

## First Half, 2015 Consolidated Financial Results (Summary)

### I. First Half 2015 Results

#### 1. Summary

(Unit: billions of yen, except for stockholders' equity/share and net income/share)

Items	1st half, 2014 (Jan.-Jun.)	1st half, 2015 (Jan.-Jun.)	Increase/ decrease
Net Sales	411.6	394.2	-17.4
Operating Income	10.3	15.9	5.6
Net Income	-4.0	1.6	5.5
Net Income per share	¥-2.65	¥1.09	¥3.74
Stockholders' equity per share	¥193.65	¥218.97	¥25.32

#### 2. Net Sales and Operating Income by Segment

(Unit: billions of yen)

Segment		1st half, 2014 (Jan.-Jun.)	1st half, 2015 (Jan.-Jun.)	Increase/ decrease	CQ1, 2015 (Jan. - Mar.)	CQ2, 2015 (Apr. - Jun.)
Net Sales	Petrochemicals	119.7	121.2	1.5	57.1	64.1
	Chemicals	67.1	69.9	2.8	34.6	35.3
	Electronics	69.5	65.0	-4.5	33.0	32.0
	Inorganics	33.3	33.1	-0.3	15.7	17.4
	Aluminum	45.8	50.0	4.2	23.1	26.9
	Others	97.6	77.0	-20.5	39.5	37.5
	Adjustments	-21.5	-22.0	-0.6	-11.1	-11.0
	Total	411.6	394.2	-17.4	191.9	202.4
Operating Income	Petrochemicals	-1.9	6.0	7.9	-1.7	7.7
	Chemicals	1.4	4.3	2.9	2.1	2.1
	Electronics	13.2	8.0	-5.2	5.4	2.6
	Inorganics	-0.8	0.0	0.7	-0.3	0.3
	Aluminum	1.8	1.4	-0.4	0.2	1.2
	Others	0.1	0.0	-0.1	0.0	0.0
	Adjustments	-3.5	-3.7	-0.2	-1.9	-1.8
	Total	10.3	15.9	5.6	3.8	12.2

#### 3. Cash Flow (Consolidated)

(Unit: billions of yen)

Cash Flows from:	1st half, 2014 (Jan.-Jun.)	1st half, 2015 (Jan.-Jun.)	Increase/ decrease
Operating Activities	11.3	20.9	9.6
Investing Activities	-22.0	-27.0	-5.0
Free Cash Flow	-10.7	-6.1	4.6
Financing Activities	6.2	-6.6	-12.7
Other	-1.0	1.2	2.3
Net increase in Cash	-5.5	-11.5	-5.9

#### 4. Reference (Consolidated)

(Unit: billions of yen)

Items	1st half, 2014 (Jan.-Jun.)	1st half, 2015 (Jan.-Jun.)	Increase/ decrease
Capital expenditures	25.1	20.3	-4.9
Depreciation and amortization	19.7	21.0	1.3
R&D expenditures	9.8	10.3	0.5
Total assets	965.2	975.4	10.2
Interest bearing debt	397.4	384.7	-12.7
Gap between interest/dividend income and interest expense	-1.0	-0.8	0.2
Total number of employees	10,458	10,746	288
Exchange rate (yen/US\$)	102.5	120.2	Yen depreciated by 17.8/S
Domestic naphtha price (yen/kl)	70,950	47,800	-23,150

## II. Forecast for 2015

### 1. Summary

(Unit: billions of yen, except for net income/share and cash dividends/share)

Items	2014	2015 Revised forecast	Increase/ decrease
Net Sales	872.8	825.0	-47.8
Operating Income	20.6	40.0	19.4
Net Income	2.9	10.0	7.1
Net income per share	¥1.99	¥7.00	¥5.01
Cash dividends per share	¥3.00	(planned) ¥3.00	0

(Note) 2015 forecast was revised on Jul. 30, 2015.

