and "Hi-Selon" are produced from "GOHSENOL". The Company has also expanded "GOHSENOL" into other products with additional special features such as "GOHSENX".

Among the production capacity of polyvinyl alcohol in Japan at 292,000 ton/year, the production capacity of the Company is 70,000 ton/y (about 25% share), which is second to Kuraray (124,000 ton/y, about 43% share) and the same position with JAPAN VAM & POVAL (see P22).

◆Main applications for Gohsenol

Category	Main applications	Shape/Packing
Adhesive and Binder	Adhesives (resoluble, paste, glue), building/civil work (cement, mortar, plaster), inorganic binder (ferrite, zirconium, alumina), synthetic leather, drug (tablet, cataplasm), compost, agricultural chemical pellet	 
Paper processing	Surface treatment (paper, paperboard), specialty paper (thermal recording, ink-jet, exfoliate papers)	Powder
Suspension agent	Dispersant agent for suspension polymerization of vinyl chloride	Granule
Emulsifiers agents	Vinyl acetate, emulsifier for emulsion polymerization of acryl emulsion	
Textile processing	Warp sizing agent (span, filament), finishing agent	
Molding	Film, PVF (sponge), PVB (interlayer, resin), water-soluble molded material, inner/outer pieces	

Source: company HP.

(*) Characteristics of GreenPla: The term "Biodegradability" does not mean that the material is broken into small and separate pieces, but is defined as the characteristics of material that can be microbiologically degraded to the final products of carbon dioxide and water, which in turn are recycled in the nature. Biodegradability of GreenPla is determined by the internationally defined test methods and evaluated based upon the pre-established criteria. Only products that meet the additional criteria such as contents of heavy metals and safe intermediate reaction products are allowed to wear the mark of GreenPla. (Source: Japan BioPlastics Association)

b. OPL Film

A material used to make a "polarizing plate", an indispensable element of LCD.

◆OPL Film: duopoly by Kuraray (70% market share) and The Nippon Synthetic Chemical Industry (30%)

"OPL Film" is an optical-use PVOH film (PVA film) produced from "GOHSENOL". After development of its application to a "polarizing plate (polarizing film)", an indispensable element of LCD, OPL Film has grown as one of the Company's core products as LCD TVs have become popular. As liquid crystals have characteristics to change a molecular sequence and refract the light, by putting liquid crystals between two "polarizing plates" and passing and blocking the light, a screen can be displayed. A PVOH film which functions as a polarizer has been used as a material for polarizing

The Nippon Synthetic Chemical Industry and Kuraray are only two manufactures of optical-use PVOH films in the world.

While Nitto Denko has started an in-house production of coating PVAs, demands are limited for now.

plates for a long time, because of difficulty in finding substitute products. There is also a high technical barrier to entry, and Kuraray and the Company are only two companies in the world that produce optical-use PVOH films, and dominate the market with 70% and 30% share, respectively (estimate based on their production capacity).

In recent years, along with thinner and lighter devices, PVOH films have become thinner from the initial 75μm to 30μm, and the Company is recently engaged in development of 15-20μm-thick films.

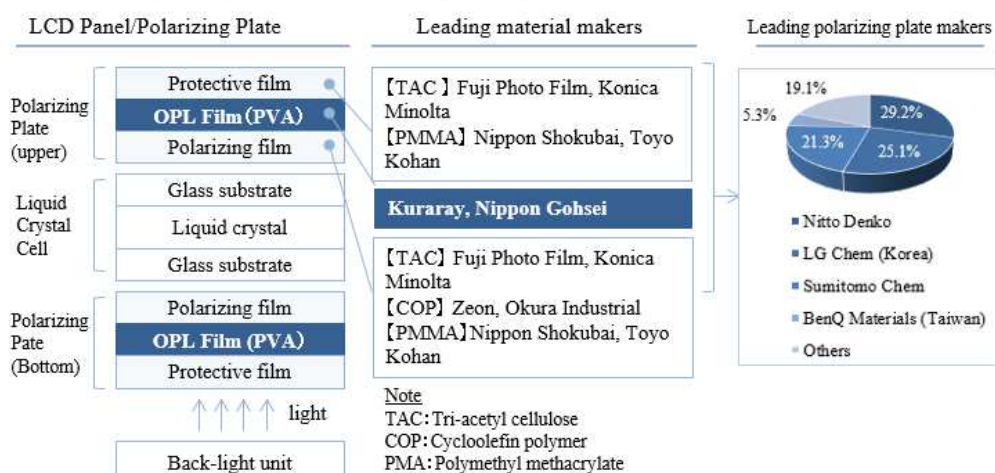
As to a polarizing plate, a three-layer structure which bonds a PVOH film as a polarizer with protective films and a polarizing film is a mainstream structure, but in 2013 Nitto Denko, the largest polarizing plate manufacturer, started an in-house production of "coating polyvinyl alcohol (coating PVA)" as a substitute for a PVOH film. Entering in FY2015-3, a full-scale practical use of a coating PVA has started as a coating PVA was adopted by "iPhone 6" and "new iPad". Although thickness of a coating PVA seems around 5μm, which contributes to thinner devices, it appears that too many number of processes make the yield rate lower at this stage. Therefore, application of a coating PVA is currently limited to small- to mid-size products such as high-spec smartphones and tablets, and out of estimated amount used of PVOH about 9,700 ton (converted by 28.7 g / m² (20μm)) in 2014, the amount used of coating PVAs is estimated to be only around 20 ton (about 0.2% share). (*)

Polarizing plates are produced by adsorbing iodine to a PVOH film, stretching it by 4-5 times and sticking it with TAC films, etc. If a 20μm-thick PVOH film currently under development comes to the practical use, as there is almost no difference in thickness from a coating PVA, considering the stretching process, the Company aims for a practical use of 20μm-thick films as early as possible.

Currently, use of polarizing plates (square measure base) is consisted of around 70% for TVs and around 30% for smartphones and tablets. While demand for use in smartphones/tablets is recently growing rapidly, demand for use in TVs continues to control the market.

(*) Fuji Chimera Research Institute, Inc., "2015 Current Status and Outlook of Functional Polymeric Films"

◆Polarizing plate (polarizing film) industry/leading makers



1-(4) Synthetic Resins: EVOH

A resin with a high barrier feature,
mainly used in food packaging

Kuraray and The Nippon Synthetic Chemical Industry substantially dominate the EVOH resin market.

◆EVOH: synthetic resins brought innovation in food packaging

Core product of EVOH (Ethylene vinyl alcohol copolymer) is "SOARNOL" which is mainly used as a food packaging material. Despite high gas barrier properties, PVOH is not suitable to molding due to a high intensity. By amalgamating ethylene with PVOH to improve processability, "SOARNOL" (EVOH resin) combines the gas barrier properties with melt extrudability.

"SOARNOL" is used, by being added film-lamination after co-extrusion molding with other resins and film processing, for packaging films, bottles, tubes and sheet formation material. While about half of applications of "SOARNOL" are for foods packaging such as meats and cheese, it is also used for mayonnaise bottles and retort pouches.

While various grades of "SOARNOL" are available in accordance with the ethylene content, derivative products such as "Soarlite" for engineering plastic and "Soarblen" that contains more vinyl acetate content and is used as a modifier of polyvinyl chloride (PVC).

In addition, since "SOARNOL" is composed of carbon, oxygen and hydrogen, it emits no toxic gases when burned with combustion heat of less than half of polyethylene, which has attracted a great deal of attention as an environmentally safe material.

◆Application Examples of Soarnol



Source: company HP.

Kuraray, The Nippon Synthetic Chemical Industry and Chang Chun Petrochemical (Taiwan) are only three manufactures of EVOH resins in the world, with production capacity (ton/year) of 81,000, 51,000 and 10,000, respectively, and the market share measured by the production capacity of 57%, 36% and 7%, respectively (based on disclosure materials of each company and hearing with the Company).

In addition to a high technical barrier to entry, EVOH resins are non-commodity products that require customization and technology services according to application, and an ability to supply products that meet with needs of customers is critical. A heavy burden of initial costs, such as around one million yen per ton of capital investment required to construct a new production plant, also works as a barrier to new entry.

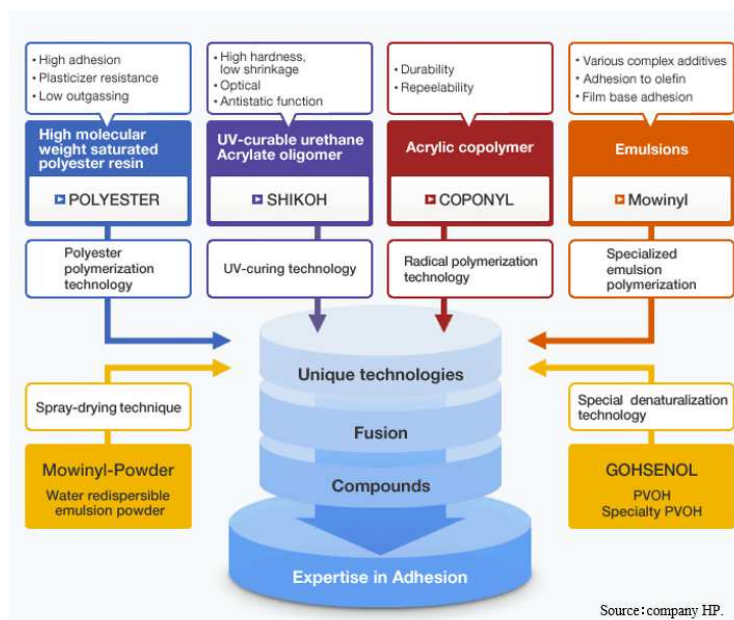
1-(5) Synthetic Resins Specialty polymer

Developed into a variety of pressure sensitive adhesive resins in a wide range of applications

World No. 2 player in the field of optical-use pressure sensitive adhesives for polarizing plates

◆Development of a variety of pressure sensitive adhesive resins

The Specialty Polymer business provides a variety of pressure sensitive adhesive resins, under the concept of "Pressure Sensitive Adhesive Skills", by combining and integrating technologies in cohesive, adhesive and coating fields. Representative products include "COPONYL", "SHIKOH", "Mowinyl" and "Polyester" (see chart in P5).



◆Specialty Polymers: properties/main use of key products

Product	Properties	Main use
Coponyl (Acrylic copolymer)	Durability, removability	Pressure sensitive adhesive, coating (building, plastic), ink, varnish, adhesives, resoluble agent
Shikoh (UV curable urethane acrylate resin)	High hardness and low shrinkage, optical competence, antistatic function	Coating agent, ink, pressure sensitive adhesive, adhesives, metal coating
Mowinyl (Synthetic resin emulsion)	Miscibility with various agents, adhesion to olefin, adhesion to film substrate	Coating, construction materials, adhesives, pressure sensitive adhesive, paper processing
Nichigo Polyester (High molecular weight saturated polyester resin)	High adhesion, plasticizer resistance, low outgas	Adhesives, film coating, ink, metal coating, toner binder

Source: company HP.

◆Strong in optical-use pressure sensitive adhesives for polarizing plates

The Company is particularly strong in the field of "optical-use pressure sensitive adhesives for polarizing plates" used in FPD (flat panel display) of TVs and PC monitors. The market of optical-use pressure sensitive adhesives for polarizing plates is dominated by top four companies (combined market share of about 93%), among which the Company ranks the world's No.2 with the market share of about 23% (the Company's estimate).

Products used for "optical-use pressure sensitive adhesives for polarizing plates" are "COPONYL" and "SHIKOH". "COPONYL" is a copolymer mainly from acrylic acid ester using solvents such as ethyl acetate and toluene, and is used for optical applications as well as a wide range of applications including masking tapes/protective masking films, labels, vinyl chloride base material, double-sided tapes and other grades.

"SHIKOH" is a urethane acrylate-type UV/electron beam curable resin. As hardening time is shorter compared with a thermoset-type resin and designing is possible under solventless or water-based conditions, it is also used as an environment-friendly resin. A broad range of properties, ranging from ultra-hard types to soft and elasticity types, are available, and by changing the structural design according to applications, products are provided to meet with customers' needs.

◆ Growing demand for UV curable-type resins mainly in optical applications

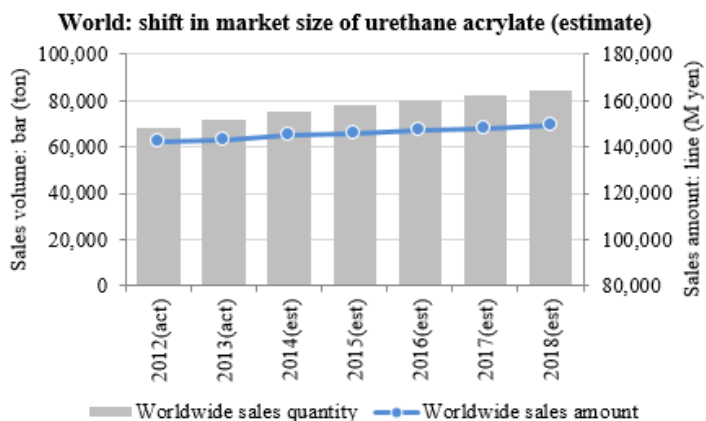
In recent years, UV curable-type resins are drawing attention in the optical field. The Company offers "SHIKOH", a UV curable-type urethane acrylate resin, in this field. The world sales volume (estimate) of urethane acrylate is expected to increase from 71,500 ton in 2013 to 84,500 ton in 2018, up nearly 20% due to strong demand. ^(*1) Globally, the sales volume of Allnex (Belgium) and Arkema (France) is standing out with a combined market share of nearly 50%, but in the domestic market, the Company is positioned at the top with about 15% domestic market share (2013). ^(*1)

While urethane acrylate is used not only for optical applications but for automobile head lamps, cosmetic cases and painting for building materials, the demand growth is supported by optical applications, and the market is on an expanding trend along with increasing popularity of smartphones and tablets. The sales volume in the domestic market is estimated around 6,600 ton in 2013, and projected to stay flat or slightly increase by 2018 ^(*1), while demand for optical applications is anticipated to increase. The Company focuses on high-value-added products for optical applications, enjoying a strong growth in revenues particularly for use in bonding touch panels. ^(*2)

Among optical applications, optically elastic UV curable-type adhesive is a product which is expected to grow further. Although a touch panel display usually sets an air gap between a cover glass and a polarizing plate for the purpose of absorbing shocks, by filling this gap with optically elastic UV curable adhesives, it is possible to make the display thinner while enhancing intensity. In addition, improvement in visibility and achievement of high contrast are leading to wider applications.

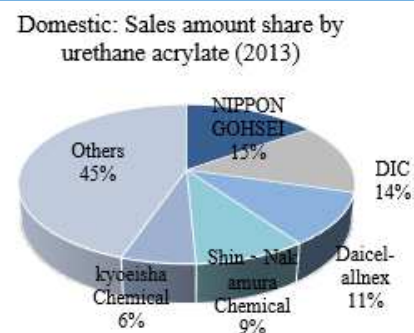
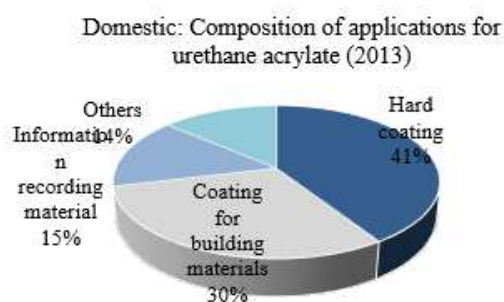
^(*1) Estimates by Fuji-Keizai.

^(*2) A touch panel has a multi-layer structure, for which optical-use transparent adhesives (SHIKOH or COPONYL) are used to bond materials.



Source: Fuji-Keizai, "2014 Overall Landscape of Optical Functional Materials and Product Market"

1-(6) Organic Synthesis



Source: Fuji-Keizai, "2014 Overall Landscape of Optical Functional Materials and Product Market"

◆ Sales of residual chemicals not internally consumed

In the organic synthesis business, (i) commodity chemicals such as "acetic acid", "vinyl acetate monomer" and (ii) fine chemicals such as "sodium acetate" and "imidazole derivative" used as raw materials of pharmaceuticals and food additives are produced and sold.

With regard to "vinyl acetate monomer" and other chemicals produced in the organic synthesis business, which are used as raw materials of PVOH and EVOH produced in the synthetic resin business, those portion not internally consumed are structured to be sold externally.

These residual chemicals are characterized by a low margin and severe price competition due to more commodity chemicals, compared with the synthetic resin business. The Company plans to continue sales of these residual chemicals as an ancillary business to the core business, but review the product portfolio with a view to suspending sales of less profitable products.

2. Company Overview

2-(1) History / Topics in FY2015-3

a. History

Established in 1927, listed in 1949

Started production of "GOHSENOL" in 1949 and "SOARNOL" in 1984

◆ Focus on optical applications since around 1990

Established in 1927, the Company has a long history. FY2015-3 represents the 132nd fiscal term. Shares were listed in Tokyo and Osaka Stock Exchanges in 1949, the 23rd fiscal term. "Keiretsu" (capital-tied) relationship with a parent Mitsubishi Chemical Corp. started in 1963 when Mizushima Gohsei Kagaku Kogyo Co., Ltd. (current Mizushima Plant) was established under joint management (see P16). The Company has developed the business around "acetic acid" as a base product and organic synthetic chemical as a base technology since its origin, started production of "GOHSENOL" (polyvinyl alcohol, PVOH) in 1949 and "SOARNOL" (ethylene-vinyl alcohol copolymer) in 1984.

The Company accelerated development of the overseas business centered on the EVOH business in mid-1990s, acquired EVOH manufacturing facility from DuPont in 1994 and established NOLTEX (US) as a production base of "SOARNOL". In 1996, the Company started operation in Europe, and subsequently in 2001, established NIPPON GOHSEI UK for production of SOARNOL.

Since mid-2000s, the Company has moved to develop the Asian market, established an office in China in 2006 and a sales subsidiary in Thailand in 2010.

In the technology front, the Company has focused on development of products for optical applications since 1990, started production of "OPL Film (optical-use PVOH

film)" in 2003, and subsequently released a series of products including pressure sensitive adhesives for use in touch panels and optical-use hard coat resins.

