Evolving unique chemical company

Third Quarter, 2015 Financial Results

- Consolidated -

SHOWA DENKO K.K.

October 30, 2015

Saburo Muto, CFO
Director & Managing Corporate Officer

Performance forecast and other statements pertaining to the future as contained in this presentation are based on the information available as of today and assumptions as of today regarding risk factors that could affect our future performance. Actual results may differ materially from the forecast due to a variety of risk factors, including, but not limited to, the economic conditions, costs of naphtha and other raw materials, demand for our products, market conditions, and foreign exchange rates. We undertake no obligation to update the forward-looking statements unless required by law.

Consolidated Companies

■ Consolidated subsidiaries: 48
No changes from the end of June

3 companies newly consolidated, Compared with the end of 2014

4 companies newly consolidated
Shanghai Showa Electronics Materials Co., Ltd.
Showa Specialty Gas Singapore Pte. Ltd.
Shanghai Showa Highpolymer Co., Ltd.
SHOTIC MALAYSIA SDN. BHD.

1 company excluded
Shotan Shoji Kaisha Ltd.

■ Equity method applied: 13
No changes from the end of June

1 company newly applied, compared with the end of 2014
PT. Indonesia Chemical Alumina

Selected Data

(Average)

	2014		2015		Increase/decrease	
	Jan.-Sept.	Jul.-Sept.	Jan.-Sept.	Jul.-Sept.	Jan.-Sept.	Jul.-Sept.
■Exchange rate: ¥/US$	103.0	103.9	120.9	122.2	Yen depreciated by ¥17.9/$	Yen depreciated by ¥18.3/$
■Domestic naphtha price: ¥/kl	70,950	70,900	47,700	47,200	-23,250	-23,700
■Aluminum						
LME price: US$/T	1,866	2,010	1,741	1,618	-125	392
Domestic market*: K¥/T	264	288	286	250	22	-38

Exchange rate at the end of June, 2015 ¥122.5/US$, at the end of September, 2015 ¥120.0/US$
⇒Yen appreciated by ¥2.5/US$

*Domestic market: data from Nikkei

Summary

Jan. 1 – Sept. 30, 2014 vs. Jan. 1 – Sept. 30, 2015

(Unit: Billions of Yen)

	Jan.-Sept.2014	Jan.-Sept.2015	Increase/decrease
Net Sales	646.3	594.1	-52.2
Operating Income	18.2	25.5	7.3
Non-operating income and expense	-1.2	0.5	1.6
Interest/Dividend income less expenses	0.0	-1.5	-1.5
Foreign exchange gain or loss	1.2	0.0	-1.2
Equity in earnings or losses of affiliates	0.5	2.2	1.7
Other	-2.8	-0.2	2.6
Ordinary Income	17.0	26.0	8.9
Extraordinary Income	1.1	2.1	1.0
Extraordinary Loss	-11.3	-18.9	-7.6
Income before income taxes and minority interests	6.9	9.1	2.3
Income Taxes	-4.5	-12.1	-7.5
Minority Interests in income	-0.2	7.1	7.3
Net Income	2.2	4.2	2.0

Extraordinary Profit/Loss

(Unit: Billions of Yen)

	Jan.-Sept. 2014	Jan.-Sept. 2015	Increase/decrease
■Extraordinary Profit	1.1	2.1	1.0
●Gain on sales of investment securities	0.7	1.7	1.0
●Other	0.4	0.4	0.0
■Extraordinary Loss	-11.3	-18.9	-7.6
●Loss on sales and retirement of noncurrent assets	-1.7	-2.4	-0.7
●Loss on valuation of investment securities	-4.0	0.0	4.0
●Provision of allowance for doubtful accounts	―	-12.9	-12.9
●Other	-5.6	-3.6	2.0
■Extraordinary Profit/Loss, Net	-10.2	-16.8	-6.6

Consolidated Sales by Segment

(Unit: Billions of Yen)

	Jan.-Sept. 2014	Jan.-Sept. 2015	Increase/ decrease	
Petrochemicals	202.6	178.6	-24.0	【Olefins】sales decreased (shipment volumes up as there was no shutdown maintenance in 2015; market price down) 【Organic chemicals】sales decreased (ethyl acetate: sales up due to shipment volumes up, vinyl acetate: sales down due to market price down)
Chemicals	102.4	106.7	4.3	【Basic chemicals】sales decreased (Ammonia: shipment volumes down, AN: market price down) 【Electronic chemicals】sales increased (shipment volumes mainly for memory up in Japan and abroad) 【Functional chemicals】sales increased (Shanghai Showa Highpolymer Co., Ltd.: newly consolidated) 【Industrial gases】sales maintained at the year-earlier level
Electronics	102.6	98.5	-4.1	【HDs】sales decreased (shipment volumes down) 【Compound semiconductors】sales slightly decreased 【Rare earth】sales decreased (shipment volumes down, market price down)
Inorganics	50.9	49.3	-1.6	【Ceramics】sales slightly increased 【Graphite electrodes】sales decreased (shipment volumes for export down)
Aluminum	70.9	75.9	5.0	【High-purity foil for capacitors】sales increased (shipment volumes of Showa Denko Aluminum (Nantong) Co., Ltd. up) 【Aluminum specialty components】sales decreased (shipment volumes down) 【Aluminum cans】sales substantially increased (Hanacans Joint Stock Company: newly consolidated at the end of June, 2014)
Others	148.7	115.7	-33.0	【LIB materials】sales increased (shipment volumes up for smartphone and automotive applications) 【SHOKO Co., Ltd.】sales substantially decreased (steel-related business in China)
Adjustment	-31.8	-30.6	1.2	
Total	646.3	594.1	-52.2	