### 2. Net sales and Operating Income by Segment

(Unit: billions of yen)

Segment		2014	2015 Revised forecast	Increase/ decrease
Net Sales	Petrochemicals	281.4	248.0	-33.4
	Chemicals	138.7	145.0	6.3
	Electronics	138.5	138.0	-0.5
	Inorganics	67.6	72.0	4.4
	Aluminum	97.9	105.0	7.1
	Others	191.6	162.0	-29.6
	Adjustments	-43.0	-45.0	-2.0
	Total	872.8	825.0	-47.8
Operating Income	Petrochemicals	-4.9	13.0	17.9
	Chemicals	5.5	10.5	5.0
	Electronics	25.8	19.5	-6.3
	Inorganics	-0.3	1.5	1.8
	Aluminum	3.0	3.0	0.0
	Others	-1.0	0.5	1.5
	Adjustments	-7.4	-8.0	-0.6
	Total	20.6	40.0	19.4

## III. Reference

Items	2013	2014 Revised forecast	Increase/ decrease
Capital expenditures	47.3	51.3	3.9
Depreciation and amortization	40.7	42.4	1.7
R & D expenditures	20.4	20.9	0.6
Interest-bearing debt	383.1	380.0	-3.1
Gap between interest / dividend income and interest expense	-0.8	-2.4	-1.6
Total number of employees	10,577	10,903	326
Exchange rate (yen/US\$)	(1st half) 102.5 (2nd half) 109.2	(1st half) 120.2 (2nd half) 120.0	(1st half) 17.8 (2nd half) 10.8
Domestic naphtha price (yen/kl)	(1st half) 70,950 (2nd half) 68,450	(1st half) 47,800 (2nd half) 50,900	(1st half) -23,150 (2nd half) -17,550

Note : The above forecast is 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 Financial Statements

For the first half year (January 1 to June 30, 2015)



## I . Consolidated Financial Results

(1) Results of operations: (¥ in millions, US\$ in thousands, except for net income per share)

	Results for the first half year (Jan.1–Jun.30)			
	2014	2015	Increase (Decrease)	2015
Net sales	¥ 411,627	¥ 394,236	% (4.2)	\$ 3,219,565
Operating income	10,309	15,943	54.6	130,199
Ordinary income	6,974	15,656	124.5	127,853
Net income	(3,973)	1,555	—	12,700
Net income per share: Basic	(2.65)	1.09	—	0.01
Net income per share: Diluted	—	—	—	—

## Notes

Important changes in accounting policies : applicable

Comprehensive income :

Results for the year ended January 1 to June 30, 2015 ¥7,764million

Results for the year ended January 1 to June 30, 2014 ¥-8,236million

(2) Financial position: (¥ in millions, US\$ in thousands, except for net income per share)

	Dec. 31, 2014	Jun.30, 2015	Jun.30, 2015
Total assets	¥ 1,009,843	¥ 975,448	\$ 7,966,094
Total equity	319,087	325,913	2,661,602
Stockholders' equity ratio	% 29.7	% 32.1	% 32.1

(3) Dividends:

	2014	2015 Forecast
Q1 dividends per share (¥)	—	—
Q2 dividends per share (¥)	0.00	0.00
Q3 dividends per share (¥)	—	—
End of Term dividends per share (¥)	3.00	3.00
Annual dividends per share (¥)	3.00	3.00

## II . Forecast of performance for the year ending December 31, 2015

(¥ in millions, US\$ in thousands, except for net income per share)

	fiscal year	
	¥	\$
Net sales	825,000	6,737,444
Operating income	40,000	326,664
Ordinary income	37,000	302,164
Net income	10,000	81,666
Net income per share	7.00	0.06

\*The above forecast was announced on July 30, 2015.

The above forecast is based on the information available at this point of time. Actual results may differ materially due to a variety of reasons, including such economic factors as fluctuations in foreign currency exchange rates as well as market supply and demand conditions.

## Note

The U.S. dollar is valued at ¥122.45 throughout this statement for convenience only.