◆Company History

Year	Category	Note
1927	General	Four wood-vinegar-manufacturing companies jointly established Nippon Gohsei Kagaku Kenkyusho.
1928	General	Changed the company's name to The Nippon Synthetic Chemical Industry Co., Ltd, succeeded in industrialization of the first organic composition acetic acid in Japan.
1949	General	Listed shares at the Tokyo & Osaka Stock Exchanges.
	PVOH	<u>Completed construction of "GOHSENL" production plant at the Ogaki Plant.</u>
1963	General	Cooperated with Mitsubishi Kasei Kogyo (currently Mitsubishi Chemical Corporation) for conversion of petrochemicals and jointly established Mizushima Gohsei Kagaku Kogyo.
1971	General	Merged with Mizushima Gohsei Kagaku Kogyo, and made it the Mizushima Plant.
1984	EVOH	<u>Started full-scale production of "SOARNOL" at the Mizushima Plant.</u>
1987	EVOH	Established NIPPON GOSEI (USA) Co., Ltd.
1989	S Polymer	<u>Start production of "SHIKOH", a ultraviolet ray and electronic line hardening type resin.</u>
1994	EVOH	<u>Planned the U.S. business development for SOARNOL</u> and purchased a plant in Houston Texas from E.I. DuPont Nemours & Co.; Established NOLTEX LLC.
1996	EVOH	Established SOARUS LLC in the US to expand sales of SOARNOL.
	EVOH	Established NIPPON GOHSEI Europe GmbH as a European sales office.
2001	EVOH	Established NIPPON GOHSEI UK Ltd. for manufacturing SOARNOL.
2003	PVOH	<u>Started full-scale production of "OPL Film" (optical PVOH film) at the Ogaki Plant.</u>
2004	S Polymer	Acquired all shares in Clariant Polymer Co., Ltd. (Nichigo-Mowinyl Co., Ltd.) and made it a subsidiary.
2006	General	Established a Shanghai office in China.
2010	General	Incorporated the Shanghai office in China and established NICHIGO SHANGHAI Co., Ltd.
	General	Established NIPPON GOHSEI (THAILAND) CO., LTD. In Bangkok, Thailand.

※PVOH: Polyvinyl alcohol, EVOH: Ethylene-vinyl alcohol copolymer, S. polymer: Specialty polymer (pressure sensitive adhesive);

Source : Annual report, Company HP

◆Promoted selection and concentration of business since FY2010-3 to achieve significant improvement in operating income

After exceeding 100B yen for the first time in FY2008-3, revenues continued to decline by FY2012-3 partly due to the impact of the financial crisis. However, during the same period, as the Company has proceeded with withdrawal from unprofitable products centered on fine chemical products (organic synthesis), the operating margin having stayed around 5% significantly improved to 12% in FY2010-3 and has subsequently remained over 10% (except in FY2012-3).



**b. Topic in
FY2015-3**
◆Topics in FY2015-3 and most recent development

During FY2015-3, the decision was made to expand production facilities for PVOH film for use in industrial materials "Hi-Selon", and for acrylic solvent-based pressure sensitive adhesive "COPONYL" in July 2014 (see P17), and an integration of the synthetic resin emulsion business within the Mitsubishi Chemical Group (company split) was implemented in October 2014 (see P17).

In addition, a new advanced research building was constructed in Central Research Laboratory (Ibaraki, Osaka) in March 2015 to expand the clean room/research space and introduce the brand-new equipment, in aiming for more efficient development at higher speed.

◆FY2015-3 - Most recent press release (extracts)

Date	Category	Segment
Jun-14	PVOH	Invitation to exhibition at In-PHARMA JAPAN(Int'l pharmaceutical ingredients expo)
Jul-14	PVOH	Expansion of production facility for industrial-use PVOH film "Hi-Selon"
Jul-14	S Polymer	Expansion of production facility for solvent-based acrylic pressure sensitive adhesive "Coponyl"
Aug-14	S Polymer	New integrated company of synthetic resin emulsion business
Sep-14	General	Announcement of voluntary application of IFRS (from FY2017-3)
Oct-14	S Polymer	Announcement of company split (incorporation-type)
Mar-15	PVOH/EVOH	Invitation to exhibition at "FilmTech Japan" highly-functional film exhibition
Apr-15	EVOH	Introcution to exhibition at "Chinaplas 2015" and "Propak Asia 2015"
Apr-15	General	Announcement of revised "Basic Policy on Establishment of Internal Control System"
May-15	General	Announcement of chage in representative director
May-15	General	Approach and policy on lower investment unit

Source : company HP.

2-(2) Ownership

Mitsubishi Chemical Corporation holds the majority of shares.

Foreign ownership slightly increased.

◆"Keiretsu" relationship with Mitsubishi Chemical, the largest shareholder, since 1963

The largest shareholder is Mitsubishi Chemical Corporation, which increased ownership of the Company in FY2013-3 from 46.1% to 50.4%, since then maintained the majority ownership.

Over the recent five years, there has been no significant change in large shareholders, and the ownership of top 10 shareholders have remained around 70%.

By type of owners, except the parent Mitsubishi Chemical, the ownership of financial institutions and foreign corporations, etc. is high about 15%, respectively. In recent years, the ownership of financial institutions has declined, while the ownership of foreign corporations, etc. has been on the increase.

After the announcement of financial results on May 8, 2015, partly driven by the impact of a disclosed dividend increase (+2 yen) in the next fiscal year, the share price having stayed around mid-800s yen moved to as high as 966 yen on May 11, and has subsequently remained at the upper end.

◆Major Shareholders

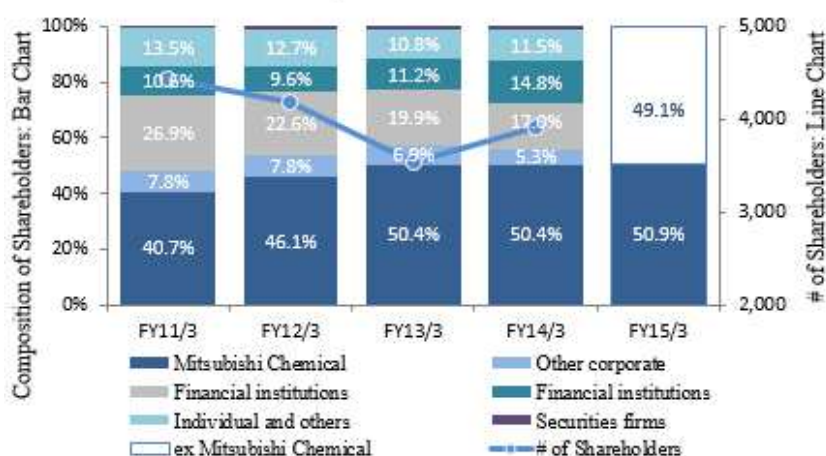
As of FY Mar-2015

Rank	Major shareholders	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
1	Mitsubishi Chemical Corporation	40.7%	46.1%	50.4%	50.4%	50.9%
2	State Street Bank and Trust Company	0.9%	1.6%	1.7%	3.6%	3.3%
3	Japan Trust Service Trust Bank (Trust)	-	-	-	-	2.1%
	Japan Trust Service Trust Bank	13.7%	-	8.7%	5.6%	-
4	Northan Trust Company (AVFC) RE-HCR00	-	-	-	-	2.1%
	Northan Trust Company (AVFC)	-	-	1.4%	1.3%	-
5	Japan Master Trust Trust Bank (Trust)	-	-	-	-	1.6%
	Japan Master Trust Trust Bank	4.7%	3.0%	2.6%	2.6%	-
6	Mizuho Bank	1.2%	1.2%	1.2%	1.2%	1.2%
7	Marubeni Corporation	1.0%	1.0%	1.0%	1.0%	1.0%
8	The Bank of NY Mellon SA/NV 10	-	-	-	-	0.9%
9	Risona Bank	-	-	-	0.9%	0.9%
10	Japan Trust Service Trust Bank (Trust4)	-	-	-	-	0.8%
	Trust & Custody Services Bank, Ltd.	1.5%	1.8%	1.4%	1.5%	-
	Treasury stock	1.0%	1.0%	1.0%	1.0%	-
	Mitsubishi Corporation	2.0%	2.0%	2.0%	-	-
	Mizuho Securities Co., Ltd.	-	1.0%	-	-	-
	Morgan Stanley and Company International PLC	0.9%	-	-	-	-
	Top 10 stockholders total	67.6%	58.7%	71.4%	69.0%	64.8%
	Others	32.4%	41.3%	28.6%	31.0%	35.2%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%

(Note) Annual report is utilized for Data from 2011-3 to 2014-3, while financial results material (which calculation method differ) is utilized for 2015-3.

Source: annual report and financial results materials.

Shareholders Composition & # of Shareholders Trend*



*Annual report is utilized for Data from 2011-3 to 2014-3, while financial results material (which calculation method differ) is utilized for 2015-3.

Source: annual report and financial results materials.

2-(3) Officers

◆Two outside directors from June 2015

Current president Katsumi Kimura, who took the office in June 2013, has a technology background and an intensive knowledge about the Company's core product, "OPL Film". He is scheduled to remain as Representative Director & President in FY2016-3.

Keiji Ishizaki, currently Representative Director & Senior Managing Executive Officer, will withdraw from the position of Representative Director as of June 2015 due to a change in the management structure at the expiration of the term, and Tomoyuki Mori, currently Managing Executive Officer, will succeed the position of Representative Director.

Previously, there was one outside director who concurrently serves as an Executive Officer of Mitsubishi Chemical, but as of June 2015 one outside director will be added to

enhance the compliance system with two outside directors.

◆ Officers (official announcement is planed at 2015-6)

Title	Name	Age	Age	Job title etc.	Previous jobs
	President (Representative director)	Katsumi Kimura	59	Assumed the current office in June	Executive Director, Specialty Materials Segment Manager
Promo tion	Director (Representative director) Senior Managing Executive	Tomoyuki Mori	59	Research and Development Division Manager Environment, Safety and Quality	Director, Managing Executive Officer, Research and Development Div. Central Research Laboratory Head
Promo tion	Director Managing Executive Officer	Keiichi Takahashi	59	General Affairs and Human Resources Dept. Manager, in	General Affaires & Human Resources Dept. Manager
Promo tion	Director Managing Executive Officer	Kazunori Takada	58	Corporate Planning Office Manager, in charge of Audit Office	Corporate Planning Office Manager
New	Director Executive director	Masahiro Wada	58	Production Technology Division Manager	Executive Officer, Production Technology Division Manager
	Director	Masayuki Waga	57	External director	Executive Officer and Performance Chemicals Div. Manager of Mitsubishi Chemical Corp
New	Director	Hiroshi Urabe	65	External director	Meiwa Corporation/Managing Director
	Auditor	Junichi Akagi	60	Full-time	Director, Audit Officer, Business Efficiency Promotioin Dept., Accounting
New	Auditor	Hiroki Sato	62	Full-time	Mitsubishi Chemical/Auditor, Nippon Kasei Chemical/External auditor
	Auditor	Takayoshi Yoshino	68	External auditor	Chief of the Osaka Court
New	Auditor	Yusuke Nakatsukasa	57	External auditor	Nakatsukasa Accounting Office/Representative (current), Japan Exchange Group/External director (current)

Source: company HP.

◆ Number of employees in the entire group is about 1,679, unchanged from the previous year

Consolidated number of employees (regular employees) as of the end of March 2015 was 1,679. There was no significant change in the total number of employees. The breakdown of employees by segment as of the end of March 2015 is not available at this moment, but there seems no significant change from the end of March 2014.

Although the decision was made to withdraw from certain products in FY2015-3 (see P30), no reduction in personnel is scheduled, but personnel relocation is planned to enhance the resource for strategic products.

◆ Number of employees

		Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
	Synthetic Resins	1,020	1,051	1,085	1,156	n.a.
Consolidated	Organic Synthesis	326	295	291	265	n.a.
	Others	221	213	220	220	n.a.
	Entire company (Shared)	16	25	29	24	n.a.
Consolidated	# of Regular employee	1,583	1,584	1,625	1,665	1,679

						JPY(M)
	Revenue / Regular employee	57.7	55.1	56.6	66.8	62.7
Consolidated	Operating profit/ Regular employee	6.4	4.5	7.3	9.7	6.7
	Net income/ Regular employee	3.9	2.0	5.0	4.8	4.0
	Average age	41.8	42.4	42.5	42.4	n.a.
Non- consolidated	Ave. duration of service (year)	20.4	20.9	21.1	20.9	n.a.
	Ave. annual salary (1,000Yen)	7,342	7,375	7,111	7,336	n.a.

Source: Annual report etc and company HP.

2-(4) Employees
Status

2-(4) Affiliates and Major Facilities

a. Affiliates

◆Group is consisted of 15 consolidated subsidiaries and one affiliated company accounted for by the equity method

The Company belongs to the Mitsubishi Chemical Holdings Group, within which the Company is a member of "Designed Materials Segment" as a listed subsidiary of Mitsubishi Chemical Corp. Also, the parent Mitsubishi Chemical Corp. supplies ethylene and other raw materials to the Company with the trade amount of 10B yen in FY2015-3 (accounting for about 13% of costs of goods sold).

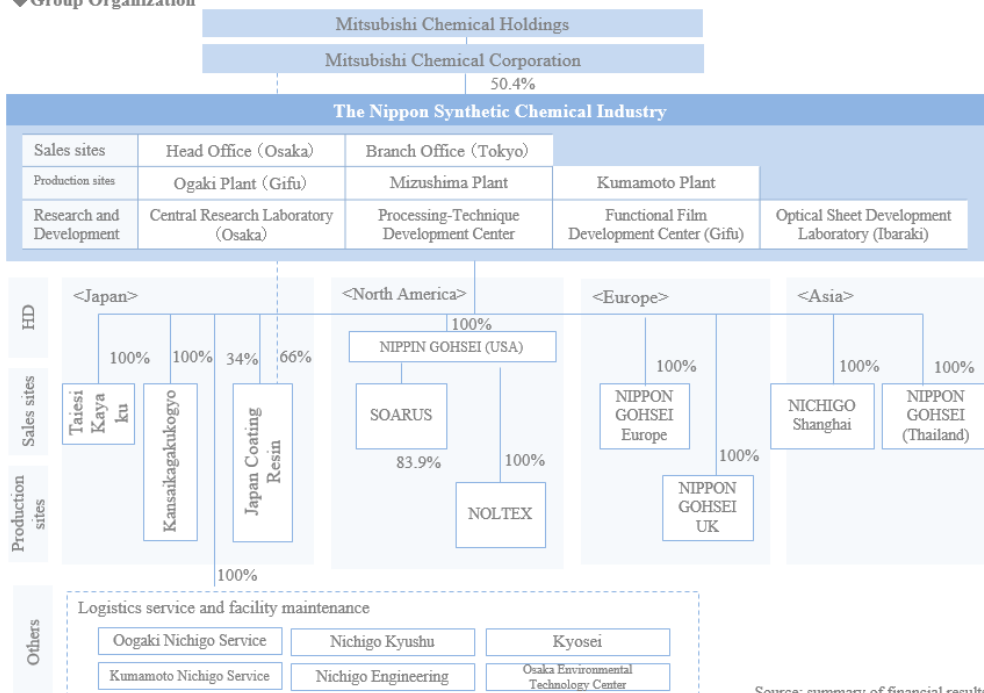
The Company itself has 15 consolidated subsidiaries and one affiliated company accounted for by the equity method (see below chart). Out of 15 subsidiaries, 6 provide "Other" services such as logistics services and maintenance of equipment, and one serves as a holding company.

In Japan, The Nippon Synthetic Chemical Industry is a primary entity of manufacturing and sales, while Taisei Kayaku is mainly engaged in sales as a trading company specialized in chemical products and Kansaikagakukougyo manufactures and distributes film products (organic synthesis business).

The overseas business is centered on EVOH, with two subsidiaries in North America: NOLTEX (US), an EVOH manufacturing subsidiary, and SOARUS (US), a sales subsidiary, and also two subsidiaries in Europe: NIPPON GOHSEI UK (UK), an EVOH manufacturing subsidiary, and NIPPON GOHSEI Europe (Germany), a sales subsidiary. Currently, there is no production base in Asia, but the Company has two sales subsidiaries in China and Thailand.

Consolidated sales are about 1.5 times as large as non-consolidated sales, and the Company generates more than 60% of consolidated sales (FY2015-3).

◆Group Organization



Source: summary of financial results.

The synthetic resin emulsion manufacturing division was split and transferred to CHIRIKA Co., Ltd. in October 2014.

b. Major facilities

A new EVOH facility is scheduled to start operations in Q2 FY2006-3, increasing the production capacity by 30%.

◆Domestic/Overseas Network



◆Restructured synthetic resin emulsion business to improve profitability

In August 2014, the decision was made to restructure the synthetic resin emulsion business.⁽⁺⁾ In this connection, as of October 1, 2014, the synthetic resin emulsion manufacturing division of the Company was transferred to another Mitsubishi Chemical Group company Chuo Rika (specialized manufacturer of synthetic resin emulsion) via company split. At the same time, Chuo Rika changed its company name to "JCR Co., Ltd. (Japan Coating Resin)". After the company split, JCR is owned by Mitsubishi Chemical (66%) and the Company (34%), becoming a subsidiary of the Company accounted for by the equity method from FY2015-3. Even after the company split, the Company plans to continue R&D and marketing activities of synthetic resin emulsion, aiming to improve profitability by seeking the optimized production and the synergy effect.

⁽⁺⁾The synthetic resin emulsion business is categorized in Synthetic Resins (Specialty Polymer) within The Nippon Synthetic Chemical Industry.

◆New OPL Film production line (7th line) in horizon

The Company has three production sites in Japan - "Kumamoto Plant", "Mizushima Plant" and "Ogaki Plant", and one each in the US and the UK; five plants in total. Those two overseas plants specialize in production of EVOH.