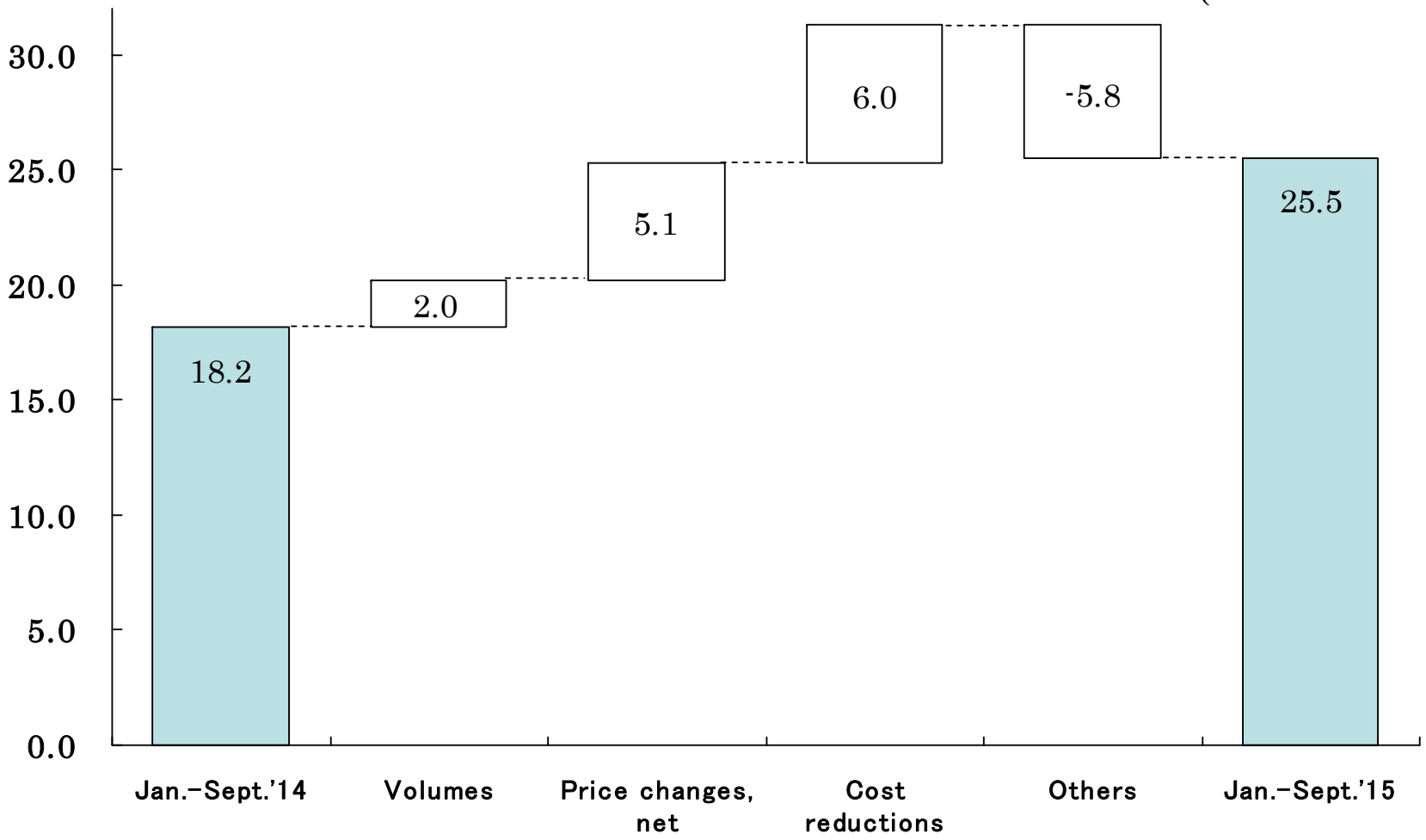
Consolidated Operating Income by Segment

(Unit: Billions of Yen)

	Jan.-Sept. 2014	Jan.-Sept. 2015	Increase/ decrease	
Petrochemicals	-0.6	8.6	9.2	【Olefins】profit substantially increased (improved export margin in CQ2; shipment volumes up as there was no shutdown maintenance in 2015) 【Organic chemicals】profit increased (ethyl acetate: shipment volumes up, the effect of plant switch)
Chemicals	3.2	7.6	4.4	【Basic chemicals】profit increased (chloroprene rubber: export steady) 【Electronic chemicals】profit increased (shipment volumes up) 【Functional chemicals】profit increased(Shanghai Showa Highpolymer Co., Ltd.: newly consolidated) 【Industrial gases】,【Power generating business】profit increased
Electronics	18.9	12.1	-6.8	【HDs】profit decreased (shipment volumes down) 【Compound semiconductors】profit slightly increased 【Rare earth】profit decreased (shipment volumes down; reductions in the book value of inventories in CQ2)
Inorganics	-0.7	0.7	1.4	【Ceramics】profit increased (shipment volumes up) 【Graphite electrodes】profit slightly increased
Aluminum	2.5	2.5	0.0	【High-purity foil for capacitors】profit slightly increased 【Aluminum specialty components】profit maintained at the year-earlier level 【Aluminum cans】profit slightly decreased
Others	0.5	0.0	-0.5	【LIB materials】profit increased (shipment volumes up) 【SHOKO Co., Ltd.】profit decreased
Adjustment	-5.5	-5.9	-0.3	
Total	18.2	25.5	7.3	

Operating Income Breakdown by Factor

(Unit: Billions of Yen)



Consolidated Balance Sheet

(Unit: Billions of Yen)