## [Business Results and Financial Conditions]

### 1. Analysis of business results

#### (1) Summary

During the first half of 2015 (January 1 – June 30), the Japanese economy continued to recover gradually. Corporate earnings maintained a high level due to a fundamentally weak yen and sluggish crude-oil prices. Consumer spending was going up again due to upward tendencies in employment and personal income. As for overseas economies, the US economy maintained the underlying tendency toward gradual recovery, though there were tentative negative factors including a wave of cold weather. Though the European economy has unstable factors including the turmoil in Greece, there was economic recovery in Germany and the United Kingdom. On the other hand, China showed clear sign of business slowdown, and resource-supplying countries including Russia and Brazil experienced decline of the economy.

In the petrochemical industry, operating rates at domestic plants continued at high levels, and the effects of the large drop in prices of crude-oil peaked off, resulting in recovery of markets for petrochemical products including olefins in the second quarter of the year. The electronic parts/materials industry remained firm, due mainly to high level overseas production of semiconductors including memory chips for smartphones.

Under these circumstances, the Showa Denko Group has been executing “PEGASUS Phase II” business plan for the 2014-2015 period as the latter part of the five-year consolidated business plan “PEGASUS.” To establish ourselves as a chemical company with a strong presence on the global market, we will continue to promote growth strategies in which our HD media and graphite electrode businesses serve as “Wings.” At the same time, in order to further enhance our earning power, we will focus our efforts on strengthening the four businesses newly classified in the “Growth” category, namely, aluminum cans, high-purity aluminum foil, semiconductor-processing high-purity gases, and functional chemicals, accelerating their expansions mainly in the growing Asian market. The Showa Denko Group will steadily promote measures planned in PEGASUS, which is in its final year, get results, and commit itself to formulate the next medium-term consolidated business plan to be started in 2016.

The Group recorded consolidated net sales of ¥394,236 million in the first half of 2015, down 4.2% from the same period of the previous year. While sales in the Petrochemicals, Chemicals and Aluminum segments increased, sales in the Electronics, Inorganics and Others segments decreased. Operating income jumped 54.6%, to ¥15,943 million. The Petrochemicals segment recorded big increase in operating income due to the recovery in the East Asian market for petrochemical products, in addition to the rebound from the periodic shutdown maintenance which took place in 2014. The Chemicals and Inorganics segments also recorded higher income. On the other hand, the Electronics segment recorded lower income due to loss on write-down of rare earth inventory and lower shipment volumes of HD media. The Aluminum and Others segments also recorded lower income. The Group recorded ordinary income of ¥15,656 million, up 124.5%. The Group posted a net income of ¥1,555 million, up ¥5,528 million.

(Unit: millions of yen)

	1H 2014	1H 2015	Increase/decrease
Sales	411,627	394,236	-17,391
Operating income	10,309	15,943	5,634
Ordinary income	6,974	15,656	8,681
Net income	-3,973	1,555	5,528

(2) A breakdown of net sales and operating income by segment (January 1 – June 30, 2015)

[Petrochemicals segment]

The Petrochemicals segment's sales increased 1.3%, to ¥121,234 million. Production of ethylene and propylene increased from the same period of the previous year due to the recovery from the influence of the once-in-four-year periodic shutdown maintenance held in 2014. Under the circumstances, shipment volumes of major olefin products including ethylene and propylene increased. However, sales of olefins remained at the same level of the previous year due to a fall in sales prices reflecting the sharp drop in raw naphtha price. Sales of organic chemicals were up due to higher shipment volumes of vinyl acetate and ethyl acetate. The segment recorded operating income of ¥5,952 million, up ¥7,893 million, due mainly to the advancing ethylene market in East Asia reflecting strong demand for olefins.

(Unit: millions of yen)

	1H 2014	1H 2015	Increase/decrease
Sales	119,726	121,234	1,508
Operating income	-1,941	5,952	7,893

[Chemicals segment]

The Chemicals segment's sales increased 4.1%, to ¥69,892 million. Though production of liquefied ammonia decreased, production of semiconductor-processing high-purity gases increased from the same period of the previous year. With regard to our basic chemicals business, sales of chloroprene rubber increased due to higher shipment volumes to the United States, while sales of liquefied ammonia decreased due to lower shipment volumes. Sales of acrylonitrile decreased following the fall in market prices. Sales of electronic chemicals increased due to a major increase in shipment volumes of semiconductor-processing high-purity gases reflecting a boost in production of semiconductors and small LCDs in East Asia. Sales of functional chemicals were up due to consolidation of Shanghai Showa Highpolymer Co., Ltd., despite of reduction in domestic shipment volumes. Sales of industrial gases were maintained at the level of the same period of the previous year. Operating income of the segment rose 207.5%, to ¥4,263 million.