As for OPL Film, the super wide-film production facility with the capacity of 15,000K m²/year (the 5th line) was completed in FY2013-3 and the new super wide-film production facility with the capacity of 18,000K m²/year (the 6th line) was completed in November 2014 both in the Kumamoto Plant. Currently, while the Company works on development of thinner films and stable production, given a stronger demand for the practical use of 20μm-thick films from users, the Company focuses on solving the technical challenges and seems to consider a construction of a new line with the capacity similar to the 6th line.

As for EVOH, with the scheduled completion and start of operations of a new facility with the capacity of 15,000 ton/year at the US NOLTEX during Q2 FY2016-3, total EVOH production capacity of the group will increase by about 30% from the current 51,000 ton/year to 66,000 ton/year.

In addition, during FY2015-3, the decision was made to construct a new production

During FY2015-3, the Company decided to construct a new "Hi-Selon" facility and expand the "COPONYL" facility.

facility for water-soluble PVOH film "Hi-Selon" (total investment of 3.3B yen) and to expand the facility for acrylic solvent-based pressure sensitive adhesive "COPONYL" (2.6B yen). Operations are scheduled to start during January-March 2016 for "Hi-Selon" and during April-June 2016 for "COPONYL".




As for "Hi-Selon", while a stronger demand is anticipated for the use in packaging materials of liquid detergents particularly in Europe, the existing production capacity has been limited. The planned capital investment should more than double the production capacity. As the operation will start in 2016, although the Company already receives an inquiry, contribution to the performance of FY2016-3 will be limited, but "Hi-Selon" is arguably one of the products expected to growth from the next fiscal year onward.

◆Production Facility Expansion Status

Production site	Amount of CAPEX	Start of const	Completion	Planned	Production Facility
Kumamoto Plant	6B JPY	Oct-10	Jul. 2012	-	OPL film (+15M m ² /y)
NOLTEX(USA)	8.1M USD (1B JPY)*	Oct-10	Oct. 2011	-	EVOH reinforcement (+3,000ton/y)
NIPPON GOHSEI UK (UK)	9.8M £. (1.8B JPY)*	Jan-11	Oct. 2012	-	EVOH reinforcement (+3,000ton/ y)
Kumamoto Plant	6.5B yen	Jan-13	Nov. 2014	-	OPL film (+18 M m ² /y)
NOLTEX(USA) (plan)	180M USD (21.2B JPY)*	Jul-13	-	FY2016-3 2Q (2015-7~9)	EVOH (+15,000 ton/ y)
Kumamoto Plant (plan)	3.3B JPY	Feb-15	-	FY2016-3 3Q (2015-9~12)	PVOH film [HI-SELON] (+1,600 ton/ y)
Ogaki Plant (plan)	2.6B JPY	Oct-14	-	FY2016-3 3Q (2015-9~12)	Acrylic pressure sensitive adhesives solvent type [COPONYL] (+12,000ton/y)

*Reference figures are calculated as USD=118JPY, £=180JPY.

Source: Press release and financial results materials.

Kumamoto Plant	Mizushima Plant	Ogaki Plant
Production of PVOH, PVOH film, Fine chemicals, etc.	Production of PVOH, EVOH, Vinyl acetate monomer, etc.	Production of PVOH film, Adhesive resin, Fine chemicals, etc.
		
Kumamoto Plant was founded in 1939 as the second plant following Ogaki Plant, with the largest site area. It now produces "Gohsenol (PVOH)", "OPL Film/Bovlon (PVOH film)" and intermediates for pharmaceuticals and agriculture.	Mizushima Plant was founded in 1963 as the third plant in the Mizushima Industrial Complex for conversion to petrochemicals. It now produces vinyl acetate monomer, "Gohsenol (PVOH)", "Soamol (EVOH)", etc.	Ogaki Plant was founded in 1927, where the Company succeeded in the first production of acetic acid in Japan. It now produces "OPL Film", Specialty Polymer products, intermediates for pharmaceuticals and agriculture.

Source: Company brochure, company HP

◆Implement enhancement of R&D facilities to improve development speed

The Company is also promoting enhancement of R&D facilities: in addition to an installment of a customer labo in the "Functional Film Development Center" (Ogaki, Gifu) to develop particularly thin PVOH films jointly with users, the Company constructed a new advanced research building in "Central Research Laboratory" (Ibaraki, Osaka) in March 2015 to seek enhancement in research of polarizing plate-related products.

In China, the Company deployed the technical staff to provide users with technical assistance and accelerate development of the market focused on "SHIKOH" and "COPONYL".

3. Performance Highlight

3-(1) FY2015-3 Performance

◆ Revenues steadily expanded since the bottom in FY2012-3

Revenues totaled 105.2B yen in FY2015-3, down by 5.9B yen (-5.4%) from the previous year on surface. However, as the fiscal year end of consolidated subsidiaries was changed from December to March during FY2014-3, revenues over 15 months were incorporated in figures of subsidiaries. Revenues excluding the impact of the change in the accounting period of consolidated subsidiaries (about 10.9B yen) are calculated 100.2B yen, resulting to an increase of 5.0B yen (+5.0%) compared with the adjusted revenues.

Nevertheless, FY2015-3 was a difficult year relative to the original plan, as the performance guidance was revised downward twice. Although the Company managed to secure an increase in Revenues partly due to the effect of weaker yen, the Operating Income squeezed from 16.2B yen of the previous year to 11.2B yen, or a decrease of 3.6B yen even compared with the Operating Income after removing the impact of the change in the accounting period (14.8B yen), and the Operating Margin was forced to decline by about 4% point from 14.8% to 10.6%.

Two factors behind the deterioration in the Operating Income were: (i) a delay in operations of a new super wide-film production facility (the 6th line) of "OPL Film", and (ii) a rise in prices of vinyl acetate monomers used as a raw material of EVOH resin "SOARNOL" in the European market.

The factor (i) was caused by occurrence of a defect in the quality stability as shown by lower yields, which was also driven by an increasingly higher demand level for the product quality from customers year-by-year. As the issue emerged this time has been already solved, the smooth operations are expected throughout the year in FY2016-3.

A sharp increase in prices of vinyl acetate monomers in Europe was caused by a temporary tightening of the demand and supply situation in association with the withdrawal from business by local producers. As the supply of vinyl acetate monomers exceeds the demand globally, prices in Europe has already started stabilizing. In addition, the Company has taken measures including diversification of sources of raw materials. Considering that the new EVOH production line (see P18) is scheduled to start operations in the US during Q2 FY2016-3, the Company aims to push up income by making adjustment to production such as putting priority on operations with lower utility costs in the US.

◆ Significant revenue growth in Asia and other regions

Given the global business development already underway, such as plants in the US and the UK, overseas revenues exceed 50% of total. Overseas revenues have been increasing year-by-year, and the growth particularly in Asia and "other" regions is significant. As the Company has a strength in high-value-added products, full-scale expansion of demand for the Company's products in the emerging markets has yet been seen, but the Company plans to promote further development of the markets for some products, including the possibility of local OEM production. Revenues from Korea accounting for as many as around 10% may come from "OPL Film" and other polarizing plate-related revenues.

◆ Withdraw from unprofitable business to accelerate focus on strategic products

The Company recorded Extraordinary Losses of 1.6B yen in total in FY2015-3 (see P30), out of which 620M yen was an impairment loss and 560M yen was a loss from disposition of fixed assets. These losses were associated with facilities related to "Bovlon"

and fine chemical products from which the Company decided to withdraw during the year. The Company plans to promote the restructuring of plants including removal of idle facilities and redeployment of production lines from FY2016-3.

◆ Financial Statements Summary (Annual)

JPY(M)

◆ Income Statement	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Revenue	91,260	87,243	91,976	111,151	105,202
Gross Profit	23,939	21,278	26,662	32,893	27,713
Operating Income	10,087	7,117	11,859	16,229	11,186
EBITDA*	16,732	13,714	18,792	23,358	18,238
Ordinary Profit	9,460	6,763	12,375	16,712	11,296
Income before Income Taxes	9,223	5,276	12,660	16,155	9,863
Net Income	6,131	3,154	8,158	8,018	6,648
Depreciation	6,645	6,597	6,933	7,129	7,052
R & D Expense	2,562	2,824	3,388	3,458	3,575
Interest Expenses	420	273	224	200	64
CAPEX**	5,900	8,028	10,772	20,263	14,512
EBITDA-CAPEX	10,832	5,686	8,020	3,095	3,726

*EBITDA=Operating Income+Depreciation, **CAPEX=Capital Expenditure on CF Statement.

* FY2014-3's value excludes the impacts by accounting period change of some subsidiaries.

	Mar-14	Mar-15	Change
Revenue	100,200	105,202	5,002
Operating Income	14,800	11,186	(3,614)
Operating Margin	14.8%	10.6%	-4.1%

◆ Balance Sheet	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Total Assets	97,857	99,761	112,180	130,107	142,110
Total Liabilities	42,906	43,764	46,735	53,337	58,390
Total Net Assets	54,951	55,996	65,444	76,770	83,720
Interest Bearing Debt	13,599	11,977	10,040	15,350	25,237
Cash and Deposits	8,036	4,879	8,433	5,785	7,312
Net Interest Bearing Debt	5,563	7,098	1,607	9,565	17,925

◆ Key Indicators	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Total Revenue Growth	1.3%	-4.4%	5.4%	20.8%	-5.4%
Gross Margin	26.2%	24.4%	29.0%	29.6%	26.3%
Operating Margin	11.1%	8.2%	12.9%	14.6%	10.6%
EBITDA Margin	18.3%	15.7%	20.4%	21.0%	17.3%
Ordinary Profit Margin	10.4%	7.8%	13.5%	15.0%	10.7%
Net Margin	6.7%	3.6%	8.9%	7.2%	6.3%
ROA	6.0%	3.2%	7.7%	6.6%	4.9%
ROE	11.4%	5.7%	13.4%	11.3%	8.3%
Capital Ratio	56.2%	56.1%	58.3%	59.0%	

◆ Share Information	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Net Income per Share	62.94	32.38	83.75	82.32	68.25
Net Assets per Share	564.07	574.83	671.84	788.11	859.49

◆ Revenue Trend by region

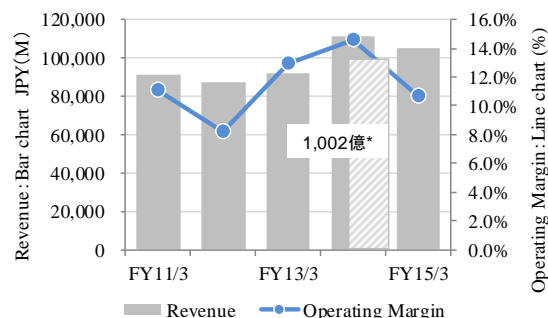
JPY(M)

	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Japan	50,499	46,922	46,482	51,727	n.a.
Korea	10,502	8,972	13,081	13,455	n.a.
US	10,295	9,515	8,344	12,211	n.a.
Europe	11,663	12,170	11,922	18,066	n.a.
Others	8,300	9,662	12,145	15,690	n.a.
Overseas total	40,760	40,319	45,492	59,422	n.a.
Total	91,260	87,242	91,976	111,151	105,202

◆ Revenue Composition by region

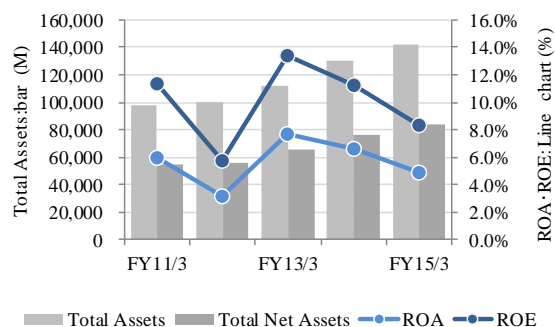
	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Japan	55.3%	53.8%	50.5%	46.5%	n.a.
Korea	11.5%	10.3%	14.2%	12.1%	n.a.
US	11.3%	10.9%	9.1%	11.0%	n.a.
Europe	12.8%	13.9%	13.0%	16.3%	n.a.
Others	9.1%	11.1%	13.2%	14.1%	n.a.
Overseas total	44.7%	46.2%	49.5%	53.5%	n.a.
Total	100.0%	100.0%	100.0%	100.0%	n.a.

Revenue & Operating Margin

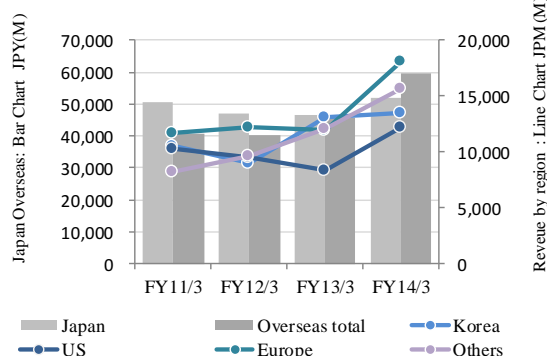


* FY2014-3's value excludes the impacts by accounting period change of some subsidiaries.

Total Assets, Total Net Assets, ROA & ROE



Revenue Trend by region



Source: Annual report and summary of financial results.

4. Market Environment

4-(1) Demand Trend of Vinyl Acetate

Both production and consumption remain largely flat.

◆ Vinyl acetate: the largest production capacity in Japan

The demand trend of vinyl acetate, a basic raw material for the Company's products will be discussed as follows. Domestic production volume of vinyl acetate in 2014 increased by about 4% y/y to 575,000 ton. The production is on an increasing trend from the bottom in 2012, but remains at the level below 600,000 ton since 2009. About 75% of the vinyl acetate production are used for polyvinyl alcohol (PVOH, so-called Poval), and the production volume tends to be linked with consumption for the same use. However, in 2014, while the supply to PVOH was 419,000 ton, down from the previous year (431,000 ton), the supply to EVA (ethylene-vinyl acetate copolymer resin) increased from 829,000 ton to 872,000 ton and the supply to adhesives increased from 383,000 ton to 499,000 ton.

Exports have continued declining from the peak of 143,000 ton in 2007 and squeezed to 9,000 ton in 2014. In addition, imports were as small as 8,000 ton (2014), indicating the self-sufficient production/consumption structure.

The Nippon Synthetic Chemical has the largest production capacity of vinyl acetate at 180,000 ton/year (domestic, July 2014), followed by Showa Denko's 175,000 ton/year, Kuraray's 160,000 ton/year and JAPAN VAM & POVAL's 150,000 ton/year. Each company except Showa Denko also manufactures polyvinyl alcohol, establishing the structure where the large part of vinyl acetate produced internally are consumed internally. Therefore, the internal consumption accounts for as high as about 73% of the production volume (2013).

Denki Kagaku Kogyo, one of the integrated chemical manufacturers, used to produce vinyl acetate but withdrew from the same business in April 2014. This was driven by a sluggish domestic demand associated with a shift to overseas production sites by consumers and the intensified competitive environment due to enhanced overseas production facilities.

Although the market environment such as the withdrawal of competitors is not in optimistic conditions, the Company plans to respond to an increase in demand due to the withdrawal of Denki Kagaku Kogyo in a flexible manner.



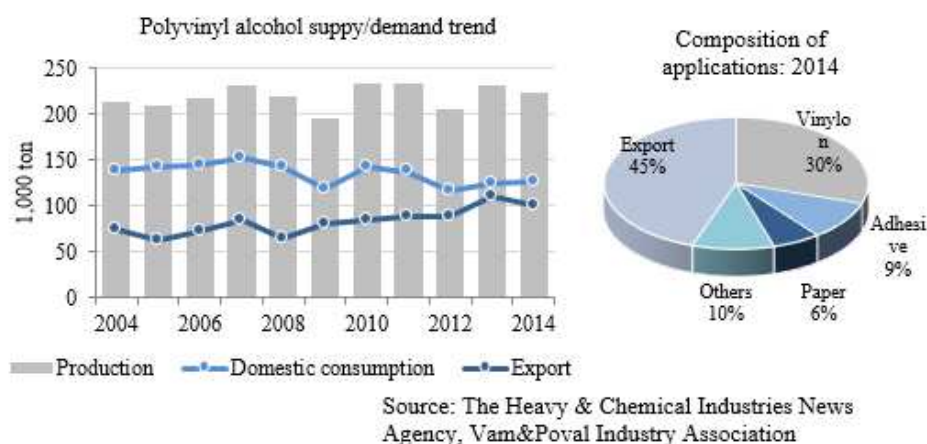
4-(2) Demand Trend of Polyvinyl Alcohol

Demand from the emerging markets, particularly China, will grow.

◆Polyvinyl alcohol: increasing exports drive the growth

Next, the demand trend of polyvinyl alcohol (PVOH, so-called Poval) will be discussed. The production volume of polyvinyl alcohol in 2014 decreased by about 4% y/y to 223,000 ton. Domestic consumption increased from 124,000 ton to 126,000 ton due to a recovery of demand particularly for use in vinylon, while exports decreased from 110,000 ton to 101,000 ton. However, the trend remains a range bound in domestic consumption and upward in exports, as the export ratio increased from 35% in 2004 to reach the peak of 47% in 2013 (45% in 2014). On the other hand, imports remain low about 6,500 ton (2014).

The largest export demands come from China (20%+), followed by Belgium (10%-) and Indonesia (10%-). Belgium may rank the second due to the impact of existence of Kuraray's plant in the country. The significant increase in exports is mainly to the emerging markets; the export volume to China increased by about 50% from 17,000 ton in 2010 to 26,000 ton in 2013, and the export volume to Indonesia increased by about 60% during the same period (from 54,000 ton to 88,000 ton). Particularly, China is the largest consumer of polyvinyl alcohol, accounting for the majority of the world consumption. Despite a slowdown in 2014, demand in China, which is projected to expand at 5%-6% growth rate from 2012 through to 2017, should continue to drive the world market.