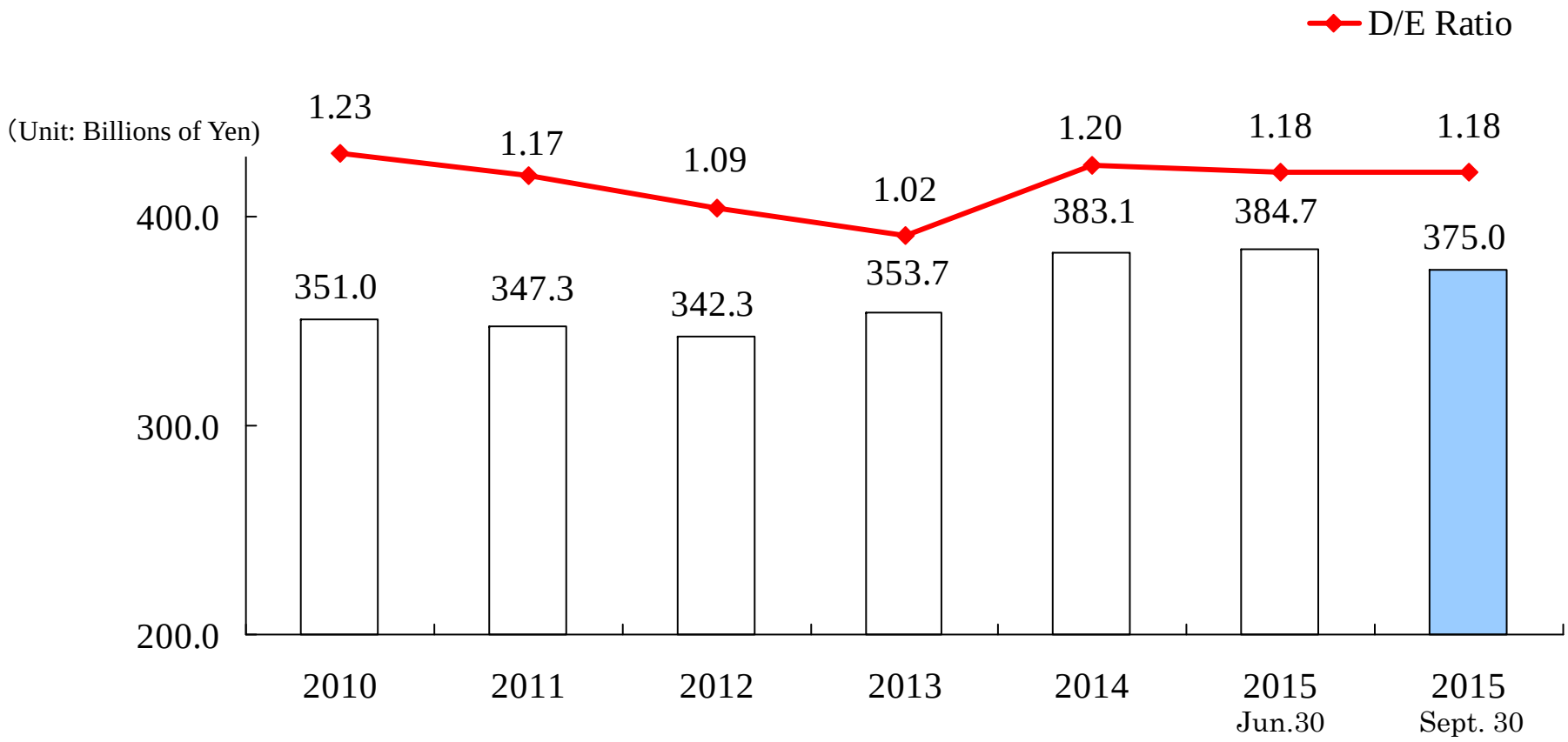
Assets	Dec.31, 2014	Sept.30, 2015	Increase/ decrease	Liabilities and Net Assets	Dec.31, 2014	Sept.30, 2015	Increase/ decrease
Cash and deposits	66.8	64.1	-2.8	Notes and accounts payable	127.2	100.3	-26.9
Notes and accounts receivable	156.9	130.2	-26.7	Interest-bearing debt	383.1	375.0	-8.1
Inventories	123.6	112.4	-11.2	Net defined benefit liability	22.1	12.5	-9.6
Other current assets	33.1	27.2	-5.9	Other liabilities	158.1	143.6	-14.5
Total Current Assets	380.4	333.9	-46.5	Total Liabilities	690.6	631.5	-59.0
Buildings and structures	85.9	83.9	-2.0	Capital stock	140.6	140.6	0.0
Machinery and equipment	119.9	115.5	-4.4	Capital surplus	62.2	62.2	0.0
Land	254.1	252.2	-1.9	Retained earnings	57.5	58.8	1.3
Other tangible fixed assets	53.7	60.3	6.7	Treasury stock	-10.2	-10.2	0.0
Total Tangible Fixed Assets	513.7	512.0	-1.7	Total Shareholders' equity	250.1	251.4	1.3
Intangible Fixed Assets	13.7	12.9	-0.8	Valuation difference on available-for-sale securities	6.8	7.2	0.5
Investments and other assets	103.3	91.0	-12.3	Foreign currency translation adjustment, Deferred hedge gains	20.3	17.3	-3.0
incl. investment securities	76.1	76.7	0.6	Revaluation reserve for land	27.9	31.5	3.6
				Remeasurements of defined benefit plans	-4.9	-2.0	2.9
				Total accumulated other comprehensive income	50.1	54.1	4.1
				Minority Interests	20.3	12.6	-7.7
Total fixed assets	630.6	615.8	-14.8	Total net assets	320.5	318.2	-2.3
Total Assets	**1,011.1**	**949.7**	**-61.4**	**Total Liabilities and Net Assets**	**1,011.1**	**949.7**	**-61.4**

Total Assets
Interest-bearing Debt and D/E ratio

(Unit: Billions of Yen)

	Dec. 31, 2014	Sept. 30, 2015	Increase/ decrease
● **Total assets**	1,011.1	949.7	-61.4
● **Interest-bearing debt**	383.1	375.0	-8.1
● **Debt/Equity ratio**	1.20times	1.18times	-0.02p
● **Stockholders' Equity ratio**	29.7%	32.2%	2.5p

Interest-bearing Debt



Equity ratio	26.1%	26.8 %	29.2%	30.6%	29.7%	32.1%	32.2%

(Reference) Summary

CQ2 (Apr.1 – Jun.30), 2015 vs. CQ3 (Jul.1 – Sept.30), 2015

(Unit: Billions of Yen)

	CQ2, 2015	CQ3, 2015	Increase/ decrease
Net Sales	203.8	197.1	-6.7
Operating Income	12.3	9.4	-2.9
Non-operating income and expense	0.5	1.1	0.6
Interest/Dividend income less expenses	0.0	-0.7	-0.7
Foreign exchange gain or loss	-0.1	1.0	1.1
Equity in earnings or losses of affiliates	0.5	1.1	0.6
Other	0.1	-0.3	-0.4
Ordinary Income	12.7	10.5	-2.3
Extraordinary Income	1.9	0.2	-1.7
Extraordinary Loss	-2.4	-1.4	1.0
Income before income taxes and minority interests	12.3	9.3	-3.0
Income Taxes	-2.9	-6.8	-3.9
Minority Interests in income	-0.6	0.5	1.1
Net Income	8.8	2.9	-5.9

(Reference) Consolidated Sales by Segment

CQ2 (Apr.1 – Jun.30), 2015 vs. CQ3 (Jul.1 – Sept.30), 2015

(Unit: Billions of Yen)

	CQ2, 2015	CQ3, 2015	Increase/ Decrease	
Petrochemicals	64.1	57.4	-6.7	【Olefins】sales decreased (market price down, reflecting weaker naphtha price in CQ3, 2015) 【Organic chemicals】sales decreased (shipment volumes of vinyl acetate down)
Chemicals	35.5	36.4	1.0	【Basic chemicals】sales decreased (shutdown maintenance in CQ3, 2015) 【Electronic chemicals】sales increased (shipment volumes up) 【Functional chemicals】sales decreased (shipment volumes down, phenol business transferred in Sept., 2015) 【Industrial gases】sales increased (shipment volumes of dry ice up, seasonal)
Electronics	32.0	33.5	1.5	【HDs】sales increased (shipment volumes slightly up) 【Compound semiconductors】sales decreased (shipment volumes down) 【Rare earth】sales maintained at the CQ2, 2015 level
Inorganics	17.4	16.2	-1.2	【Ceramics】sales maintained at the CQ2, 2015 level 【Graphite electrodes】sales decreased (shipment volumes down)
Aluminum	26.9	25.9	-1.0	【High-purity foil for capacitors】sales decreased (shipment volumes down) 【Aluminum specialty components】sales maintained at the CQ2, 2015 level 【Aluminum cans】sales maintained at the CQ2, 2015 level (Japan: sales decreased, Vietnam: shipment volumes up)
Others	38.8	36.3	-2.5	【LIB materials】sales increased (shipment volumes up) 【SHOKO Co., Ltd.】sales decreased
Adjustment	-11.0	-8.6	2.3	
Total	203.8	197.1	-6.7	