(Unit: millions of yen)

	1H 2014	1H 2015	Increase/decrease
Sales	67,137	69,892	2,755
Operating income	1,387	4,263	2,877

[Electronics segment]

The Electronics segment's sales decreased 6.5%, to ¥65,009 million. Production of HD media decreased due to the backlash from high level replacement demand for PCs in the same period of the previous year triggered by the expiration of support for an old version of operating system. Thus, sales of HD media decreased due to lower shipment volumes. Sales of rare earth magnetic alloys decreased due to fall in prices under the influence of the repeal of export duty on rare earths by China. Sales of compound semiconductors slightly decreased. Operating income of the segment decreased 39.1%, to ¥8,047 million due partly to the loss on write-down of rare earth inventory.

(Unit: millions of yen)

	1H 2014	1H 2015	Increase/decrease
Sales	69,509	65,009	-4,500
Operating income	13,202	8,047	-5,156

[Inorganics segment]

The Inorganics segment's sales decreased 0.8%, to ¥33,072 million. Sales of graphite electrodes slightly decreased due to the reduction in shipment volumes, owing to stagnated steel industry of the United States resulting from appreciation of dollar and a wave of cold weather, and also owing to the weak supply demand situation in Asian steel market. Sales of ceramics maintained at the level of the same period of the previous year. The segment recorded an operating loss of ¥24 million, an improvement of ¥737 million.

(Unit: millions of yen)

	1H 2014	1H 2015	Increase/decrease
Sales	33,346	33,072	-275
Operating income	-761	-24	737

[Aluminum segment]

The Aluminum segment's sales increased 9.2%, to ¥50,000 million. Production of high-purity foil for aluminum electrolytic capacitors slightly increased due to the start of commercial operation of expanded facility of Showa Denko Aluminum (Nantong) Co., Ltd., China, though production of that in Japan remained stagnant. Accordingly, sales of rolled products increased. Sales of aluminum specialty products decreased due to stagnant domestic car production. Sales of aluminum cans were up due to addition of the sales by Hanacans Joint Stock Company, of Vietnam, which had been consolidated last year. Operating income of the segment decreased 21.5%, to ¥1,408 million due mainly to the influence of increases in prices of aluminum ingots and electricity rates.

(Unit: millions of yen)

	1H 2014	1H 2015	Increase/decrease
Sales	45,803	50,000	4,197
Operating income	1,792	1,408	-385

[Others segment]

The Others segment's sales fell 21.0%, to ¥77,042 million. Sales of lithium ion battery (LIB) materials increased due to the start of full-scale shipment for car application, in addition to higher shipment volumes for smartphones. Shoko Co. Ltd.'s sales decreased due to the fall in sales of its steel related business in China. Operating income of the segment decreased 87.8%, to ¥13 million.

(Unit: millions of yen)

	1H 2014	1H 2015	Increase/decrease
Sales	97,565	77,042	-20,524
Operating income	103	13	-91

(3) Major steps taken or decided in the second quarter of 2015

[General]

- Start of mass production of transparent conductive ink for electronics

In May 2015, SDK and Microwave Chemical Co., Ltd. jointly developed a technology to mass produce silver nanowire ink that forms transparent electro-conductive patterns through utilization of printing technology. In 2012, SDK developed printable silver nanowire ink jointly with National University Corporation Osaka University. However, establishment of technology that realizes stable mass production of silver nanowires was a problem. This time, SDK and Microwave Chemical jointly developed a method to synthesize silver nanowires with microwave heating. This production method utilizes the

property of silver nanoparticles that, when microwave is irradiated on silver nanoparticles in their growth process to silver nanowires, only the growing ends absorb energy and generate heat. Through this method, SDK successfully produced slender nanowires with great efficiency. SDK will start to offer samples of this ink and related materials.