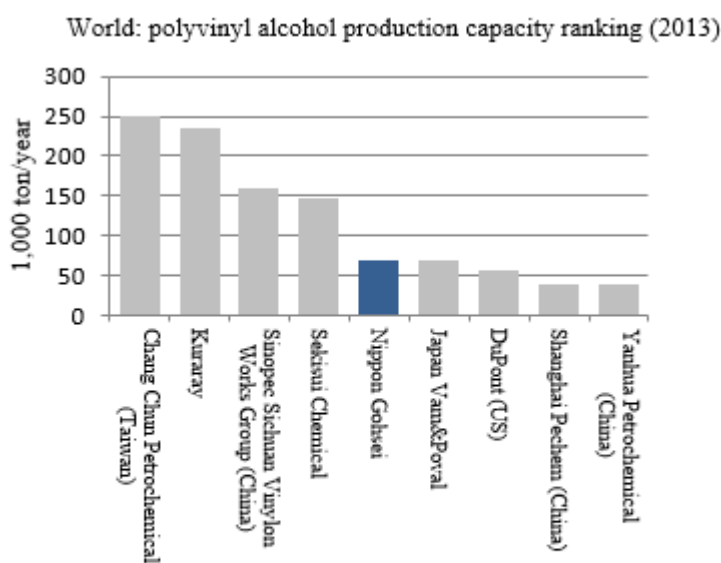


◆Production of polyvinyl alcohol concentrated in Asia

When looking at the ranking of the production capacity of polyvinyl alcohol (2013), Chang Chun Petrochemical (Taiwan) ranks the top and Kuraray ranks the second both with the production capacity over 200,000 ton/year. Kuraray acquired the vinyl acetate business of DuPont in August 2014. Considering this acquisition, Kuraray with the production capacity of 290,000 ton/year is expected to become the world largest producer. The third Sinopec Sichuan Vinylon Works Group (China) and the fourth Sekisui Chemical have the similar production capacity of around 150,000 ton/year, and The Nippon Synthetic Chemical (70,000 ton/year) ranks the fifth. The world total production capacity is 150,000 ton and the combined shares of top eight companies exceed 70%. Also, considering the acquisition of DuPont's vinyl acetate business by

Kuraray, all top eight companies are Asian companies.

While overseas producers seek to expand the production capacity, including the capital investment implemented by Sinopec Sichuan Vinylon Works Group (China) for 100,000 ton/year capacity in 2011 and the expansion of the capacity by 40,000 ton/year by Chang Chun Petrochemical (Taiwan) through its group company Chang Chun Chemical (Jiangsu) in 2013, the quality of Japanese products is highly evaluated. As the global demand is on a growing trend, particularly for the use in automobile front glass (PVB sheet) and films for LCD panels (optical-use PVOH film), on the back of weaker yen, each company is actively seeking to enhance exports.



- Chang Chun Petrochemical includes Chang Chun Chemical (Jiangsu).
- Kuraray acquired the vinyl acetate business from DuPont in 2014.
- Sekisui Chemical includes DS Poal (JV with Denki Kagaku Kogyo).

Source: The Heavy & Chemical Industries News Agency

4-(3) Trend in Polarizing Plate

Demand remains strong despite lower prices, continuing growth is expected in future.

◆Continuing demand expansion for polarizing plates despite slower growth rate

Next is the trend in the polarizing plate market where one of core products "OPL Film (optical-use PVOH film)" is used as a material. The polarizing plate market is on an expanding trend, with the square footage sold in the world increasing from 203M m² in 2009 to 339M m² in 2014, about 1.7 times larger over five years (CAGR: about 10%). In the future, the market is expected to continue expanding despite some slowdown seen in the growth rate, with the square footage sold expected to reach 412M m² in 2018, about 1.2 times as large as that in 2014 (CAGR: about 5%).

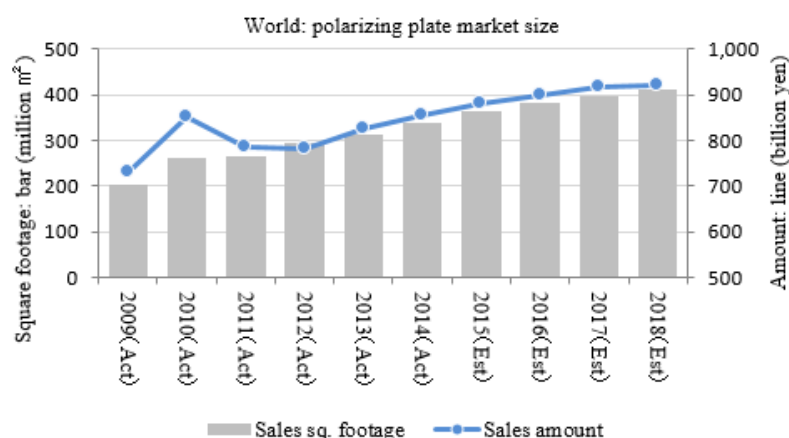
While the demand for polarizing plates is linked with the demand for LCD, main devices which use LCD include digital TVs, PCs, mobile phones (featurephones/smartphones) and tablets.

As to digital TVs, while the demand in the developed markets have entered into a stable period, the market size (on a unit basis) is expected to expand though a slight growth, as the demand particularly in the emerging markets is growing. In addition, as TV screens are getting larger, the polarizing plate market is expected to grow faster on a square footage basis than on a unit basis.

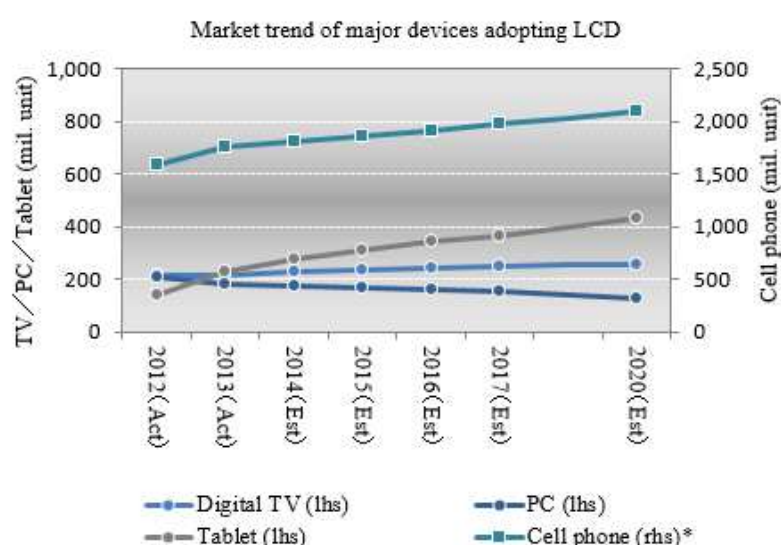
While the demand for PCs has peaked out and the growth tends to be slowing down, the markets for mobile phones and tablets are expected to expand. Particularly sales of tablets almost doubled from about 140M units in 2012 to 276M units in 2014, and are expected to significantly increase to 429M units in 2020, about threefold relative to those in 2012. However, as screens of mobile phones and tablets are smaller, the market growth on a square footage basis is considered to be limited.

The market size of polarizing plates on a sales amount basis expanded by more than 10% from about 729.0B yen in 2009 to about 855.0B yen in 2012, and is expected to increase to about 922.0B yen in 2018. However, as the end prices of final products are trending down, and polarizing plates are also seeing a decline in prices particularly for the large-scale TV panels, the growth in the market size on an amount basis is slower than that on a square footage basis.

Along with lower prices of polarizing plates, optical-use PVOH films are also experiencing the pressure on prices, but prices are expected to hold up well given the brisk demand,



Source: Fuji Chimera Research Institute, Inc., "2015 Current Status and Outlook of Display-related Market"



* Cell phone: featurephone, smartphone

Source: Fuji Chimera Research Institute, Inc., "2014 Digital AV Device Market Marketing Survey Handbook"

5. Segment Overview and Business Model

5-(1) Synthetic Resins

a. Outline

Synthetic Resins Revenue Share



b. Business flow

PVOH:

Produced in three domestic plants.

Mitsubishi Chemical supplies ethylene at prices linked to the market.

◆ "OPL Film" and "SOARNOL" are two pillars of income generation

Synthetic Resins segment is the Company's main business segment accounting for 74% of total revenues and 98% of operating income. Businesses are categorized into (1) PVOH (polyvinyl alcohol), (2) EVOH (ethylene vinyl alcohol copolymer) and (3) Specialty Polymers (pressure sensitive adhesive resins), each consisting largely (1) PVOH: 40%+, (2) EVOH: 40%- and (3) Specialty Polymers: around 20% of the segment revenues, respectively. Composition of income by business is not clear but "OPL Film (PVOH business)" and "SOARNOL (EVOH business)" are top two core products in terms of both size and income.

As shown by a large-scale capital investment made twice over the recent five years in the OPL Film and expansion of EVOH production facilities in the US (see P18), the Company has focused on expansion of these core businesses, but fostering products that could be the third pillar following "OPL Film" and "SOARNOL" is the challenge. (see P37)

As the Company's core products represent non-commodity high-end products, at this moment, sales are concentrated in the developed markets and the emerging markets has not yet been cultivated. While the Company has already penetrated into China in 2006 and Thailand in 2010, there is sufficient room to expand sales.

◆ PVOH

"GOHSENOL"(polyvinyl alcohol) is a base product in the PVOH business. "GOHSENOL" is produced by creating vinyl acetate monomers from raw materials such as acetic acid and ethylene, and polymerizing and saponifying vinyl acetate monomers.

"GOHSENOL" is sold as a stand-alone product, but also used as a raw material for other products such as "OPL Film" and "Hi-Selon". PVOH-related products are produced in three domestic plants (Ogaki, Kumamoto and Mizushima), and are sold domestically as well as exported to Asia, particularly China.

In the production process of PVOH, acetic acid is generated as a bi-product. Acetic acid collected as a bi-product is recycled as a raw material, and any shortfall of acetic acid is sourced externally. While prices of acetic acid are linked with prices of main raw material methanol, given the recycling of collected acetic acid as a raw material, the fluctuation of prices of ethylene, another main raw material, is a significant driver of the material costs. The Company purchases ethylene from the parent Mitsubishi Chemical at the prices linked to the market prices. Ethylene prices are determined in tandem with prices of domestically-produced naphtha. While the Company makes an effort to pass the fluctuation of ethylene prices on product prices, as there is a time lag between the fluctuation of ethylene (and naphtha) prices and revision of sales prices, if naphtha prices sharply rise all of a sudden, the Company temporarily bears the increase in raw material prices.

OPL Film facilities require granular maintenance.

EVOH :

Vinyl acetate monomers to be used as an intermediate material are produced internally in Japan and locally procured in overseas plants.

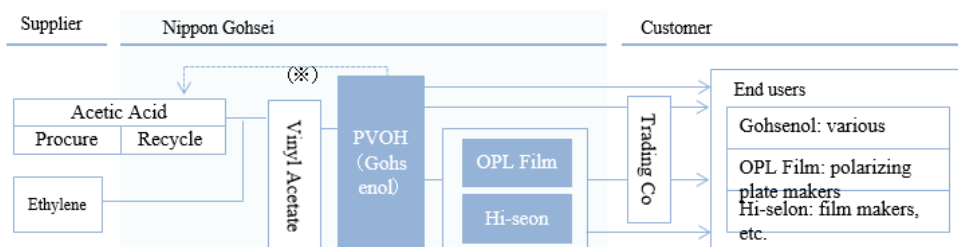
C. Performance in FY2015-3

Weaker yen contributed to revenue growth, but the margin deteriorated by 5%

◆OPL Film: maintenance of production facilities is important

As the precision is required to "OPL Film" which is a product for polarizing plates, the maintenance of production facilities is more important than other products. While the maintenance once every two years is sufficient for EVOH resin "SOARNOL" facilities, the regular repairs in 3-4 weeks are implemented twice a year to "OPL Film" facilities.

◆PVOH: Business Flow Summary



(※) "Acetic acid" generated as a bi-product in the production process is reused as a raw material.

Source: company materials.

◆EVOH

EVOH resins are produced in three plants: Mizushima Plant, NOLTEX (US) and NIPPON GOHSEI UK (UK). The production capacity (per year) as of FY2015-3 was: (i) Mizushima Plant 10,000 ton (20%), (ii) the US 23,000 ton (45%) and (iii) the UK 18,000 ton (35%), respectively (51,000 ton/year in total). When adding a new production capacity in NOLTEX of 15,000 ton scheduled to complete during Q1 FY2016-3, total production capacity will be 66,000 ton, comprising of (i) Mizushima Plant 15%, (ii) the US 58% and (iii) the UK 27%, showing the majority share by NOLTEX (US).

◆Higher revenues and lower income due to delay in operation of new OPL Film production facility, and sharp rise in raw material prices in Europe

Revenues in the Synthetic Resins segment amounted to 77.9B yen in FY2015-3, about 3.0B yen more than 75.0B yen in the previous year ^(*), but the segment income contracted from 15.0B yen in the previous year to 11.4B yen, with the margin forced to deteriorate from 20% to 15%.

Performance in the sales volume varied by product, but the amount maintained about 4% increase relative to the previous year attributable to the effect of weaker yen. However, a decline in income was inevitable due to (i) a delay in full-scale operations of a new super wide-film production facility of "OPL Film" (the 6th line in Kumamoto Plant) that was scheduled in Q1 until November caused by a defect in the quality stability and other issues and (ii) a sharp increase in prices of vinyl acetate monomers that are used as raw materials for EVOH resin "SOARNOL" in Europe.

(*) Figures excluding the impact of a change in the accounting period of consolidated subsidiaries.

◆ Synthetic Resins Business Trend

JPY(M)

	Mar-11	Mar-12	Mar-13	Mar-14*	Mar-15	change	y/y
Revenue (segment)	64,946	61,510	67,113	75,000	77,944	2,944	103.9%
Operating Income	10,234	7,244	11,837	15,000	11,381	(3,619)	75.9%
Operating Margin	15.8%	11.8%	17.6%	20.0%	14.6%	-5.4%	

Revenue Share	71.2%	70.5%	73.0%	74.9%	74.1%		
Operating Income Share	99.3%	96.4%	96.6%	98.7%	98.3%		

*FY2014-3's values exclude the impacts by accounting period change of some subsidiaries.

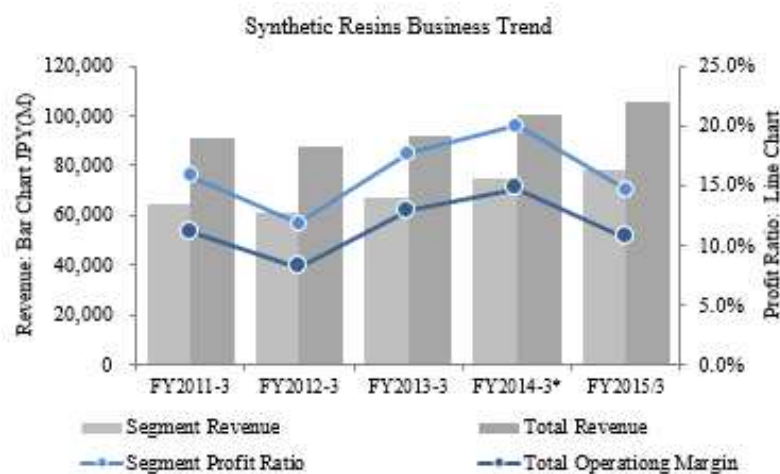
FY2014-3's actual values are: Revenue: 83,560M JPY, Segment profit: 16,407M JPY.

Source: Summary of Financial Statements.

◆ FY2015-3: performance of core products

Category	Product	Description	Volume	Revenue	Income
PVOH	Gohsenol	Despite a slight decline in the volume due to a slowdown of commodity chemicals in China, the weaker yen brought some gain in revenues.	slightly down	slightly up	flat
	OPL Film	(i) delay in operation of the new super wide-film facility (6th line) due to time spent to stabilize the quality and (ii) ad-hoc maintenance in Ogaki and Kumamoto caused the volume a slight down.	slightly down	slightly down	down
EVOH	Soamol	Total volume was slightly up with the slower US offset a gain in Europe. Despite a revenue growth driven by the weaker yen, the income squeezed due to a sharp rise in raw material (vinyl acetate monomers) prices in Europe and the reduced volume in the US due to the facility trouble.	slightly up	up	down
S.Polymer	Coponyl	Electronic materials led the growth. Kept full operation.	up	up	up

Source: Summary financial results.



* FY2014-3's value excludes the impacts by accounting period change of some subsidiaries.

Source: financial results briefing materials.