(Reference) Consolidated Operating Income by Segment

CQ2 (Apr.1 – Jun.30), 2015 vs. CQ3 (Jul.1 – Sept.30), 2015

(Unit: Billions of Yen)

	CQ2, 2015	CQ3, 2015	Increase/ Decrease	
Petrochemicals	7.7	2.7	-5.0	【Olefins】profit substantially decreased (shrinking the spread, time lag of raw material price) 【Organic chemicals】profit maintained at the CQ2, 2015 level
Chemicals	2.1	3.3	1.2	【Basic chemicals】profit maintained at the CQ2, 2015 level 【Electronic chemicals】profit maintained at the CQ2, 2015 level 【Functional chemicals】profit increased (shipment volumes up) 【Industrial gases】profit increased (shipment volumes of dry ice up, seasonal) 【Power generating business】profit substantially increased (shutdown maintenance in CQ2, 2015)
Electronics	2.6	4.0	1.4	【HDs】profit slightly decreased (shipment volumes slightly up, production volumes down) 【Compound semiconductors】profit maintained at the CQ2, 2015 level 【Rare earth】profit increased (loss on valuation of inventories in CQ2, 2015)
Inorganics	0.3	0.7	0.4	【Ceramics】profit increased (shipment volumes up) 【Graphite electrodes】profit maintained at the CQ2, 2015 level
Aluminum	1.2	1.1	-0.1	【High-purity foil for capacitors】profit slightly decreased 【Aluminum specialty components】profit decreased (shipment volumes for Japanese auto down) 【Aluminum cans】profit increased
Others	0.1	-0.2	-0.3	【LIB materials】profit increased 【SHOKO Co., Ltd.】profit decreased
Adjustment	-1.8	-2.1	-0.3	
Total	12.3	9.4	-2.9	

(Reference) Summary

CQ3 (Jul.1 – Sept.30), 2014 vs. CQ3 (Jul.1 – Sept.30), 2015

(Unit: Billions of Yen)

	CQ3, 2014	CQ3, 2015	Increase/decrease
Net Sales	232.9	197.1	-35.8
Operating Income	7.7	9.4	1.7
Non-operating income and expense	2.2	1.1	-1.1
Interest/Dividend income less expenses	1.0	-0.7	-1.7
Foreign exchange gain or loss	2.1	1.0	-1.1
Equity in earnings or losses of affiliates	0.1	1.1	1.0
Other	-0.9	-0.3	0.6
Ordinary Income	9.8	10.5	0.6
Extraordinary Income	0.0	0.2	0.1
Extraordinary Loss	-5.5	-1.4	4.2
Income before income taxes and minority interests	4.3	9.3	4.9
Income Taxes	0.9	-6.8	-7.7
Minority Interests in income	0.3	0.5	0.1
Net Income	5.6	2.9	-2.7

(Reference) Consolidated Sales by Segment

CQ3 (Jul.1 – Sept.30), 2014 v s. CQ3 (Jul.1 – Sept.30), 2015

(Unit: Billions of Yen)

	CQ3, 2014	CQ3, 2015	Increase/ decrease	
Petrochemicals	82.9	57.4	-25.5	【Olefins】sales decreased (market price down, reflecting weaker naphtha price) 【Organic chemicals】sales decreased (shipment volume of vinyl acetate down)
Chemicals	35.1	36.4	1.4	【Basic chemicals】sales decreased (AN: market price down) 【Electronic chemicals】sales increased (shipment volumes mainly for memory up in Japan and abroad) 【Functional chemicals】sales increased (Shanghai Showa Highpolymer Co., Ltd.: newly consolidated) 【Industrial gases】sales maintained at the year-earlier level
Electronics	33.1	33.5	0.4	【HDs】sales slightly increased 【Compound semiconductors】sales decreased (shipment volumes down) 【Rare earth】sales decreased (shipment volumes down, market price down)
Inorganics	17.6	16.2	-1.4	【Ceramics】sales slightly increased (shipment volumes of abrasives up) 【Graphite electrodes】sales decreased (shipment volumes for export down)
Aluminum	25.1	25.9	0.9	【High-purity foil for capacitors】sales maintained at the year-earlier level 【Aluminum specialty components】sales decreased (shipment volumes for automotive applications down in Japan) 【Aluminum cans】sales increased (sales in Japan increased: shipment volumes for coffee beverages up, Vietnam: shipment volumes up)
Others	49.6	36.3	-13.3	【LIB materials】sales increased (shipment volumes up) 【SHOKO Co., Ltd.】sales substantially decreased (steel-related business in China)
Adjustment	-10.4	-8.6	1.8	
Total	232.9	197.1	-35.8	

(Reference) Consolidated Operating Income by Segment

CQ3 (Jul.1 – Sept.30), 2014 v s. CQ3 (Jul.1 – Sept.30), 2015

(Unit: Billions of Yen)

	CQ3, 2014	CQ3, 2015	Increase/ decrease	
Petrochemicals	1.3	2.7	1.3	【Olefins】profit increased (shipment volumes slightly up due to operation ratio up, improved export margin) 【Organic chemicals】profit increased (shipment volumes of ethyl acetate up)
Chemicals	1.8	3.3	1.5	【Basic chemicals】profit increased (chloroprene rubber: shipment volumes for export up, AN: market price of raw materials down) 【Electronic chemicals】profit increased 【Functional chemicals】profit increased (Shanghai Showa Highpolymer Co., Ltd.: newly consolidated) 【Industrial gases】profit increased (shipment volumes of dry ice up) 【Power generating business】profit slightly increased
Electronics	5.7	4.0	-1.7	【HDs】profit decreased (shipment volumes down) 【Compound semiconductors】profit maintained at the year-earlier level 【Rare earth】profit maintained at the year-earlier level
Inorganics	0.0	0.7	0.6	【Ceramics】profit increased (shipment volumes up) 【Graphite electrodes】profit slightly decreased (shipment volumes for export down)
Aluminum	0.7	1.1	0.4	【High-purity foil for capacitors】profit maintained at the year-earlier level 【Aluminum specialty components】profit maintained at the year-earlier level 【Aluminum cans】profit increased (Japan: shipment volumes for coffee beverages up, Vietnam: shipment volumes up)
Others	0.1	-0.2	-0.4	【LIB materials】profit increased (shipment volumes up) 【SHOKO Co., Ltd.】profit decreased
Adjustment	-2.0	-2.1	-0.1	
Total	7.7	9.4	1.7	