- Development of conductive ink for screen printing of film circuits  
In May 2015, SDK developed an electro-conductive silver ink that can form thin film electronic circuits through screen printing. In recent years, in order to attain higher performance, many electronic devices adopt multilayered circuit boards, and the need for thin film electronic circuits is increasing. However, electronic circuits formulated through screen printing, which is the mainstream method in the field of printed electronics, tends to be thicker than those formed by other methods of printing, and thinning of screen-printed electronic circuits was a pressing matter. This time, SDK successfully developed a silver ink that contains polymers and solvents with advanced proprietary compositions, and secures enough electro-conductivity and viscosity even in the form of thin film, without increasing density of precious silver particles. Electric circuits printed with this new ink can form thin film of less than 1 micrometer in thickness through simple after-treatment process to vaporize and dry solvents out with heat.

#### [Petrochemicals segment]

- Signing multi-technology acetyls licensing agreement with KBR  
SDK concluded a business alliance agreement with KBR Inc., an engineering company headquartered in Texas, USA, to cooperatively market SDK's proprietary technologies to produce acetic acid and its derivatives (acetyls). Under the licensing agreement, SDK will provide KBR with its proprietary technologies to catalyze and process acetic acid to produce its derivatives, and its skills and know-how on plant operation, which were cultivated over many years. SDK will aim to seek more opportunities to license its proprietary acetyls-related technologies by utilizing KBR's sales network.

#### [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 from 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.

- **Completing expansion of high-purity N<sub>2</sub>O base in South Korea**  
 SDK has increased its capacity for supplying high-purity nitrous oxide (N<sub>2</sub>O), a specialty gas used for deposition of an insulating oxide film for producing semiconductors and LCDs, by cooperating with Dooam Industrial, headquartered in Anseong, Gyeonggi Province, South Korea. Having jointly constructed a purification facility within the premises of Dooam's plant near Seoul, the two companies started full-scale operation of the new facility in March 2015. With the addition of the newly completed 600t/y facility in South Korea to the existing 1200t/y plant in Japan, the Showa Denko Group's high-purity N<sub>2</sub>O supply capacity increased to 1.5 times of the previous level in total
- **Expanding capacities to produce high-purity hydrogen fluoride and high-purity hydrogen bromide**  
 In March 2015, SDK expanded capacities to produce high-purity hydrogen fluoride (HF) and high-purity hydrogen bromide (HBr), which are specialty gases for semiconductor production. High-purity HF is mainly used as a cleaning gas. In recent years, the number of cases where HF is used as an etching gas in the process of dry etching is increasing. Therefore, SDK expanded its HF production facility in Kawasaki Plant to double the capacity. SDK also decided to build a new facility to produce high-purity HF in the premises of its wholly-owned subsidiary Shanghai Showa Electronics Materials Co. Ltd. The new facility is scheduled to start its operation by the end of 2015. High-purity HBr is used for etching of polysilicon in the manufacturing process of semiconductors including NAND flash memories and DRAMs. SDK is the sole company in the world that has integrated HBr production system from synthesis of crude HBr to purification of it to produce high-purity HBr gas. SDK has been expanding the amount of sales of HBr with its efficient and flexible production system and its advanced purification, analysis and quality control technologies. Since the demand for semiconductor memories is increasing very rapidly centering on the use in portable terminals and data centers, in the second quarter of 2015, SDK expanded its capacity to produce high-purity HBr to 600t/y, which is 1.5 times of the previous level.
- **Locating second bulk molding compound plant in China**  
 In February 2015, SDK decided to establish a new production site for thermosetting bulk molding compound (BMC\*) in Zhuhai, Guangdong Province, China, as its second BMC plant in China, jointly with Eternal Materials Co., Ltd., a synthetic resin manufacturer based in Taiwan. SDK Group's BMC business sector has production sites at three locations, in Japan, Shanghai, and Thailand. SDK Group's sales of BMC in China is expected to continue recording annual growth rate of 15% in average for quite a while, and will exceed the production capacity of the BMC plant in Shanghai. By establishing another BMC plant, SDK Group will strengthen its BMC supply system in the growing Chinese market.