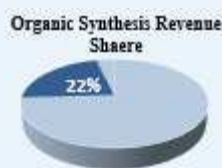
Already solved issues occurred in the 6th line before the quality stabilized, aim for stable operations in FY2016-3

【OPL Film】

Optical-use PVOH film "OPL Film" enjoys a continuing positive growth of the market despite the inventory adjustment made by some customers (see P23). However, revenues slightly decreased from the previous year due to the large impact of a delay in full-scale operations of a new super wide-film production facility (the 6th line) until the latter half of the year caused by an instable quality. In addition, a failure of full-scale operations of facilities due to a delay in start-up after the regular repairs in the Kumamoto Plant partially caused a decline in revenues. Also in FY2015-3, the

<p>Focus on development of thinner films (20μm)</p> <p>No impact of emerging coating PVA on performance</p>	<p>restrictions in facilities prevented the Company from fully meeting the required demand volume, forcing some cut in prices, which partially explains the squeezed margin. However, <u>issues occurred in the 6th line before the quality stabilized have been already remedied</u>, and the Company seeks a stable supply of high-quality products throughout the year in FY2016-3. <u>Given the continuing needs for thinner, wider and lower-contrastile products, the Company plans to focus on the practical use of thinner (20μm-thick) films and the development of low-contrastile products</u>. Also, water-soluble adhesives have been typically used to bond OPL Film (PVOH film) with polarizing plate protective films, etc., but in recent years, UV curable adhesives have become popular. While UV adhesives have benefits such as shorter drying time, the high quality is required to OPL Film. The demand level for the quality from customers is increasingly becoming higher year-by-year partially due to the dissemination of UV adhesives.</p> <p><u>Although there were concerns about the negative impact of emerging coating PVA (see P7) on sales, there was almost no impact in FY2015-3, and the Company seeks the higher sales growth than the market by introducing 20μm-thick films as early as possible.</u></p>
<p>Given a sharp increase in prices of vinyl monomers in Europe, implemented diversification of supply sources</p> <p>Chang Chun Petrochemical aggressively cuts prices in North America</p>	<p>【EVOH】</p> <p>The sales volume of EVOH resin "SOARNOL" was up in Europe but sluggish in North America, ending the year with a slight increase as a whole. FX adjustments due to the weaker yen was also attributable to the increase in revenues. However, <u>a sharp increase in raw material prices (prices of vinyl acetate monomers) in Europe and a decline in the production volume due to troubles in facilities in the US caused a contraction of income</u>.</p> <p>Although vinyl acetate monomers tend to be in the oversupply situation globally, a withdrawal from the business by some local producers in Europe combined with troubles in facilities tightened the supply/demand, causing a sharp rise in prices and the deterioration of profitability due to higher costs. Entering into Q4, the supply/demand balance has turned towards an improvement and prices have started stabilizing, but the Company is promoting to build the structure to avoid the similar situation by diversifying the supply sources.</p> <p>The cost of goods manufactured is lower in the US where utility costs are cheap, and even when transportation costs are added, the production in the US is more advantageous than the production in Europe. Also, in July 2015, a new facility (15,000 ton/year) currently under construction is scheduled to start operations, <u>the Company plans to make efforts to maximize income of the entire group by making adjustment to operations such as putting priority on operations in the US</u>.</p> <p>On the other hand, <u>Chang Chun Petrochemical (Taiwan, hereinafter "Chang Chun") is aggressively cutting prices in the US</u>, leading to a shift of some customers. However, as the production capacity of Chang Chun is limited to 10,000 ton/year, the impact is limited for now. Having said that, Chang Chun should obviously look into the expansion of facilities, etc., the possibility of a shift of customers in the future cannot be denied. However, as Chang Chun's ability to provide technical supports is weak, <u>the Company plans to differentiate itself through enhancement of its strength, i.e. high-value added products and technical follow-up</u>.</p>

5-(2) Organic Synthesis



◆ Revenues of 20B yen, maintaining a break-even income

Revenues of the organic synthesis segment has stayed at the level of around 20B yen over the past five years, and the segment income maintains a break-even with expenditures. The organic synthesis segment is structured to produce "acetic acid" and "vinyl acetic monomer" to be used as a raw material in the synthetic resins business, and therefore, the organic synthesis is positioned as an ancillary business rather than a core business.

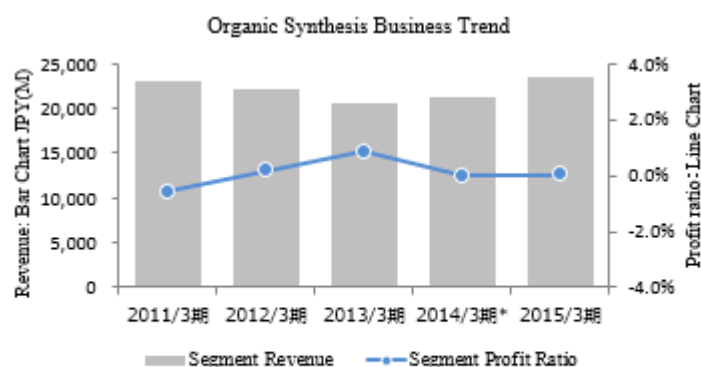
◆ Organic Synthesis Business Trend

	Mar-11	Mar-12	Mar-13	Mar-14*	Mar-15	change	y/y
Revenue (segment)	22,932	22,034	20,643	21,300	23,371	2,071	109.7%
Operating Income	(131)	35	174	0	5	5	
Operating Margin	-0.6%	0.2%	0.8%	0.0%	0.0%	0.0%	
Revenue Share	25.1%	25.3%	22.4%	21.3%	22.2%	1.0%	

*FY2014-3's values exclude the impacts by accounting period change of some subsidiaries.

FY2014-3's actual values are: Revenue: 23,754M JPY, Segment profit: 49M JPY.

Source: summary of Financial Statements and financial results briefing materials.



* FY2014-3's value excludes the impacts by accounting period change of some subsidiaries.

Source: summary of Financial Statements and financial results briefing materials.

◆ Competitors started handling cheap commodity products

The segment revenues amounted to 23.4B yen in FY2015-3, a slight increase from the previous year. Vinyl acetate monomers tend to fall in the price competition, as the segment is centered on commodity products, although the Company is strong in some products with the largest production capacity in Japan. In addition, cheap imported products put pressure on some products. Under these circumstances, the Company seeks to improve profitability by reviewing the portfolio including the withdrawal particularly from unprofitable products.

As for ethyl acetate, a domestic competitor (Showa Denko) started operations of the brand-new facility in June 2014 and started providing the products at the similar prices with imported products from China which share the majority of the Japanese market. The Company used to distribute the imported ethyl acetate, but decided to stop handling ethyl acetate considering its thin margin from the beginning. Thus, revenues are expected to decrease by around 2.0B yen (the impact on income is minimal), but in FY2016-3, the Company plans to increase production of vinyl acetate monomers to seek capturing the demand saved by the withdrawal of Denki Kagaku Kogyo from the business (see P21).

5-(3) Cost Analysis

◆Cost of Sales

The COGS/Revenue ratio has stayed in a range of 70-75%. The cost of goods manufactured (non-consolidated basis) is largely consisted of materials cost (60%), labor cost (15%) and general expenses (25%), indicating a higher weight of raw materials costs. Entering in 2015, given lower oil prices, domestic naphtha prices had also declined to the level below 50,000 yen/KL before recovering to the high level around 70,000 yen/KL from Q1 through to Q3 this year. Combined with higher costs due to a sharp increase in prices of vinyl acetate monomers (raw material of SOARNOL) in the European market, the COGS/Revenue ratio stood at 73.7% in FY2015-3, a deterioration of about 3% compared with the previous year. In FY2015-3, in addition to the extraordinary maintenance in Ogaki and Kumamoto Plants, higher maintenance costs on older production facilities of basic products such as GORSENOL contributed to an increase in the Cost of Sales.

In FY2016-3, as a new EVOH production facility in NOLTEX (US) currently under construction (total investment of 180M dollars) is scheduled to start operations in Q2, the depreciation burden including the NOLTEX's portion is expected to increase by around 2.0B yen in total.

◆Selling, General and Administrative Expenses

SG&A Expenses totaled 16.5B yen in FY2015-3, of which three major items including transportation and storage costs (20%-), salaries (20%+), R&D expenses (20%+) account for around 60% of total. Although SG&A expenses are on an increasing trend on an amount basis, it is largely driven by an increase in sales, and the SG&A/Revenue ratio remains at the level of 15%-16%.

◆Extraordinary Gain/Loss

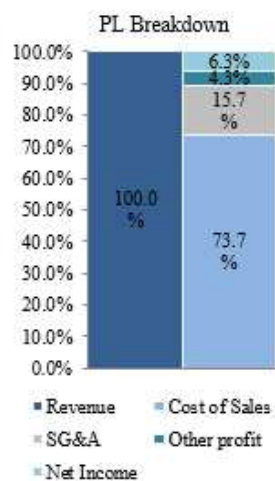
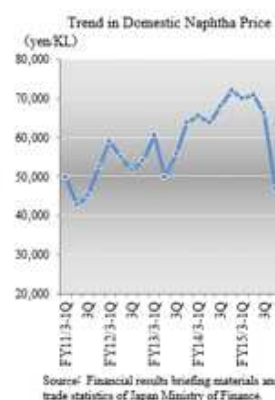
During FY2015-3, the Company decided to suspend operations of biaxially-oriented PVOH film "Bovlon" and glass-substitute optical sheet "ORGA" within the synthetic resins business and withdraw from certain fine chemical products within the organic synthesis business. Centered on the related facilities, the impairment loss (620M yen) and loss from disposal of fixed assets (560M yen) were accounted. As for the old facility site, the Company plans to promote the restructuring of the plant including redeployment of production lines from FY2016-3 onward.

In addition, the new OPL Film line (the 6th line) completed within the Kumamoto Plant in Q1 this year has delayed its full-scale operations until November 2014 due to a defect in the quality stability. In this connection, the Extraordinary Loss of 370M yen was accounted as costs of measures to deal with a defect in products occurred during the period until the quality of the 6th line stabilized.

						JPY(M)		
◆ PL Summary	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Composition	vs. Prev. year	vs. Prev. %
Revenue	91,260	87,243	91,976	111,151	105,202	100.0%	(5,949)	94.6%
Cost of Sales	67,320	65,965	65,313	78,258	77,489	73.7%	(769)	99.0%
Gross Profit	23,939	21,278	26,662	32,893	27,713	26.3%	(5,180)	84.3%
Selling, General and Administrative Expenses	0	0	0	0	0	0.0%	0	0.0%
Transportation and Storage	2,693	2,592	2,568	3,012	2,973	2.8%	(39)	98.7%
Salaries	3,261	3,257	3,331	3,970	3,877	3.7%	(93)	97.7%
Provision for Allowance For Possible Loan Losse	28	(7)	3	(12)	(47)	0.0%	(35)	391.7%
Provision for Accrued Bonuses	325	309	367	381	438	0.4%	57	115.0%
Provision for Officers' Bonuses	71	51	84	107	63	0.1%	(44)	58.9%
Retirement Benefit Expenses	150	230	253	198	180	0.2%	(18)	90.9%
Provision of Reserve for Retirement Benefits for	12	22	25	23	21	0.0%	(2)	91.3%
Tax and Dues	154	133	165	170	161	0.2%	(9)	94.7%
Depreciation	102	113	133	190	174	0.2%	(16)	91.6%
R&D Expenses	2,562	2,824	3,388	3,458	3,575	3.4%	117	103.4%
Others	4,494	4,637	4,486	5,167	5,112	4.9%	(55)	98.9%
Total	13,852	14,161	14,803	16,664	16,527	15.7%	(137)	99.2%
Operating Income	10,087	7,117	11,859	16,229	11,186	10.6%	(5,043)	68.9%
Non-Operating Income	333	342	892	883	387	0.4%	(496)	43.8%
Non-Operating Expenses	960	697	375	400	277	0.3%	(123)	69.3%
Ordinary Profit	9,460	6,763	12,375	16,712	11,296	10.7%	(5,416)	67.6%
Extraordinary Gain	158	34	538	9	169	0.2%	160	1877.8%
Extraordinary Loss	394	1,521	253	566	1,602	1.5%	1,036	283.0%
Income before Income Taxes	9,223	5,276	12,660	16,155	9,863	9.4%	(6,292)	61.1%
Income Taxes etc.	2,585	2,003	4,397	7,975	3,087	2.9%	(4,888)	38.7%
Income before Minority Interests	6,638	3,273	8,262	8,180	6,776	6.4%	(1,404)	82.8%
Minority Interests	507	118	104	162	128	0.1%	(34)	79.0%
Net Income	6,131	3,154	8,158	8,018	6,648	6.3%	(1,370)	82.9%

◆ Key Indicators	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
COGS/ Revenue	73.8%	75.6%	71.0%	70.4%	73.7%
SG&A/ Revenue	15.2%	16.2%	16.1%	15.0%	15.7%
R&D Expense/ Revenue	2.8%	3.2%	3.7%	3.1%	3.4%
Operating Margin	11.1%	8.2%	12.9%	14.6%	10.6%
Ordinary Profit Margin	10.4%	7.8%	13.5%	15.0%	10.7%
Net Margin	6.7%	3.6%	8.9%	7.2%	6.3%

◆ Details of other PL Items	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Non-Operating Income					
Interest and Dividends Income	107	107	100	105	98
Gain On Valuation Using Equity Method of Accounting	-	-	-	-	20
Rent Income	124	125	111	109	101
Insurance Income	25	14	88	69	26
Gain on Sales of Securities	31	36	38	39	55
Gain on Foreign Exchange Translation	-	-	487	507	-
Others	42	59	65	54	87
Total	333	342	892	883	387
Non-Operating Expenses					
Interest Expenses	420	273	224	200	64
Depreciation Expenses of Fixed Assets Lent	41	39	33	31	36
Loss on Foreign Exchange Translation	339	281	-	-	134
Loss on Valuation Using Equity Method of Accounting	80	45	61	-	-
Compensation for Damage	-	-	-	133	-
Others	77	56	55	36	43
Total	960	697	375	400	277
Extraordinary Gain					
Gain on Sale of Fixed Asset	1	30	3	5	47
Gain on Sale of Investments in Securities	4	0	417	3	-
State Subsidy	153	-	117	1	123
Others	-	3	-	-	-
Total	158	34	538	9	169
Extraordinary Loss					
Expenses for Product Deficiency	-	-	-	-	367
Loss on Disposal of Fixed Asset	350	936	243	556	556
Loss on Valuation of Investment Securities	40	513	4	-	-
Impairment Loss	-	-	-	-	616
Others	3	70	5	10	63
Total	394	1,521	253	566	1,602



Source: summary of financial results.

5-(4) Financial Overview

Along with the large-scale enhancement of facilities in the US subsidiary, Tangible Fixed Assets have significantly increased since FY2014-3

While the Company funded part of capital investment by borrowing, the Company relies less on debt and has a sufficient ability to repay debt.

◆ While the Company funded part of capital investment by borrowing, the Company relies less on debt

With accumulation of internal reserves, Net Assets increased from 55.0B yen in FY2011-3 to 83.7B yen in FY2015-3, up 28.8B yen (about 52%) over the recent five years. In addition, Total Assets increased from 97.9B yen in FY2011-3 to 142.1B yen in FY2015-3, up 44.2B yen (about 45%), due to implementation of the large-scale capital investment by utilizing borrowing and an increase in the amount converted to yen along with the weaker yen.

【Assets】

Notes Receivable and Accounts Receivable slightly inflated to 27.4B yen in FY2015-3, but have largely remained around 25.0B yen with Days Sales Outstanding around three months. Distribution channels include both via trading companies and direct sales to end users. There was no large customer which accounted for more than 10% of total sales in FY2015-3, but in FY2013-3 and FY2014-3, Mitsubishi Corporation was disclosed as a major customer accounting for more than 10% of total sales (FY2013-3: 11.6B yen (13% share), FY2014-3: 12.1B yen (11%)). Measures such as money on deposit are taken in accordance with the creditworthiness of customers, and no default has occurred over the last five years or more.

Inventory of 23.1B yen was consisted of finished products and goods (17.4B yen), work-in-process (0.3B yen) and raw materials and supplies (5.4B yen). As a production cycle is short at around five days, the weight of work-in-process is low.

Among Tangible Fixed Assets, construction-in-progress has significantly increased from the end of FY2014-3 as the large-scale expansion of EVOH production facilities (total investment of 180M dollars) has been in progress in the US NOLTEX since July 2013. The subject plant is scheduled to complete construction during Q2 FY2016-3 (July-September 2015).

Investment and Other Assets of 7.9B yen was consisted of investment securities (5.4B yen), deferred taxes (1.5B yen) and other (0.9B yen). Of an increase by about 1.7B yen compared with the previous year, about 1.1B yen came from the acquisition of shares of Japan Coating Resin (affiliated company accounted for by the equity method) in association with the company split of the synthetic resin emulsion business.

【Liabilities】

Notes Payable and Accounts Payable amounted to 14.8B yen, with Cash Disbursement Outstanding remaining around 2.5 months, a slightly shorter than Days Sales Outstanding of receivables. Trade amount with and payables to Mitsubishi Chemical, the parent company and the largest supplier, were 10.0B yen (accounting for about 13% of COGS) and 2.0B yen, respectively in FY2015-3.

Interest Bearing Debt has gradually increased from 10.0B yen two years ago to 25.2B yen, because part of the capital investment was funded by borrowing. However, over the past five years or more, EBITDA has remained at the level exceeding 15.0B yen (except in FY2012-3), and, though Interest Bearing Debt significantly increased, the Company has a strong debt service ability and plans to repay the majority of borrowings within two years.