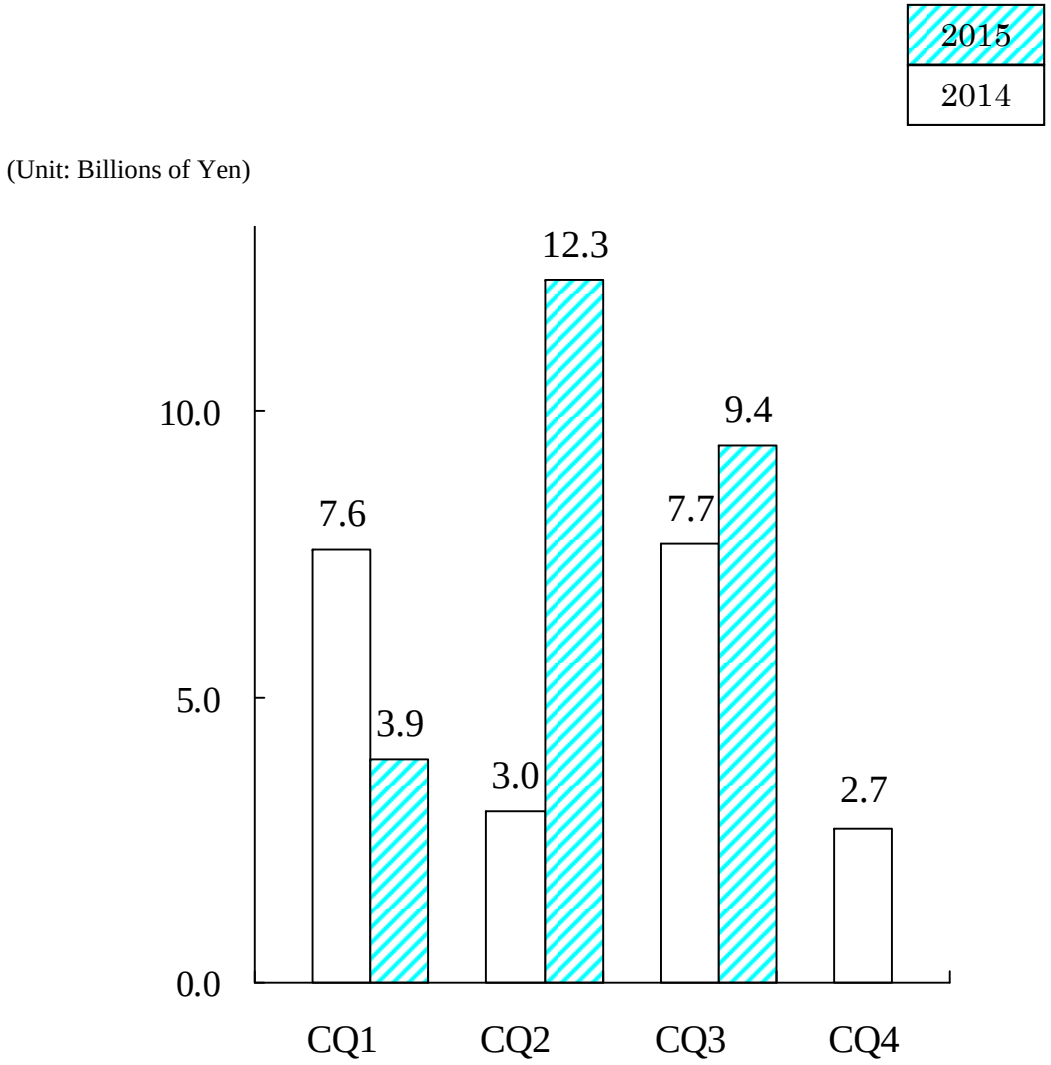
(Reference) Quarterly Summary 2015

(Unit: Billions of Yen)

	CQ1, 2015	CQ2, 2015	CQ3, 2015	Jan. - Sept. 2015	2015 Forecast *
Net Sales	193.2	203.8	197.1	594.1	825.0
Operating Income	3.9	12.3	9.4	25.5	40.0
Net Income	-7.5	8.8	2.9	4.2	10.0