\*BMC is a thermosetting bulk molding compound resin made from unsaturated polyester resin as main component, kneaded together with glass fiber and other additives. BMC is used as headlamp reflectors and engine covers for car applications, and encapsulation material for home electrical appliances and precision parts.
- **Decision to split and transfer phenolic resin business**  
 SDK has decided to split and transfer its phenolic resin business to its wholly owned subsidiary AICA SDK PHENOL CO., LTD. on September 1, 2015. On the same day, SDK will transfer 85% of the AICA SDK PHENOL's share to Aica Kogyo Company, Limited, to make AICA SDK PHENOL a joint corporation.
- **Launching new slimming/anti-aging cosmetic material**  
 SDK has developed HCAP<sup>TM</sup> (2-palmitoyl hydroxycitric acid; a hydroxycitric acid derivative) as a cosmetic raw material that deeply permeates the skin and cell membrane,



contributing significantly to the effect of controlling accumulation of fatty acid and skin anti-aging. As hydroxycitric acid (HCA), which is an active compound, is water soluble and does not readily permeate the skin, its effect was limited when used in cosmetics. SDK, however, has developed a lipophilic derivative of HCA, increasing its transdermal permeability. SDK is already selling Hi-Carnitine, a cosmetic raw material that promotes fat combustion and moisturizes the skin. Thus, SDK can now provide slimming agents based on two different approaches, namely, *HCAP*<sup>TM</sup> and Hi-Carnitine, looking forward to the synergy effect of them.

#### [Electronics segment]

- Starting commercial production of 2.5-inch 750 GB HD media

In March 2015, SDK started shipment of 2.5-inch hard disk (HD) media with storage capacity of 750 gigabytes per platter, the world's highest storage capacity for this size available on the market to date\*. The new 2.5-inch HD media we started to ship is classified into the eighth-generation of perpendicular magnetic recording (PMR) technology based media. As the world's largest independent HD media supplier, SDK will aim to continue leading the development of HD media with higher capacities including next generation 2.5-inch HD media with storage capacity of 1 terabyte, following the launch of 750 gigabyte media. SDK will also aim to continue meeting expectations of our customers in HDD industry by ensuring stable supply of high-capacity media.

\*As of February 5, 2015 (To the best of SDK's knowledge)

#### [Inorganics segment]

- Starting commercial operation of a new chemical alumina plant in Indonesia

PT. Indonesia Chemical Alumina, a joint corporation owned by SDK and PT. ANTAM (Persero) Tbk, of Indonesia, started commercial operation of its new chemical alumina plant established in the Tayan District, West Kalimantan, Indonesia. Chemical alumina is used for various industrial applications including electronic materials, chemicals for water treatment, abrasives, and thermal conductive fillers.

#### [Aluminum segment]

- Completing expansion of high-purity aluminum foil plant in China

In April 2015, Showa Denko Aluminum (Nantong) Co., Ltd. (SDAN), a consolidated subsidiary of SDK, completed construction work to expand its capacity to produce high-purity aluminum foil for high-voltage use\* to be applied to aluminum electrolytic capacitors from 400 tons per month to 600 tons per month, and started its commercial operation. Aluminum electrolytic capacitors are used in wide areas such as electric appliances, IT devices, electric vehicles, and hybrid cars. Especially in China, the demand for medium- and high-voltage electrolytic capacitors is increasing in applications including environment friendly cars and power conditioners for solar power generation. SDK will continue strengthening of SDAN as a base to provide our customers in China with high-purity aluminum foil for high-voltage use in a timely manner.

\*High-purity aluminum foil for high-voltage use is electrolytic foil made from 99.99% purity of aluminum or higher, and has a withstanding voltage of 200V or higher.