						JPY(M)		
◆BS Summary	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Composition	vs. Prev. year	vs. Prev. %
Cash & Deposits	8,036	4,879	8,433	5,785	7,312	5.1%	1,527	126.4%
Notes and Accounts Receivable	22,897	24,213	25,120	24,478	27,375	19.3%	2,897	111.8%
Inventory	15,674	17,528	19,788	24,134	23,074	16.2%	(1,060)	95.6%
Deferred Tax Assets	1,150	977	1,326	1,211	1,135	0.8%	(76)	93.7%
Allowance for Doubtful Accounts	(80)	(36)	(44)	(42)	(9)	0.0%	33	21.4%
Others	1,021	1,901	2,429	1,341	1,829	1.3%	488	136.4%
Total Current Assets	48,699	49,464	57,054	56,907	60,716	42.7%	3,809	106.7%
Buildings & Structures	9,426	9,554	11,619	11,528	12,969	9.1%	1,441	112.5%
Machinery & Equipment and Vehicles	22,375	20,671	28,326	28,313	29,812	21.0%	1,499	105.3%
Land	4,332	4,478	4,512	4,540	4,567	3.2%	27	100.6%
Lease Assets	31	27	6	632	655	0.5%	23	103.6%
Construction In Progress	3,778	7,273	2,625	19,722	23,327	16.4%	3,605	118.3%
Others	1,450	1,429	1,671	1,776	1,748	1.2%	(28)	98.4%
Total Tangible Fixed Assets	41,394	43,436	48,762	66,511	73,078	51.4%	6,567	109.9%
Intangible Assets	839	665	489	496	407	0.3%	(89)	82.1%
Investment & Other Assets	6,923	6,195	5,873	6,193	7,909	5.6%	1,716	127.7%
Total Fixed Assets	49,157	50,296	55,125	73,200	81,394	57.3%	8,194	111.2%
Total Asset	97,857	99,761	112,180	130,107	142,110	100.0%	12,003	109.2%
Notes and Accounts Payable	13,673	14,648	16,018	15,254	14,827	10.4%	(427)	97.2%
Short-Term Debt	3,954	4,365	6,072	10,868	18,899	13.3%	8,031	173.9%
Lease Obligations	9	9	1	44	52	0.0%	8	118.2%
Accrued Expenses	2,191	2,773	2,510	2,275	2,684	1.9%	409	118.0%
Income Tax Payable	1,504	618	2,646	4,472	318	0.2%	(4,154)	7.1%
Accrued Bonuses	1,165	1,125	1,229	1,364	1,273	0.9%	(91)	93.3%
Others	3,504	4,749	4,669	4,545	3,939	2.8%	(606)	86.7%
Total Current Liabilities	26,003	28,289	33,148	38,822	41,992	29.5%	3,170	108.2%
Long Term Debt	9,613	7,584	3,962	3,850	5,689	4.0%	1,839	147.8%
Accrued Expenses	23	19	5	588	597	0.4%	9	101.5%
Deferred Tax Liabilities	1,028	1,256	1,944	2,562	2,554	1.8%	(8)	99.7%
Provision for Retirement Benefits	5,477	5,687	5,935	5,481	5,314	3.7%	(167)	97.0%
Others	757	924	1,736	2,034	2,244	1.6%	210	110.3%
Total Non-Current Liabilities	16,902	15,475	13,587	14,515	16,398	11.5%	1,883	113.0%
Total Liabilities	42,906	43,764	46,735	53,337	58,390	41.1%	5,053	109.5%
Capital Stock	17,989	17,989	17,989	17,989	17,989	12.7%	0	100.0%
Capital Surplus	13,879	13,879	13,879	13,879	13,879	9.8%	0	100.0%
Retained Earnings	25,692	27,581	34,550	40,815	45,446	32.0%	4,631	111.3%
Treasury Stock	(194)	(195)	(197)	(202)	(203)	-0.1%	(1)	100.5%
Total Stockholders' Equity	57,367	59,254	66,222	72,481	77,111	54.3%	4,630	106.4%
Other Comprehensive Income	(2,420)	(3,260)	(780)	4,283	6,604	4.6%	2,321	154.2%
Minority Interests	4	2	2	6	5	0.0%	(1)	83.3%
Total Net Assets	54,951	55,996	65,444	76,770	83,720	58.9%	6,950	109.1%
Total Liabilities and Total Net Assets	97,857	99,761	112,180	130,107	142,110	100.0%	12,003	109.2%

Interest Bearing Debts	13,599	11,977	10,040	15,350	25,237
EBITDA	16,732	13,714	18,792	23,358	18,238

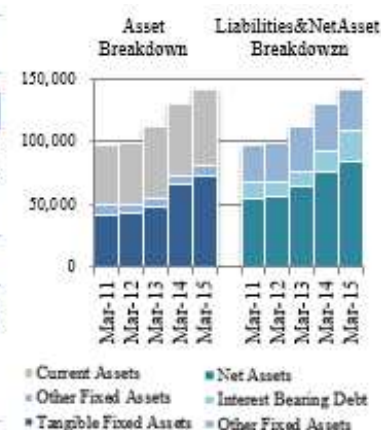
◆Key Indicators	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Current Ratio	187.3%	174.9%	172.1%	146.6%	144.6%
Capital Ratio	56.2%	56.1%	58.3%	59.0%	58.9%
D/E ratio (times)	0.25	0.21	0.15	0.20	0.30
Interest Bearing Debts /EBITDA	0.81	0.87	0.53	0.66	1.38

ROA	6.0%	3.2%	7.7%	6.6%	4.9%
ROE	11.4%	5.7%	13.4%	11.3%	8.3%
Days Sales Outstanding (M)	3.1	3.2	3.2	2.7	3.0
Days Sales in Inventories (M)	2.8	3.0	3.4	3.4	3.7
Cash Disbursement Outstanding (M)	2.5	2.6	2.8	2.4	2.3

Days Sales Outstanding = (Average Trade Receivables at beginning & end of FY / Revenue) × 12

Days Sales in Inventories = (Average Inventories at beginning & end of FY / COGS) × 12

Cash Disbursement Outstanding = (Average Accounts Payable at beginning & end of FY / COGS) × 12



Source: summary of financial results.

5-(5) Cash Flow Overview

Negative free CF for two consecutive years due to large-scale capital investments in progress since FY2014-3

◆ Negative free CF due to large-scale capital investments implemented in FY2014-3

CF from Operating Activities fell below 10.0B yen due to a significant impact of the contraction of income. Payment of corporate taxes, etc. in the total amount of 7.0B yen, including about 2.6B yen of corporate taxes for prior periods, also negatively affected.

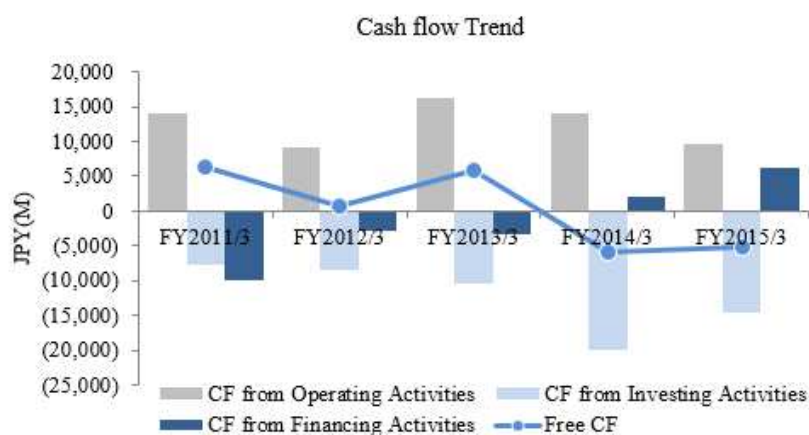
CF from Investing Activities remained at the high level as a result of large-scale capital investments implemented in FY2014-3 and FY2015-3 such as OPL Film production facility in the Kumamoto Plant (total investment: 6.5B yen) and EVOH production facility in NOLTEX (US) (total investment: 180M dollars). Thus, free CF which generally remains positive turned to negative, as CF from Investing Activities exceeded CF from Operating Activities.

CF from Financing Activities amounted to +6.3B yen, as the capital investment for 4.8B yen was funded through the long-term borrowing. The Company has sought to improve the balance sheet by contracting the Interest Bearing Debt from FY2006-3 through to FY2011-3, which was significantly reduced from 41.7B yen in March 2006 to 13.6B yen in March 2011, including the repayment of the long-term borrowing for about 6.6B yen during FY2011-3.

	JPY(M)				
◆ CF Summary	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Income before Income Taxes	9,223	5,276	12,660	16,155	9,863
Depreciation etc*	6,822	6,768	7,046	7,196	7,722
Change in Assets(Liabilities) for Operating	171	(1,867)	(1,209)	(3,225)	(1,177)
Others	678	1,484	152	(34)	159
Income Taxes Payment	(2,764)	(2,438)	(2,284)	(5,942)	(7,015)
CF from Operating Activities	14,132	9,223	16,365	14,150	9,552
CF from Investing Activities	(7,761)	(8,375)	(10,557)	(20,033)	(14,618)
Free CF	6,371	648	5,808	(5,883)	(5,066)
CF from Financing Activities	(9,844)	(2,872)	(3,319)	1,996	6,263
Adjustments	(329)	(142)	425	954	330
Net Cash Flow	(3,802)	(2,367)	2,914	(2,933)	1,527
Cash & Cash equivalents at the beginning of period	11,807	8,005	5,637	8,677	5,744
Change Of Consolidated Entity	-	-	125	-	-
Cash and Cash Equivalents at end of period	8,005	5,637	8,677	5,744	7,271

* Impairment Loss & Amortization are included.

Source: summary of financial statements



Source: summary of financial results.

6. Management Plan and Growth Strategy

6-(1) Management Plan

Expect increase in revenues and income driven by enhanced production capacity

◆Target in FY2016-3: revenues of 112.0B yen and operating income of 14.0B yen

Currently, the mid-term management plan "Double 15" is underway: FY2015-3 was the fourth year of the plan, and the next fiscal year reaches to the final year. The next five-year plan for the period from FY2017-3 to FY2021-3 is currently under development, which is scheduled to be announced within 2015.

The Company defines where it wants to be in 2025 as "a company that exploits its strengths to provide specialty products, thereby contributing to a sustainable society and maintaining a visible presence on the global market", and has been taking initiatives under the mid-term management plan "Double 15" as specific measures to achieve that goal. The Company has initially set numerical goals of "Revenues 130.0B, Operating Income 20.0B yen, Operating Margin 15% or more in FY2016-3", but given the performance in the current fiscal year, revised them downward to "Revenues 112.0B yen, Operating Income 14.0B yen, Operating Margin 12.5%" as planned figures in FY2016-3. To achieve the plan, compared with the performance in FY2015-3, 6.8B yen (about +6.5%) to revenues and 2.8B yen (about +25%) to operating income should be added.

◆Expect increase in sales volume from full-year operations of new OPL Film line (the 6th line) and enhanced EVOH production capacity

By segment, the Company assumes almost flat growth in the organic synthesis and other segments, and seeks to achieve the plan by expanding sales in the synthetic resins business. Although full-scale operations of the new OPL Film line (the 6th line) was not possible due to a defect in the quality, operations throughout the year are scheduled in FY2016-3. Also, as the new EVOH production line (US) is expected to start operations in Q2, the Company plans to seek a growth in revenues and gross profit by increasing the sales volume from the enhanced production capacity.

On the operating income side, a stabilization of prices of vinyl acetate monomers in Europe which temporarily jumped and a drop in domestic naphtha prices which had remained at nearly 70,000 yen/KL to the level below 50,000 yen/KL entering in Q4 FY2015-3 should positively contribute to the increase.

On the other hand, decisions to withdraw from "Bovlon" within the synthetic resins segment and stop handling ethyl acetate within the organic synthesis segment should negatively affect the sales volume. However, as both are unprofitable businesses, an improvement in the operating margin is expected.

When looking at the projected net increase in the operating income of 2.8B yen by factor, change in the volume (+4.4B yen), raw fuel (+2.4B yen) and other (*0.3B yen) should positively contribute to the income, while change in prices (-1.5B yen) and fixed costs (-2.7B yen) are two factors (-4.2B yen in total) assumed to negatively contribute to the income. The Company expects a significant improvement in the operating income through an increase in the sales volume, and to what extent a recovery of "OPL Film" and an expansion of sales of "SOARNOL" after the new facility starts operations will drive the performance in the next fiscal year. Also, while FY2015-3 was a year experiencing facility troubles, whether the stable operations can be maintained throughout the year will be another challenge.

◆Revenue/Operating Income/Operating Margin Trend

	Act	Act	Act	Act	Act	Double15	Act	Act	Act	Plan
	FY2007-3	FY2008-3	FY2009-3	FY2010-3	FY2011-3	FY2012-3	FY2013-3	*FY2014-3	FY2015-3	FY2016-3
Revenue	95,800	109,600	100,961	90,086	91,260	87,243	91,976	100,200	105,202	112,000
Operating Income	5,700	7,700	4,382	10,767	10,087	7,117	11,859	14,800	11,186	14,000
Operating Margin	5.9%	7.0%	4.3%	12.0%	11.1%	8.2%	12.9%	14.8%	10.6%	12.5%
Depreciation	n.a.	n.a.	n.a.	6,775	6,645	6,597	6,933	7,129	7,052	9,000
EBITDA	n.a.	n.a.	n.a.	17,542	16,732	13,714	18,792	21,929	18,238	23,000
EBITDA Margin	n.a.	n.a.	n.a.	19.5%	18.3%	15.7%	20.4%	21.9%	17.3%	20.5%

* Value excludes the impacts by accounting period change of some subsidiaries.

Source: summary of financial results and financial results materials.



* Value excludes the impacts by accounting period change of some subsidiaries.

Source: summary of financial results and financial results materials.

◆Business trend and plan by segment		Act	Act	Act*	Act	JPY(M) Plan
		Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Revenue	Synthetic Resins	64,946	61,510	67,113	75,000	77,944
	Organic Synthesis	22,932	22,034	20,643	21,300	23,371
	Others	3,381	3,699	4,219	3,800	3,887
	Total	91,260	87,243	91,976	100,200	105,202
Operating Income	Synthetic Resins	10,234	7,244	11,837	15,000	11,381
	Organic Synthesis	(131)	35	174	0	5
	Others	200	231	243	200	189
	Sub total	10,303	7,512	12,254	15,200	11,575
	Adjustment	(216)	(395)	(395)	(400)	(389)
	Total	10,087	7,117	11,859	14,800	11,186
		Act	Act	Act*	Act	Plan
Increase in Revenue (vs previous year)	Synthetic Resins		(3,436)	5,603	7,887	2,944
	Organic Synthesis		(898)	(1,391)	657	2,071
	Others		318	520	(419)	87
	Total		(4,017)	4,733	8,224	5,002
Revenue growth (vs previous year)	Synthetic Resins		-5.3%	9.1%	11.8%	3.9%
	Organic Synthesis		-3.9%	-6.3%	3.2%	9.7%
	Others		9.4%	14.1%	-9.9%	2.3%
	Total		-4.4%	5.4%	8.9%	5.0%
Increase in OI (vs previous year)	Synthetic Resins		(2,990)	4,593	3,163	(3,619)
	Organic Synthesis		166	139	(174)	5
	Others		31	12	(43)	(11)
	Sub total		(2,791)	4,742	2,946	(3,625)
	Adjustment		(179)	0	(5)	11
	Total		(2,970)	4,742	2,941	(3,614)
Operating Margin	Synthetic Resins	15.8%	11.8%	17.6%	20.0%	14.6%
	Organic Synthesis	-0.6%	0.2%	0.8%	0.0%	0.0%
	Others	5.9%	6.2%	5.8%	5.3%	4.9%
	Total	11.1%	8.2%	12.9%	14.8%	10.6%

* Value excludes the impacts by accounting period change of some subsidiaries.

Source: summary of financial results and financial results materials.

6-(2) Growth Strategy

Basic policies are:

- (i) Expansion of core businesses
- (ii) Establishment of the third pillar
- (iii) Enhancement of competitive advantage
- (iv) Acceleration of overseas expansion
- (v) Assurance of safety, quality, environment and compliance

◆ While expanding core businesses, focus on new source of income

Basic policies of the mid-term management plan "Double 15" are: (i) Aggressive expansion of core businesses, (ii) Establishment of the third pillar and strengthening of new product development, (iii) Enhancement of competitive advantage, (iv) Acceleration of overseas expansion and (v) Assurance of safety, quality, environment and compliance (see below table).

◆ Mid-term management plan "Double 15": basic policy and progress

Focus	Basic policy	Initiatives
① Aggressive expansion of core business	<ul style="list-style-type: none"> ■ Quality improvement and sales expansion of "OPL Film" and "Soarnol" ■ Steady increase in production capabilities 	<ul style="list-style-type: none"> ✓ Wider/thinner OPL Film ✓ Soarnol: new applications e.g. retort pouches ✓ Start OPL Film 5th/6th lines ✓ New EVOH facilities in US/UK
② Establishment of the third pillar Strengthening of new product development	<ul style="list-style-type: none"> ■ Early implementation of the third pillar ■ Promotion of new product development by enhancement of R&D activities 	<ul style="list-style-type: none"> ✓ Practical use of Nichigo G-Polymer ✓ A new advanced research building in Central Research Labo ✓ Hi-Selon: expect demand growth in liquid detergent use, start expanding facilities
③ Enhancement of competitive advantage	<ul style="list-style-type: none"> ■ Invest in growth areas ■ Selection/concentration ■ Enhance cost advantage 	<ul style="list-style-type: none"> ✓ Withdraw from non-profitable business e.g. ketene product/gum base resin/Bovlon ✓ Re-organization of synthetic resin emulsion business within Mitsubishi Group
④ Acceleration of overseas expansion	<ul style="list-style-type: none"> ■ Focus emerging market ■ Overseas development incl. local production ■ Nurture global talents 	<ul style="list-style-type: none"> ✓ Overseas development of Hi-Selon ✓ Sales expansion of existing products in the overseas markets ✓ Local technical staff in China
⑤ Assurance of safety, quality, environment and compliance	<ul style="list-style-type: none"> ■ Safe/steady production ■ Reduce chemical emission ■ Save energy 	<ul style="list-style-type: none"> ✓ Ogaki plant: add city gas boiler ✓ Kumamoto plant: add biomass boiler, install solar power generation system

Source: explanatory materials of financial results

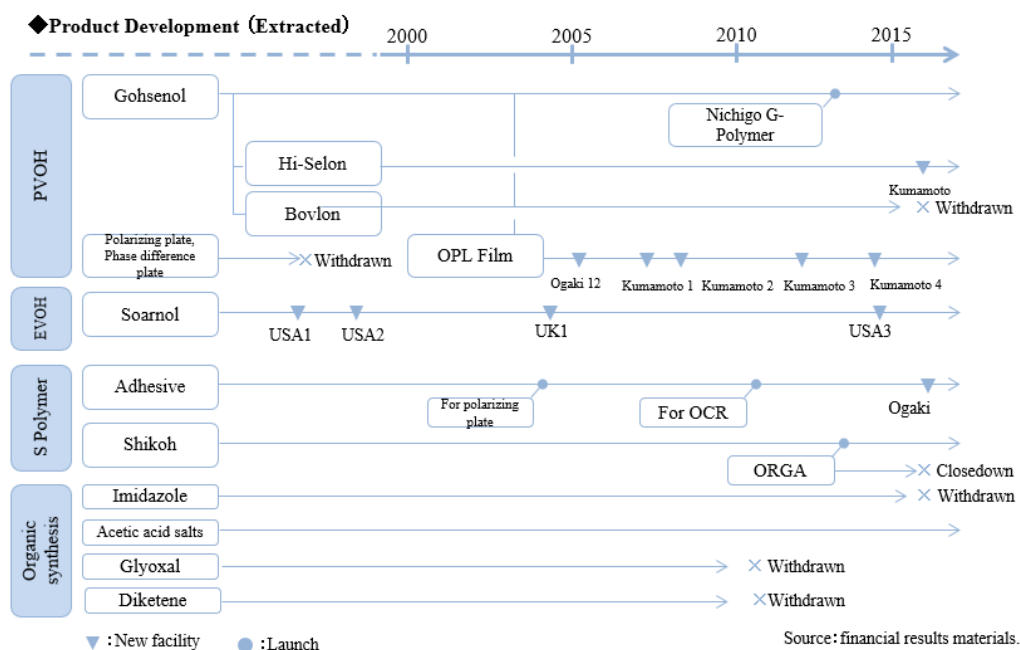
◆ Aim for early practical use of thinner OPL Film/low-contractile products

With respect to "(i) Aggressive expansion of core businesses", the Company achieved a size expansion, including the large-scale capital investment in OPL Film (optical-use PVOH film) and SOARNOL (EVOH resin). However, a new challenge emerged this year, such as a temporary suspension of operations due to a defect in the quality.