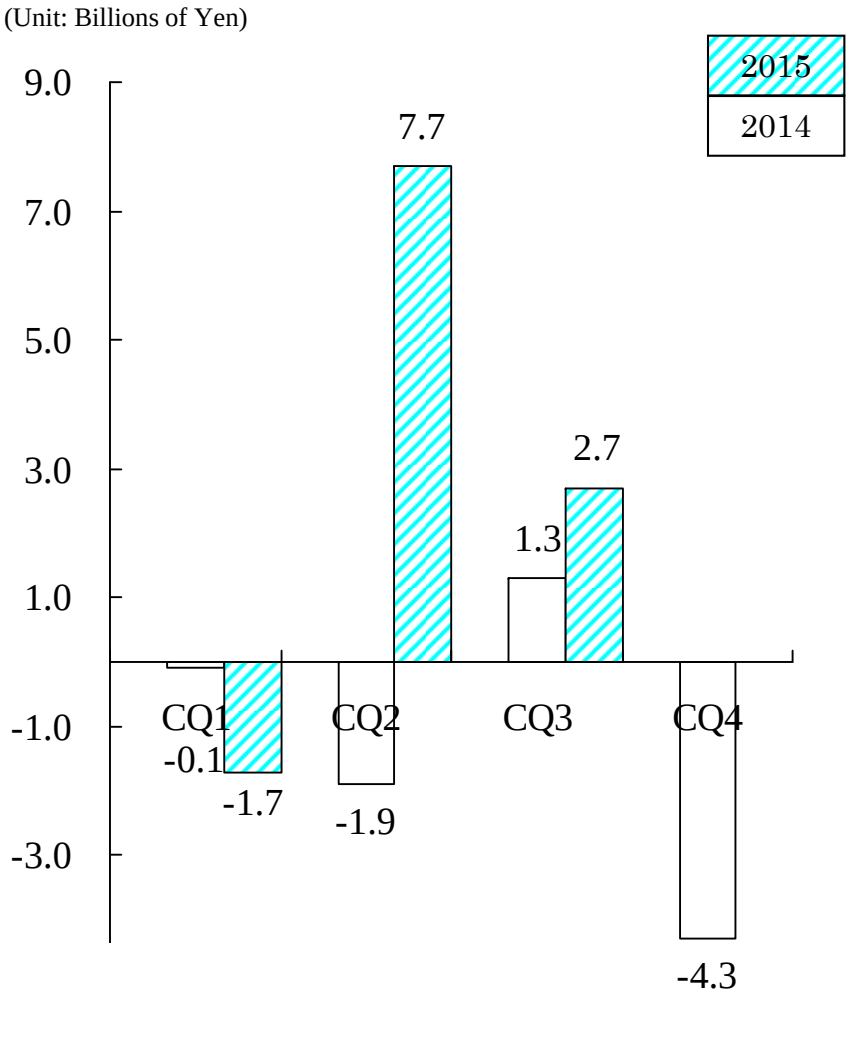
Forecast was revised on Jul. 30, 2015

(Reference)　Quarterly Operating Income

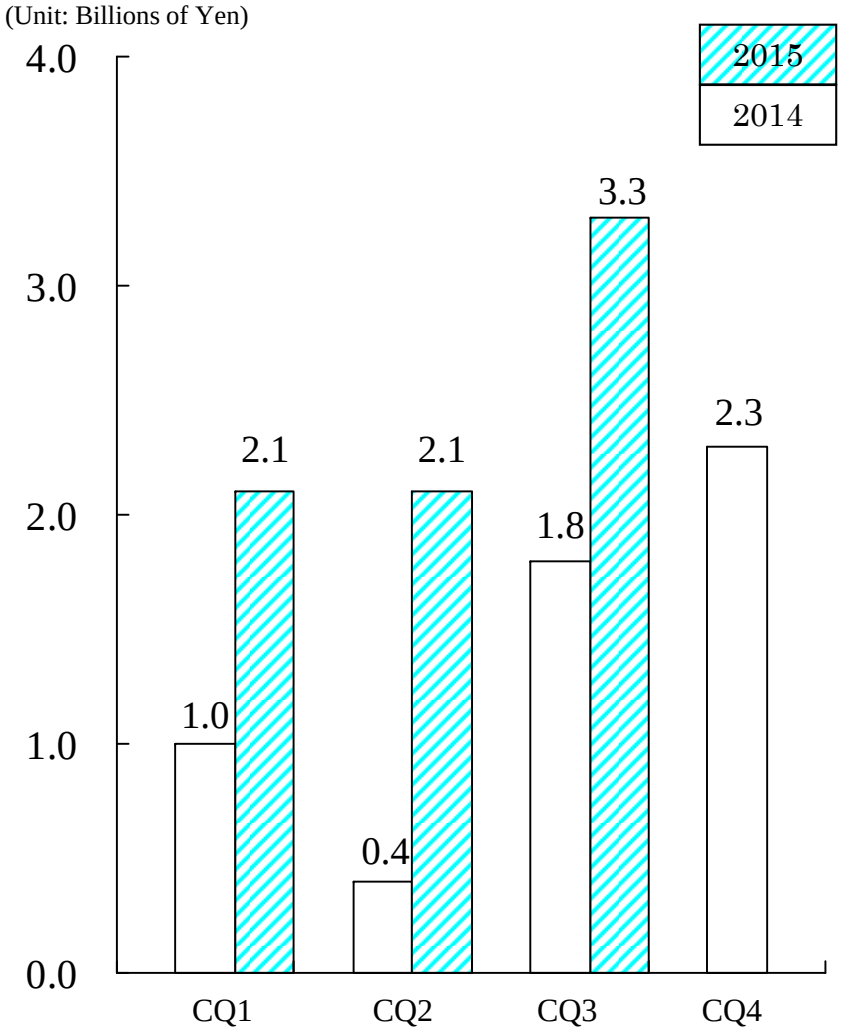


(Reference) Quarterly Operating Income by Segment

《Petrochemicals》



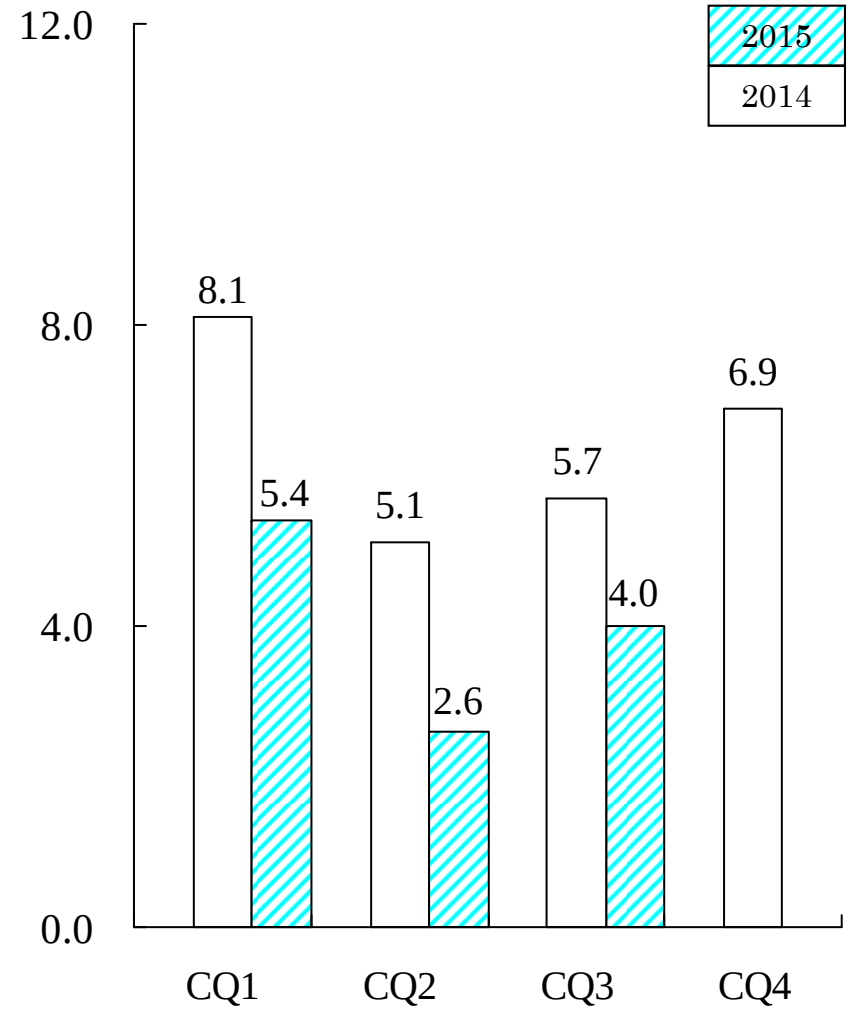
《Chemicals》



(Reference) Quarterly Operating Income by Segment