- Starting supply of cans for coffee beverages with milk

Showa Aluminum Can Corporation, a subsidiary of SDK, set up a new facility to produce aluminum cans for coffee beverages in its Oyama Plant located in Tochigi Prefecture, and started its commercial operation. The scale of domestic market for cans to be used to contain coffee beverages is about 10 billion cans per year, most of which are made of steel. In 2014, the self-restraint guideline set by the beverage makers' association was changed to allow use of aluminum cans to contain coffee with milk. Aluminum cans are expected to increase its share in the coffee beverage container market because aluminum

cans are of lighter weight and recycle-friendly.

[Others segment]

- Launching new LIB-packaging laminates for downsizing  
Showa Denko Packaging Co., Ltd., a subsidiary of SDK, developed aluminum laminated films with electroconductivity, integrated with electrodes, to be used for packaging pouch type lithium ion batteries (LIBs). Aluminum laminated films with cathodic/anodic structure can eliminate necessity to deposit tab-leads on electrodes to conduct electricity to the outside of LIBs, and make downsizing of LIBs possible. The new laminates also eliminate electrolyte leakage from areas around through paths of tab-leads, and give more heat radiation capacity to LIBs than conventional ones. Moreover, by eliminating conventional cathodic/anodic-metal layers, these new laminates make it possible to manufacture LIBs with less than 50% thickness of conventional ones. Thus, these new laminates are expected to be applied to slim type products with batteries, and driving gears.
- SDK and Yamaguchi University ally to promote plant factories  
SDK and National University Corporation Yamaguchi University concluded a partnership agreement to jointly promote global dissemination of our original high-speed plant growth technology “*SHIGYO*<sup>TM</sup> method” for LED-based plant factories and the results of joint researches related to that method. *SHIGYO*<sup>TM</sup> method is a technology to accelerate growth of plants by irradiating light emitted from SDK’s proprietary ultra-bright red LEDs and blue LEDs in optimum pattern for plant growth. The optimum irradiation methods differ depending on the plant and the environment in which it is grown. Therefore, it is necessary for plant factory operators to receive technical support after introduction of *SHIGYO*<sup>TM</sup> method. Thus, SDK, with Yamaguchi University, will aim to cooperate with research institutions in various countries in more effective way, and contribute to dissemination and development of plant factories optimized for conditions in each region.

2. Financial conditions for the January 1 – June 30, 2015 period (as compared with the conditions at December 31, 2014)

a) Situation of assets, liabilities and net assets

Total assets at June 30, 2015 amounted to ¥975,448 million, a decrease of ¥34,395 million from the level at December 31, 2014. Total assets were down due mainly to the decrease in accounts receivable. Total liabilities decreased ¥41,220 million, to ¥649,535 million, due partly to the decrease in accounts payable. Net assets at June 30, 2015 increased ¥6,826 million, to ¥325,913 million, owing to the increases in foreign currency translation adjustments.

b) Situation of cash flows

Net cash provided by operating activities during the first half of 2015 amounted to ¥20,900 million, an increase of ¥9,602 million from the same period of the previous year, due mainly to the decrease in accounts receivable. Net cash used in investing activities increased ¥5,042 million, to ¥27,008 million, due mainly to the increase in payments into overseas subsidiary’s time deposits, notwithstanding the decrease in purchase of plant, property and equipment. Thus, free cash flow ended up in expenditure of ¥6,108 million, an improvement of ¥4,559 million from the same period of the previous year. Cash flows from financing activities ended up in expenditure of ¥6,579 million, an increase in expenditure of ¥12,746 million from the same period of the previous year, due mainly to the reduction of interest-bearing debt. As a result, after the effects of exchange rate fluctuations are taken into account, cash and cash equivalents at the end of the first half year period decreased ¥8,299 million, to ¥46,862 million.

### 3. Performance forecast

We announced our revised performance forecast on July 30, 2015. The table below shows our revised performance forecast for the full year.

(Unit: Millions of yen)

	Net sales	Operating income	Ordinary income	Net income
Revised forecast for the full year	825,000	40,000	37,000	10,000

For the second half of the year, we assume an exchange rate of ¥120 to the U.S. dollar and a naphtha price of ¥50,900/KL.