OPL Film continues to enjoy an increasing trend in demand, but lower prices of end products are putting more pressure on prices. The needs for improvement in the product quality (e.g. thinner or lower-contractile features) are also strong. The current key target is to achieve an improvement in the quality aligned with users' needs and soon to commercialize the improved products, ahead of competitors. The Company plans to add a new production line, when the practical use of thinner (20μm-thick) films is successful. The addition of a production line is expected to cost around several billion yen, but there is no concern about financing, as the Company has sufficient funding ability.

SOARNOL is currently sold mostly in the developed markets where the requirement level for safety and freshness of food is high, but it is likely that the similar needs to the developed markets would arise in the emerging markets along with higher income level, and further growth is expected in this field. Also in Europe, there still remain a lot of foodstuff for which glass container is a mainstream, leaving a sufficient room for cultivating demand.

In addition, the Company seeks to expand the business by making efforts to increase sales through ongoing detailed technical follow-up, and cultivating the demand for use in agricultural materials other than use in food packaging.



◆Aggressively promote expansion of applications of existing products in addition to development of new products

"(ii) Establishment of the third pillar and strengthening of new product development" is an important challenge driving the future growth, and the Company promotes development of new products and new applications of existing products which lead the next generation, targeting "environment" and "energy".

The practical use of "Nichigo G-polymer" has come in sight. "Nichigo G-polymer" is the first amorphous vinyl alcohol resin in the world with excellent gas barrier property and water-solubility. Although dissemination has been slower than initially estimated, it is expected to be put in practical use for food packaging and non-woven fabric applications from FY2016-3. The Company plans to promote the practical use for applications such as in the energy field exploiting the product features.

The Company is also aggressive in expanding applications of existing products. Water-soluble PVOH film "Hi-Selon" is a good example. Production of "Hi-Selon" started in 1973, and the product has been used for packaging of pharmaceuticals and a film for curved transfer printing. In recent years, the demand expanded along with the requirement for packaging of agricultural chemicals, and transfer printing films for use in automobile interiors remain solid. The area which is expected to grow as a new application is a demand for use in packaging materials for liquid detergent. Along with dissemination of individually packaged liquid detergent particularly in Europe, there has been increasing inquiry on Hi-Selon. To meet with these needs, the Company decided to add a new production facility in July 2014. However, as the new facility is scheduled to start operations during Q4 FY2016-3 (January-March 2016), the increase in sales from the added facility will contribute to the full-year revenues from FY2017-3.

A stable increase in demand is also expected in the near term for adhesives used in electronic materials and optical materials such as "COPONYL" and "SHIKOH", as the polarizing plate market continues to be strong and the touch panel market is rapidly

6-(3) Risk Factors

expanding along with dissemination of tablet devices and smartphones.

◆ **Seek to enhance cost advantage and improve profitability through selection and concentration of business and global production adjustment**

With respect to "(iii) Enhancement of competitive advantage", the Company has suspended production of unprofitable products such as diketene and gum base resins, and decided to withdraw from Bovlon in FY2015-3. The Company continuously reduces unprofitable businesses and shifts to more profitable products by reviewing the profitability of businesses, and makes efforts to improve the margin.

The maintenance method for production facilities is an area having a room to review. Currently, the maintenance for about 1.5-2 months is implemented twice a year on OPL Film production facilities that require the intensive maintenance. If the maintenance method can be renewed, it becomes possible to increase annual operating hours through less frequency and number of days in addition to a reduction in repair costs.

Also in July 2015, considering the scheduled operation of the new EVOH production facility in the US, the Company plans to exploit the cost advantage in promoting the business development, and also pursue a reduction of costs through making adjustments to the overall operations.

◆ **High reliance on optical field and two core products**

While the demand for the Company's products comes from various industries, the weight of optical-use products led by OPL Film is relatively high. While the mid-term expansion is expected in this field, persistent improvement in the quality and product development are required for this industry with the rapid advancement of technology.

Also, as recognized by the Company that targets the establishment of the third pillar, the reliance on two core products (OPL Film and SOARNOL) is currently high. As the demand for two core products comes from different sources, a correlation of the business performance is not high, but the establishment of the third pillar is desirable from the perspective of not only the future growth but the stable performance.

(Reference) Recognized Risks

Risk item	Description
① Economic conditions	Economic trend in the major markets (Japan, North America, Europe, Asia) and the associated demand fluctuation may affect the business performance and financial conditions.
② Fluctuation of raw materials prices	A significant volatility in oil and naphtha prices, if it is not easily passed on to sales prices, may affect the business performance and financial conditions.
③ Fluctuation of exchange rates	Yen equivalent of sales and oil prices traded in foreign currencies and assets/liabilities denominated in foreign currencies is affected by the exchange rate fluctuations.. To avoid the currency risk, efforts are made to minimize the impact of short-term fluctuations by entering into currency forward contracts pursuant to the internal rules, but unexpectedly large fluctuations may affect the business performance and financial conditions.
④ Overseas business development	Risks are inherent in the laws and regulations, a change in the tax system, political frameworks and organizational violent activities, etc. in each country.
⑤ Intellectual property right	The intellectual property rights held may be invalidated by the claim of the third parties. The rights may not be protected in certain countries or regions. There are risks that competitors infringe the intellectual property rights and the company infringes the competitors' rights.
⑥ Lawsuit	Lawsuits may be filed in the course of business activities.
⑦ Interest bearing debt	The fluctuation in the level of interest rates may affect the business performance and financial conditions.
⑧ Accidents/incidents	There are risks that operations are suspended due to accidents caused by the trouble in facilities and large-scale natural disasters.

Source: annual report.

7. Competitive Analysis

7-(1) Competitive Environment

a. Optical-use PVOH film

◆Optical-use PVOH film: Kuraray (70%) and The Nippon Synthetic Chemical Industry (30%) dominate the market

The competitive environment for the optical-use PVOH film (product name: OPL Film), one of the Company's mainstay products, is discussed as follows.

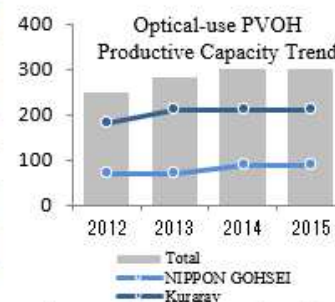
Other than the Company, Kuraray and Aicello (unlisted) also produce PVOH films. However, The Company and Kuraray are the only two manufactures of optical-use PVOH films in the world. Kuraray in its disclosure materials estimates its market share to be about 80%, but in the Company's view, the respective market share is: Kuraray: about 70% and The Nippon Synthetic Chemical Industry: about 30%.

Initially, PVOH film was mainly used as a packaging material, but after development of an application as a material for "polarizing plate (polarizing film)", an indispensable element of LCD, the demand for the optical use has rapidly expanded. Kuraray had the monopoly on the optical-use PVOH film, but in 2003 the Company entered into the optical-use PVOH film field with its PVOH processing technology at the world-top level. After an initial difficult period, the Company has been evaluated for its efforts such as an extension of the film length from the previous 2,700 m per roll to 5,000 m, and came to establish the current position.

◆Optical-use PVOH Productive Capacity

	2012	2013	2014	2015
Kuraray	180	212	212	212
NIPPON GOHSEI	70	70	88	88
Total	250	282	300	300
Productive Capacity Share				
Kuraray	72.0%	75.2%	70.7%	70.7%
NIPPON GOHSEI	28.0%	24.8%	29.3%	29.3%

Unit: (M)m²/year



Source: Kuraray release and financial results materials.

◆Early practical use of thinner and lower-contrast products is key to the future

As production of the optical-use PVOH film requires a high level of the precision processing technology in addition to an advanced know-how of refining PVOH, technical hurdle for a new entry to this field is very high. The polarizing plate industry, a demand source of PVOH films, is also dominated by top three companies (Nitto Denko, LG Chemical (Korea) and Sumitomo Chemical) that hold over 70% market share. Considering the long-standing structure of two makers and several buyers, in addition to a technical barrier to entry, an emergence of companies that newly enter into the optical-use PVOH film business should be highly unlikely. Every polarizing plate company uses both the Company and Kuraray, although the respective shares are different.

Nitto Denko, a top polarizing plate producer, started in-house production of coating PVA as an alternative product to PVOH film, but its share is limited for now (see P7). The Company is rapidly promoting R&D towards the practical use of thinner (20μm-thick) products to compete against the coating PVA. Year-by-year, the needs for thinner, wider or lower-contrast products are growing, whether to be able to put the products of superior quality in the practical use earlier and commercialize them ahead of competitors will be a key to capture the future trend.

b. EVOH resins

◆EVOH resin: high initial cost serves as barrier to entry

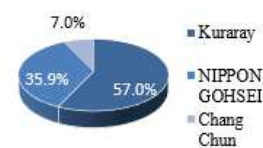
The competitive environment for the EVOH resins (product name: SOARNOL) is summarized below.

As discussed in Business Overview (P8), (i) Kuraray, (ii) The Nippon Synthetic Chemical Industry and (iii) Chang Chun Petrochemical (Taiwan) are only three manufactures of EVOH resins in the world. In the past, DuPont (US) tried unsuccessfully to start the EVOH resin business, and The Nippon Synthetic Chemical Industry acquired DuPont's plant in Houston, Texas in 1994. In addition to a high technical barrier to entry, provision of products according to applications and forming methods is required. Initial entry costs including capital investment, etc. is high, such as required capital investment for around one million yen per ton.

The share of each company on a production capacity basis is estimated (i) Kuraray 57%, (ii) The Nippon Synthetic Chemical Industry 36% and (iii) Chang Chun Petrochemical (Taiwan) 7%, and Kuraray and the Company dominate the market with over 90% share. Both companies are seeking to expand the production facilities with the view of growth in demand for EVOH resins. The Company plans to complete expansion of the production facility in the US (+15,000 ton/year) during Q1 FY2016-3, which will bring the total production capacity from the current 51,000 ton/y to 66,000 ton/y. On the other hand, Kuraray is adding 11,000 ton/y to the capacity in Belgium by the end of FY2016, which is expected to increase the production capacity to 92,000 ton/y.

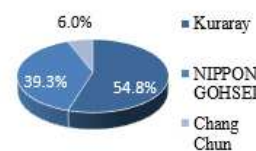
◆EVOH resin Productive Capacity(Current)

	US	Europe	Japan	Taiwan	Total	Share
Kuraray	47,000	24,000	10,000	-	81,000	57.0%
NIPPON GOHSEI	23,000	18,000	10,000	-	51,000	35.9%
Chang Chun	-	-	-	10,000	10,000	7.0%
Total	70,000	42,000	20,000	10,000	142,000	100.0%



◆EVOH resin Productive Capacity(including planed facility expansion)

	US	Europe	Japan	Taiwan	Total	Share
Kuraray	47,000	35,000	10,000	-	92,000	54.8%
NIPPON GOHSEI	38,000	18,000	10,000	-	66,000	39.3%
Chang Chun	-	-	-	10,000	10,000	6.0%
Total	85,000	53,000	20,000	10,000	168,000	100.0%



Unit: ton / year

Source: company release and hearing from NIPPON GOHSEI.

◆Chang Chun Petrochemical aggressively cuts prices

Chang Chun Petrochemical (Taiwan) is a core company of the Chang Chun Group, a leading petrochemical company in Taiwan, and, despite a late comer to the EVOH resin field, is a chemical product company with the largest production capacity in polyvinyl alcohol (2013, see P22).

Although its market share is limited with the current production capacity of EVOH resin at 10,000 ton/year (estimate), Chang Chun Petrochemical is aggressively cutting prices in the US and other countries. Properties (gas barrier and molding flexibility) of EVOH resins vary depending on the ethylene content. Therefore, to offer the most suitable products to the customer needs, the insight on resins to be combined and the processing technology is required. Given its poor ability to provide technical supports, Chang Chun Petrochemical has not been able to enter into the high-value-added product area. However, as it has a vision to expand the production lines, the possibility of a shift of some customers in the future cannot be denied.

7-(2) Performance Comparison

◆Margin on the entire company basis exceeds that of Kuraray, but inferior to Kuraray in segment profitability

Performance relative to Kuraray which competes in the optical-use PVOH film and EVOH resin is as follows.

Kuraray, with revenues of 542.6B yen for the most recent 12 months ^{(*)1}, is nearly five times larger than the Company (105.2B yen) in terms of the revenue size. On the other hand, in terms of the operating margin, the Company turned to exceed Kuraray in FY2014-3, and also in FY2015-3, the Company's operating margin (10.6%) was significantly higher than Kuraray's (2.9%). Among the chemical industry (204 companies), both companies are positioned at the higher end in the operating margin, as the Company ranks 38th (FY2015-3, entire company base) and Kuraray ranks 45th (FY2014-12, entire company base).

When focusing on the synthetic resin business (vinyl acetate business), Kuraray had maintained a better position in terms of both size and profitability than the Company until FY2014-3. Particularly, Kuraray's vinyl acetate segment had enjoyed very high profitability, maintaining the margin over 30%. Given the gap in the revenue size as much as twice in FY2014-3, assuming no difference in prices of both companies' products, an advantage in size should have appeared as a difference in profitability.

However, after Kuraray acquired the vinyl acetate business from DuPont (US) for about 543M dollars, Kuraray expanded both revenues and assets to nearly 1.5 times larger, but the segment margin deteriorated from 30% to 19%, partly due to the impact of greater burden of amortization of goodwill associated with the acquisition, suggesting that EBITDA margin ^{(*)2} also declined by nearly 10%.

As the Company does not source the raw materials from DuPont, there is no impact of Kuraray's M&A on the Company's business. There has also been no significant change in the business environment before and after the acquisition.

(*)1 Kuraray changed the fiscal year end from the end of March to the end of December from December 2014. Therefore, figures for the most recent 12 months were calculated by adding the figures of Q2 FY2015-12 to figures in FY2014-12 (9 months).

(*)2 $\text{EBITDA Margin} = \text{EBITDA} / \text{Revenue}$, $\text{EBITDA} = \text{Operating Income} + \text{Depreciation} + \text{Amortization of Goodwill}$

◆Rival Comparison		JPY(M)				
Company		Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Kuraray(*1) (Entire company)	Revenue	363,191	368,975	369,431	413,485	542,602
	Operating Income	53,095	54,733	49,197	49,545	15,934
	Operating Margin	14.6%	14.8%	13.3%	12.0%	2.9%
	Depreciation	33,536	30,737	30,952	34,972	45,709
	goodwill amortization	2,057	2,100	2,741	3,217	4,571
	EBITDA	88,688	87,570	82,890	87,734	66,214
NIPPON GOHSEI (Entire company)	EBITDA Margin	24.4%	23.7%	22.4%	21.2%	12.2%
	Revenue	91,260	87,243	91,976	111,151	105,202
	Operating Income	10,087	7,117	11,859	16,229	11,186
	Operating Margin	11.1%	8.2%	12.9%	14.6%	10.6%
	Depreciation	6,645	6,597	6,933	7,129	7,052
	EBITDA	16,732	13,714	18,792	23,358	18,238
	EBITDA Margin	18.3%	15.7%	20.4%	21.0%	17.3%

Segment		Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Kuraray(*1) (vinyl acetate)	Revenue	116,905	119,125	126,133	155,503	257,300
	Segment OI	50,848	49,904	48,877	46,658	48,080
	Segment OM	43.5%	41.9%	38.8%	30.0%	18.7%
	(*2) Depreciation	14,778	13,675	14,399	16,721	26,768
	(*2) goodwill amortization	2,057	2,001	2,642	3,118	4,476
	EBITDA	67,683	65,580	65,918	66,497	79,324
	EBITDA Margin	57.9%	55.1%	52.3%	42.8%	30.8%
	(*3) Segment Asset	150,556	159,031	226,677	278,042	398,631
	(*4) Return on assets ratio	33.8%	31.4%	21.6%	16.8%	12.1%
NIPPON GOHSEI (synthetic resin)	Revenue	64,946	61,510	67,113	83,560	77,944
	Segment OI	10,234	7,244	11,837	16,407	11,381
	Segment OM	15.8%	11.8%	17.6%	19.6%	14.6%
	Depreciation	5,806	5,853	6,283	6,712	6,541
	EBITDA	16,040	13,097	18,120	23,119	17,922
	EBITDA Margin	24.7%	21.3%	27.0%	27.7%	23.0%
	(*3) Segment Asset	68,580	74,527	86,503	105,131	116,383
	(*4) Return on assets ratio	14.9%	9.7%	13.7%	15.6%	9.8%

(*1) Kuraray changed the fiscal year end from the end-March to the end-December from December 2014. Therefore, figures for FY2015-3 were calculated by adding the figures of Q1 FY2015-12 to figures in FY2014-12 (9 months).

(*2) As Kuraray's segment breakdown is not available for Q1 FY2015-12, the amount of the vinyl acetate business in FY2015-3 was obtained by multiplying the company total in Q1 by the ratio of the segment over the company total in FY2014-12. (FY2015-3 (estimate)=FY2014-12 (actual segment) + 2015Q1 (actual company total) x segment ratio)

(*3) As the amount of Kuraray's segment assets as of March 2015 is not known, the amount as of December 2013 is used

(*4) Return on assets ratio= Segment Operating Income/ Segment Asset

Source: summary of financial results.

8. Stock Price Trend and Investment Return Analysis

8-(1) Stock Price Trend

The Company's stock outperformed TOPIX and peers in FY2013-3, as the business performance recovered.