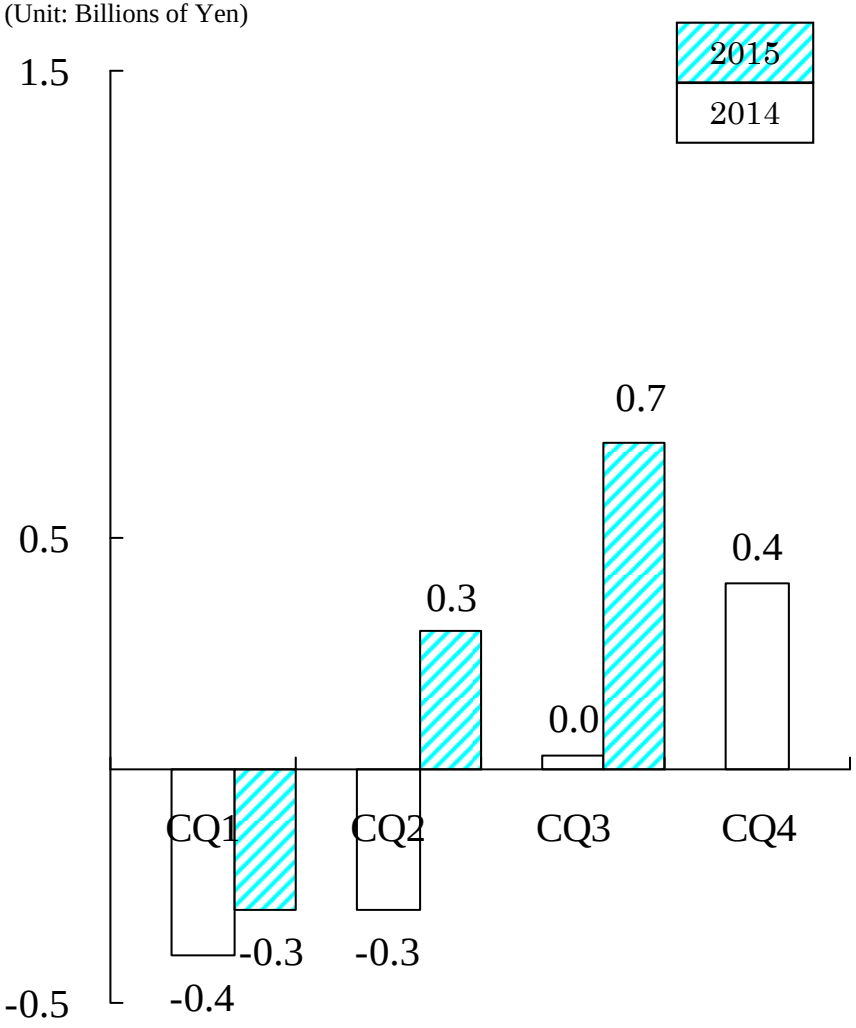
《Electronics》

(Unit: Billions of Yen)



《Inorganics》

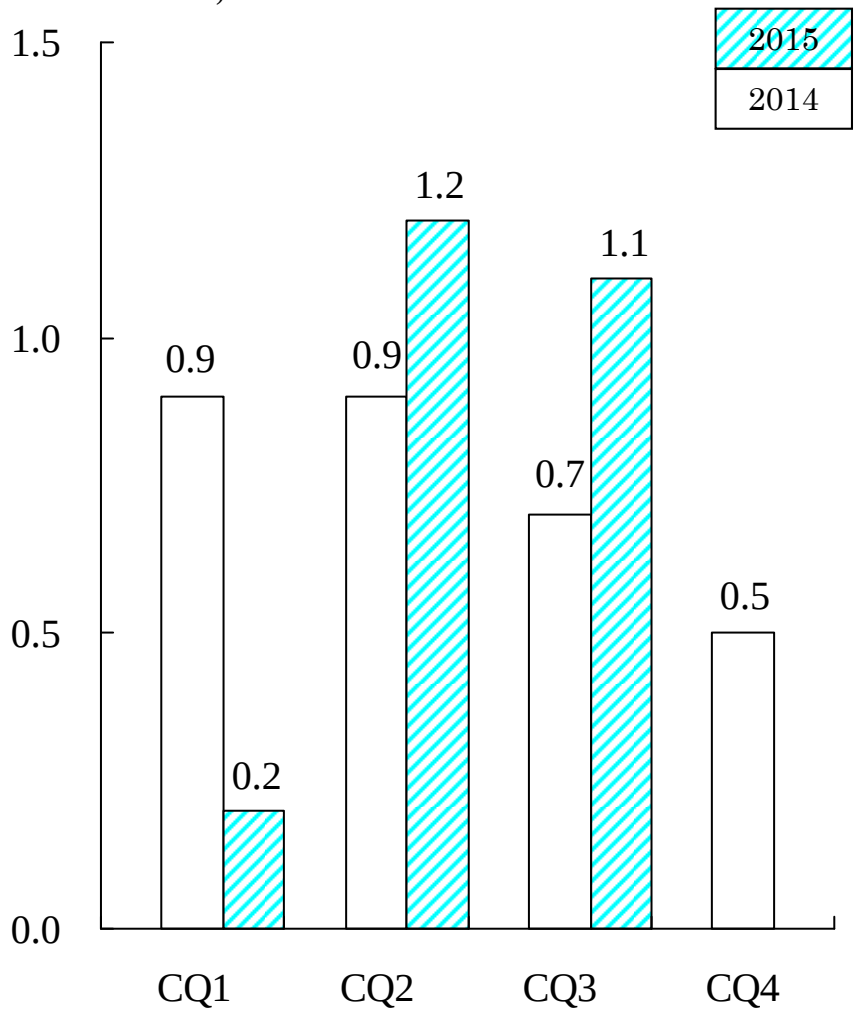
(Unit: Billions of Yen)



(Reference) Quarterly Operating Income by Segment

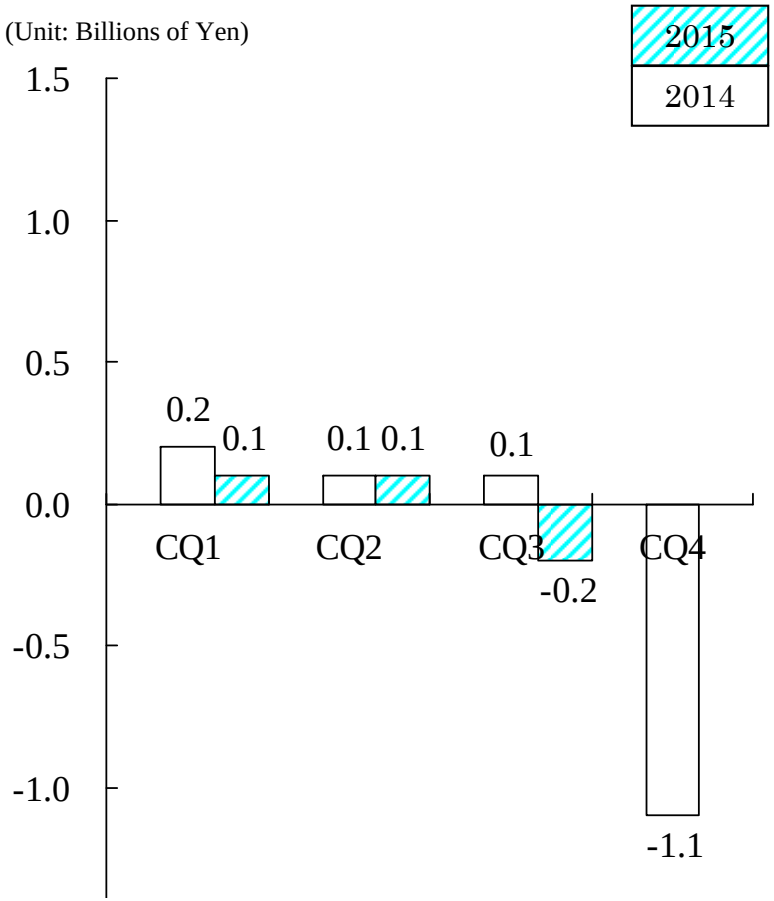
《Aluminum》

(Unit: Billions of Yen)