Weaker stock price in H1 FY2015-3 given slower business performance due to special factors, return to uptrend later in the year led by the prospect of solving problems

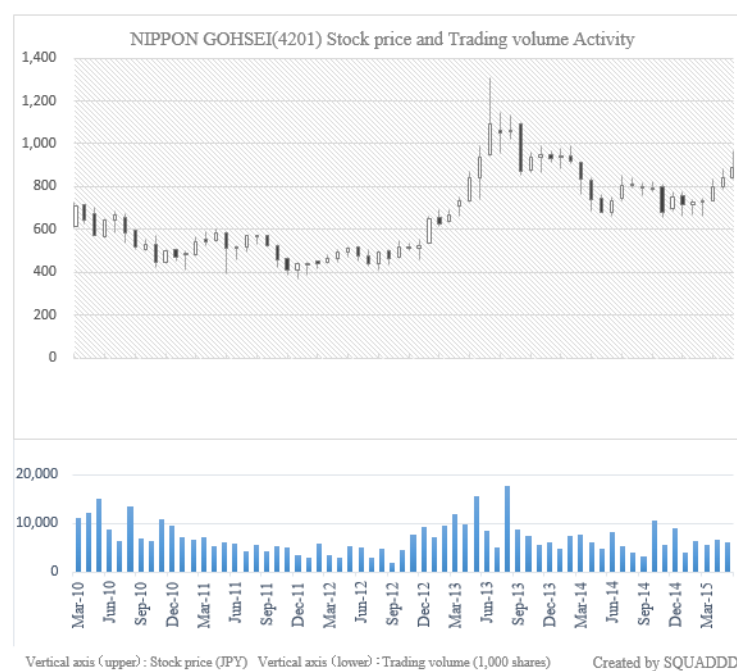
◆Business maintains expanding trend over the recent five years, weaker stock price returned to uptrend later

Stock price has shown the following trend. The Company confirmed an expanding trend in its Revenues over the recent five years from FY2011-3 to FY2015-3 (excluding the impact of the change in the accounting period of consolidated subsidiaries in FY2014-3), the Operating Income showed an increasing trend except in FY2012-3 and FY2015-3, and ROE and other profitability measures remained relatively solid without no significant deterioration.

In FY2012-3, the stock underperformed TOPIX and peers including Kuraray (3405.T), driven by a temporary deterioration in the business performance due to the impact of the prolonged inventory adjustment in the LCD TV market affected by the European debt crisis, etc. The liquidity per day (amount basis), which had remained around 200M yen, fell below 100M yen and recorded a bottom around the time of reporting financial results for FY2012-3.

In FY2013-3, the stock outperformed TOPIX and peers including Kuraray (3405.T), led by the bullish market driven by Abenomics later in the year and recovery of the business performance. Also, the liquidity (per day on amount basis; the same shall apply hereinafter) remained around 400M yen, indicating an expansion of market participants.

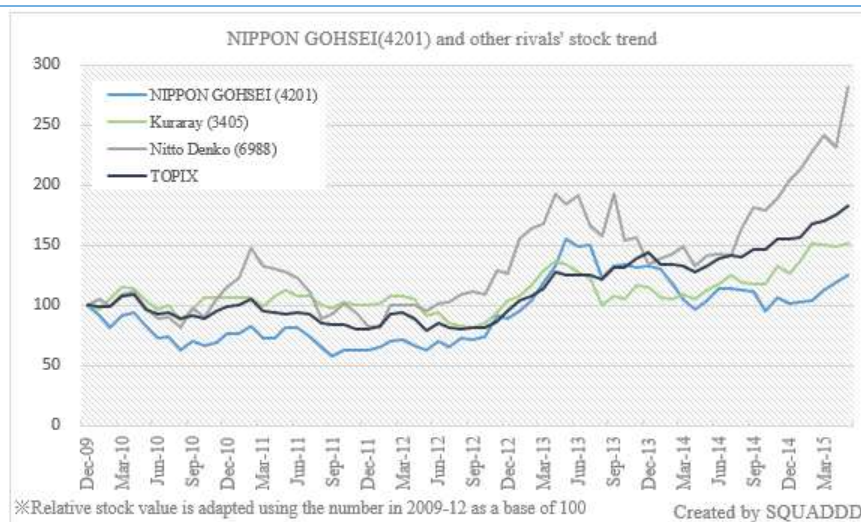
In FY2015-3, after going up for some time early in the year, the stock price gradually weakened due to a temporary deterioration in the business performance driven by special factors, resulting in underperformance relative to TOPIX and peers including Kuraray (3405.T). Later in the year, the resolution of the main factors that had caused deterioration in the business: (i) a defect in the quality stability in the new OPL Film facility (the 6th line) and (ii) a sharp rise in prices of vinyl acetate monomers in Europe, came in sight and an improvement in the income level was felt confident, leading to recovery of the stock price. The liquidity also dropped from 300M yen to around 200M yen in the first half of the year, but turned to an increasing trend along with the recovery of the stock price later in the year.



8-(2) Investment Return Analysis

Stock price (PBR) remains cheap relative to the industry average.

For valuation to improve going forward, expansion of size and better liquidity through IR activities will be a key.



◆Profitability measures such as ROE and PBR remain attractive relative to industry average

The stock valuation will be reviewed as follows. As of May 25, 2015, the Company's market capitalization was about 87.1B yen, PBR was 1.0x, ROE (actual basis) was 8.3% and dividend yield (company estimate) was 2.3%. Compared with the chemical industry average (204 names) of PBR (1.3x) and ROE (4.5%), the Company's valuation (PBR) remains cheap. For the stock to move higher in the future, solving the following challenges will be a key.

In the chemical industry which is consisted of many large-cap companies, there exist gaps in size (the average market capitalization of the industry is about 170B yen, twice larger than the Company) and the market liquidity (liquidity per day (amount basis) of the Company is 300M yen vs. market average of 630M yen; more than twice).

It varies by industry, but particularly in the chemical industry, the recent data confirmed that stock prices are highly correlated with the size factor such as sales and assets and profitability after considering the capital efficiency such as ROE and operating income relative to capital.

For the stock price to move higher (and remove premiums over the market average), further expansion of institutional (professional) investors by increasing the liquidity per day, while seeking to expand the revenue size and improve the capital efficiency, and enhancing the courteous disclosure and IR activities, should be critical.

◆Profitability was highly evaluated and successfully selected in "JPX Nikkei Index 400"

As specific measures to achieve the above, approach to both passive investors and active investors will be critical.

First, the approach to passive investors includes "JPX Nikkei Index 400" which started operations in January 2014. "JPX Nikkei Index 400" is an equity index composed of "top 400 companies with high appeal for investors", which meet various requirements of global investment standards, such as efficient use of capital and investor-focused management perspectives. The index was developed for the purpose of promoting the appeal of Japanese corporations domestically and abroad, while encouraging continued improvement of corporate value, thereby seeking to revitalize the stock market.

Expect selection in index again at reshuffle in August 2015

The Nippon Synthetic Chemical Industry ranks 772nd out of 3,459 companies in terms of market capitalization (771st in liquidity), but was successfully selected in the JPX Nikkei Index 400 driven by its profitability. On the other hand, a competitor Kuraray (3405.T), which was also selected in the index, already ranked within top 400 companies in terms of market capitalization (194th out of 3,459) and the liquidity (249th). As Kuraray also meets a certain level of profitability, it seems relatively easy to select Kuraray in the index

Constituents of the index are scheduled to be reshuffled in August 2015, but considering the profitability and other measures, it is likely that the Company and Kuraray (3405.T) will continue to be selected in the index.

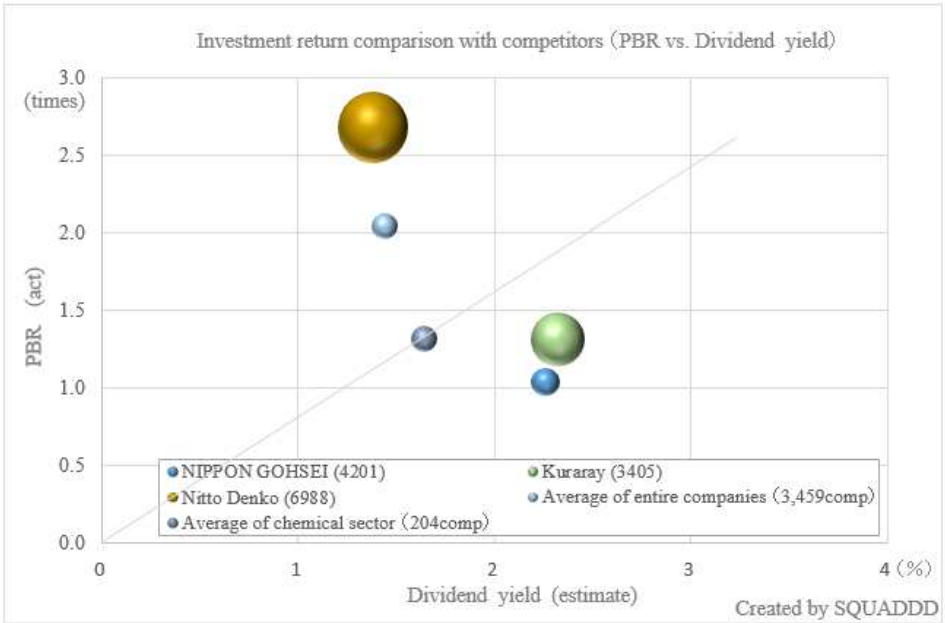
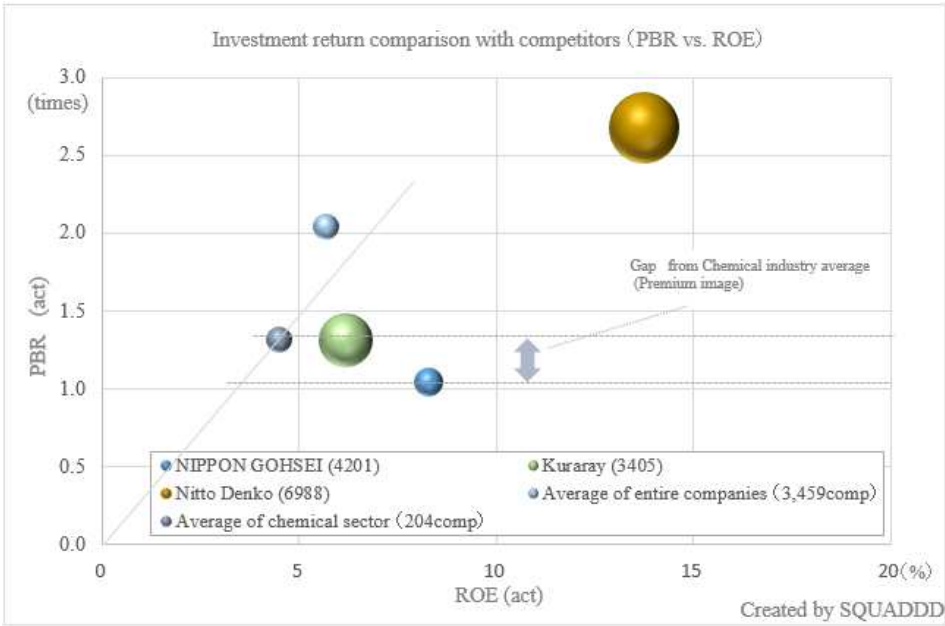
As it is anticipated that passive investors represented by GPIF will increase allocation to the index, resulting incremental flow to the Company's stock is expected to improve the liquidity.

On the other hand, with respect to the approach to active investors, as the above-mentioned additional improvement in the liquidity will increase the chance to fulfill the criteria set by the asset management companies in their investment universe, further support from active investors should be expected going forward. Although, as mentioned earlier, the market capitalization ranking 772nd out of 3,459 (771st in liquidity) is not in the range of the sell-side coverage, the Company has established its position as an attractive value stock with profitability superior to the industry top Kuraray (3405.T). It should become critical to steadily cultivate active investors with large investment size by appealing to institutional (professional) investor base through steady IR activities such as small meetings.

◆ Attractive relative to peers, expect re-rating of stock price this year

The Company is compared with peers as follows. In terms of the market capitalization, Kuraray ranks the top (625.0B yen, TSE1) and the Company ranks 2nd (87.0B yen, TSE1), compared with the chemical industry average of 170B yen with ROE of 4.5% (a size of bubbles representing individual companies in the chart illustrates the market cap of each company). In terms of profitability indicators, as shown by ROE (Company: 8.3% vs. Kuraray's 6.2%) and dividend yield (Company: 2.3% vs. Kuraray's 2.3%), the Company is predominantly attractive from the value investment perspective.

In terms of the future stock price, the Company's stock price and liquidity are expected to rise further from the mid- to long-term perspective, supported by institutional (professional) investor base of "JPX Nikkei Index 400". In addition, as the factors behind the deterioration in the business performance in FY2015-3 was solved, which is expected to significantly contribute to improvement in the income next year, the stock price has turned to the upward trend, outperforming Kuraray. Going forward, it is likely that re-rating of the Company's stock continues, resulting in the gradual consolidation of stock prices with peers (industry average).



8-(3) Return to Shareholders &

◆Plan to increase dividends by 2 yen in FY2016-3

The Company puts return to shareholders one of the important initiatives, and pays dividends considering the business trend, while seeking to secure internal reserves for the business investment and to maintain the financial conditions.

Dividend per share was raised from 12 yen to 15 yen in FY2013-3, and by 3 yen to 18 yen in FY2014-3. In FY2015-3, although the Net Income was 6.6B yen (EPS: 68.25 yen), less than the previous year and the year before when the Net Income exceeded 8.0B yen, the Company will pay the same amount of dividend (18 yen) with the previous year.

Also in FY2016-3, the Company plans to increase dividends by 2 yen to 20 yen, consistent with the payout ratio of 20%.

◆Shares Outstanding / Share Information

company estimate

	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
Shares outstanding at the end of the period 1,000 stock	98,369	98,369	98,369	98,369	98,369	n.a.
# of shareholders (person)	4,440	4,179	3,536	3,922	n.a.	n.a.
Stock price at the end of the period (JPY)	513	509	839	741	797	n.a.
Market Cap (JPY (M))	50,463	50,070	82,532	72,892	78,400	n.a.
Earnings per share (EPS) (JPY)	62.94	32.38	83.75	82.32	68.25	97.54
Book value per share (BPS) (JPY)	564.07	574.83	671.84	788.11	859.49	n.a.

◆Shareholder Return Information

company estimate

	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
Dividend per share at the half of the period (JPY)	5.00	6.00	6.00	9.00	9.00	10.00
Dividend per share at the end of the period (JPY)	7.00	6.00	9.00	9.00	9.00	10.00
Dividend per share (DPS) (JPY)	12.00	12.00	15.00	18.00	18.00	20.00
Dividend payout ratio (%)	19.1%	37.1%	17.9%	21.9%	26.4%	20.5%
Dividend yield (%)	2.3%	2.4%	1.8%	2.4%	2.3%	n.a.

Source: annual reports, summary of financial statements and financial results materials.

8-(4) Capital Cost/ROIC

◆Despite ROE below 10%, maintain positive Equity Spread

With accumulation of internal reserves as well as lower organic income, Net Assets increased from 55.0B yen in FY2011-3 to 83.7B yen in FY2015-3, up 28.8B yen (about 52%) over the recent five years, resulting in ROE of 8.3%, below 10%. Although a dividend increase, etc. may be one of options, considering the large capital investment needs and continued generation of returns in excess of the level required by shareholders (Equity Capital Cost), the existing return to shareholders policy is considered reasonable.

◆Equity Spread

JPY(M)

	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Total Assets	54,951	55,996	65,444	76,770	83,720
Total Net Assets	6,131	3,154	8,158	8,018	6,648
ROE	11.4%	5.7%	13.4%	11.3%	8.3%
Capital cost*	5.0%	5.0%	5.0%	5.0%	5.0%
Equity Spread	6.4%	0.7%	8.4%	6.3%	3.3%

* $\beta=0.921$ (Bloomberg data as of 2015/5/22), calculated at the risk premium= 5%

The latest capital cost is also used for the past year.

Source: Created by SQUADD

◆ Newly invested facilities still under construction with no generation of returns, resulting in lower ROIC

The Return on Invested Capital (ROIC) in FY2015-3 is calculated 6.7%, down about 4% compared with the previous year. While the invested capital increased by 15.4B yen from 88.2B yen of the previous year-end to 103.6B yen, affected by the borrowing to fund a portion of the capital investment, as the facilities are now under construction, no additional returns were generated from operations of the new facilities during FY2015-3, partially contributing to the lower ROIC. However, with the Weighted Average Cost of Capital (WACC) around 4%, ROIC maintains the level exceeding WACC.

In making decisions on the capital investment, the Company uses the relatively conservative criteria including IRR of 15% as one of thresholds of a hurdle rate to the investment, in addition to the qualitative judgment such as a materialization of customer needs.

◆ ROIC (Return On Invested Capital)

	JPY(M)				
	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15
Operating Profit*	10,087	7,117	11,859	14,800	11,186
Effective tax rate	40.6%	40.6%	38.0%	38.0%	38.0%
NOPLAT	5,992	4,227	7,353	9,176	6,935
Interest Bearing Debts	13,599	11,977	10,040	15,350	25,237
Market Cap	50,463	50,070	82,532	72,892	78,400
Invested Capital	64,062	62,047	92,572	88,242	103,637
ROIC	9.4%	6.8%	7.9%	10.4%	6.7%
Liability Cost	2.2%	2.3%	2.2%	1.2%	0.9%
Capital Cost	5.0%	5.0%	5.0%	5.0%	5.0%
WACC**	4.2%	4.3%	4.6%	4.3%	3.9%
ROIC-WACC	5.1%	2.5%	3.3%	6.1%	2.8%

*FY2014-3's values exclude the impacts by accounting period change of some subsidiaries.

**WACC=Liability Cost×(1-effective tax rate)×Interest Bearing Debts ratio / Total Asset+Capital Cost×Market Cap ratio.

Liability Cost: the company's historical average of the long term loan interest rate, refer to 「Equity Spread」 above for the Capital Cost.

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