《Others》

(Unit: Billions of Yen)



Topics

[Chemicals segment]

- Expanding utilization of used plastic to produce liquefied ammonia "*ECOANN*™"

  In July 2015, SDK completed the expansion of used-plastic gasification facility at the Kawasaki Plant. After the expansion, the percentage of hydrogen from used plastic to produce liquefied ammonia "*ECOANN*™" will increase to 65%. This investment is partly subsidized by the Ministry of Economy, Trade and Industry's interest subsidy program for the promotion of effective utilization of resources*. Under the program, SDK received a loan from the Development Bank of Japan, Inc. The method to produce hydrogen form used plastic entails significantly lower environmental burden compared to the conventional methods to produce hydrogen from petroleum-derived raw materials. *ECOANN*™ has been approved and rated high as "eco-friendly goods for procurement" by major electric power companies. Moreover, in July 2015, SDK's proprietary process to produce this liquefied ammonia was accredited by Japan Environment Association, which sponsors the "Eco Mark Program" to praise environment friendly products/processes, to be eligible for Eco Mark, an official Japanese program in conformity with Type-1 environmental labelling principles hosed by Global Eco-labelling Network*, as the first case of production process in the world. SDK will continue developing environment friendly products and production processes.

*Under this program, the Japanese government provides interest subsidies for bank loans to firms investing in plant and equipment that promote effective utilization of recyclable resources.

**Eco Mark Program is hosted by Japan Environment Association, which is a member of Global Eco-labelling Network. Eco Mark is awarded to products/processes certified by third party certification authorities to have environmental superiority. Certification process of Eco Mark is operated in conformity with Type-1 environmental labelling principles defined in ISO 14024.

Topics

[Chemicals segment]

- Launching two hydrophilic HPLC columns as addition to the lineup of *Shodex*™

SDK launched two series of columns as new products of *Shodex*™ business, which produces separation/analysis columns for high performance liquid chromatography (HPLC). In August 2015, SDK started to sell "HILICpak VT-50" series, which are polymer based columns for hydrophilic interaction chromatography (HILIC*) suitable for separation of anionic biochemicals including phosphorylated saccharides. In September 2015, SDK also started to sell "OHpak LB-800" series, which are columns for aqueous size exclusion chromatography (SEC**) compatible with multi-angle light scattering (MALS) detector. SDK will continue expanding lineup of high-functioning columns, with focus on use in fields of pharmaceuticals and functional chemicals.

*HILIC (hydrophilic interaction chromatography): A kind of normal phase chromatography, which extracts chemical compounds from samples injected into column in reverse order of hydrophilicity.

**SEC (size exclusion chromatography): A kind of chromatography, which separates and analyzes samples containing protein or other high molecules on the basis of relative molecular mass by utilizing micro-holes of polymer-based packing materials.

[Electronics segment]

- Baotou Showa Rare Earth High-Tech New Material to be dissolved

In July 2015, SDK decided to dissolve its consolidated subsidiary Baotou Showa Rare Earth High-Tech Material Co., Ltd. (BSR) located in Baotou, Inner Mongolia, China. BSR had been producing rare earth materials from mines in China, producing magnetic alloy and selling that to Japanese and Chinese markets since its establishment. However, since 2012, when the Chinese government terminated export duty exemption for rare earth magnetic alloy, BSR's sales to customers in Japan had been significantly reduced. Thus SDK and its partners decided to dissolve BSR. SDK will concentrate its production and sale of rare earth magnetic alloy in China into Ganzhou Zhaori Rare Earth New Materials Co., Ltd. (GSR). SDK will aim to accelerate development of new-generation rare earth magnetic alloy, and strengthen its sales activities in China.

Topics

[Others segment]

- Offering SiC epitaxial wafers with very low defect density

SDK developed a new grade of silicon carbide (SiC) epitaxial wafers for power devices with very low defect density. In this October, SDK started commercial shipments of the new grade, in two different sizes of four inches and six inches in diameter, under the trade name of “High-Grade Epi” (HGE). Power modules for high-voltage, high-current applications mainly contain devices with the structure of SBD (Schottky barrier diode) and transistors with the structure of MOSFET (metal-oxide-semiconductor field-effect transistor). While SiC is increasingly used in SBD, reduction of defects in SiC epitaxial wafers was a matter to be solved in order to realize use of SiC in MOSFET. In the new product “HGE,” SDK has succeeded in significantly reducing defect density by controlling the number of surface defects (SD) within one-third the current level of SDK’s conventional product and of basal plane dislocation (BPD) within one-hundredth compared with conventional product. As a result, it is now possible to eliminate device defects attributable to BPD. SDK believes that the new product will realize practical application of SiC-MOSFET and greatly contribute to the commercialization and market expansion of “full-SiC” power modules. When compared with the mainstream silicon-based semiconductors, SiC-based power devices can operate under high-temperature, high-voltage, and high-current conditions, while substantially reducing energy loss. These features enable the production of smaller, lighter, and more energy-efficient next-generation power control modules. SiC power devices are already used as power sources of servers, distributed power supply systems for new energies, and in railcars. Demand for SiC power devices as onboard equipment is expected to grow further. Moreover, efforts are under way to develop SiC-based ultra-high-voltage devices for use in power generation/transmission systems. SDK will continue its efforts to meet requirements for higher quality, contributing toward expansion of the market.

Topics

[Others segment]

- Introduction of plant growth system including *SHIGYO*™ Unit is in progress

  "*SHIGYO*™ Method," which is a proprietary high-speed plant growth technology jointly developed by SDK and National University Corporation Yamaguchi University, and "*SHIGYO*™ Unit," which is a solution package for plant factories including LED lighting equipment, heat insulation panels and other necessary equipment, have been adopted by Kyoei Kogyo Co., Ltd., and will be applied to its large-scale plant factory to be established in Mino City, Gifu Prefecture. The new plant is scheduled to be completed in April 2016. Moreover, SDK's proprietary LED illuminant for plant factories and aluminum stands have been adopted by Sekishin Electric Co., Ltd. and Sony Business Solutions Corporation, and applied to a jointly developed LED lighting system to accelerate growth of natural grass in stadiums. The LED illuminant adopted this time includes our proprietary LED chips that emit deep-red light optimum for plant's photosynthesis at the world's highest level of efficiency and LED chips that emit blue light. Thus the LED illuminant efficiently accelerates photosynthesis by grass, while contributing to reduction of electricity consumption. Our light-weight aluminum stands contribute to reduction of load on grass. SDK will further promote development of technologies for plant growth, aiming to promote dissemination of plant growth system that realizes stable supply of safe vegetables and fast growth of plant.