## Consolidated Balance Sheets

(¥ in millions, US\$ in thousands)

	Dec. 31, 2014	Jun. 30, 2015	Jun. 30, 2015
	¥	¥	\$
<b>Assets</b>			
Current assets			
Cash and deposits	66,840	67,595	552,018
Notes and accounts receivable-trade	155,802	127,775	1,043,488
Merchandise and finished goods	57,913	56,599	462,218
Work in process	14,750	13,764	112,407
Raw materials and supplies	50,937	48,845	398,901
Other	33,628	33,162	270,820
Allowance for doubtful accounts	(1,509)	(327)	(2,673)
<b>Total current assets</b>	<b>378,360</b>	<b>347,413</b>	<b>2,837,179</b>
Noncurrent assets			
Property, plant and equipment			
Buildings and structures, net	85,948	86,338	705,090
Machinery, equipment and vehicles, net	119,924	118,554	968,180
Land	254,116	254,110	2,075,211
Other, net	54,837	59,986	489,879
<b>Total property, plant and equipment</b>	<b>514,824</b>	<b>518,987</b>	<b>4,238,360</b>
Intangible assets			
Other	13,351	12,795	104,489
<b>Total intangible assets</b>	<b>13,351</b>	<b>12,795</b>	<b>104,489</b>
Investments and other assets			
Investment securities	76,113	80,201	654,971
Other	28,549	31,935	260,804
Allowance for doubtful accounts	(1,355)	(15,883)	(129,710)
<b>Total investments and other assets</b>	<b>103,307</b>	<b>96,254</b>	<b>786,066</b>
<b>Total noncurrent assets</b>	<b>631,483</b>	<b>628,036</b>	<b>5,128,915</b>
<b>Total assets</b>	<b>1,009,843</b>	<b>975,448</b>	<b>7,966,094</b>
<b>Liabilities</b>			
Current liabilities			
Notes and accounts payable-trade	127,206	107,921	881,347
Short-term loans payable	71,519	72,740	594,037
Current portion of long-term loans payable	70,486	51,218	418,277
Commercial papers	5,000	13,000	106,166
Current portion of bonds	10,000	10,000	81,666
Provision	3,102	3,205	26,176
Other	93,644	82,015	669,781
<b>Total current liabilities</b>	<b>380,958</b>	<b>340,099</b>	<b>2,777,450</b>
Noncurrent liabilities			
Bonds payable	35,000	45,000	367,497
Long-term loans payable	191,119	192,770	1,574,278
Provision	633	958	7,822
Net defined benefit liability	22,115	14,376	117,400
Other	60,930	56,332	460,045
<b>Total noncurrent liabilities</b>	<b>309,798</b>	<b>309,436</b>	<b>2,527,042</b>
<b>Total liabilities</b>	<b>690,755</b>	<b>649,535</b>	<b>5,304,492</b>
<b>Net assets</b>			
Shareholders' equity			
Capital stock	140,564	140,564	1,147,926
Capital surplus	62,221	62,221	508,134
Retained earnings	56,896	55,583	453,927
Treasury stock	(10,153)	(10,155)	(82,934)
<b>Total shareholders' equity</b>	<b>249,527</b>	<b>248,213</b>	<b>2,027,053</b>
Accumulated other comprehensive income			
Valuation difference on available-for-sale securities	6,783	10,502	85,763
Deferred gains or losses on hedges	1,262	294	2,398
Revaluation reserve for land	27,908	31,499	257,237
Foreign currency translation adjustment	19,018	24,288	198,350
Remeasurements of defined benefit plans	(4,899)	(2,042)	(16,676)
<b>Total accumulated other comprehensive income</b>	<b>50,072</b>	<b>64,540</b>	<b>527,071</b>
<b>Minority interests</b>	<b>19,488</b>	<b>13,161</b>	<b>107,478</b>
<b>Total net assets</b>	<b>319,087</b>	<b>325,913</b>	<b>2,661,602</b>
<b>Total liabilities and net assets</b>	<b>1,009,843</b>	<b>975,448</b>	<b>7,966,094</b>

## Consolidated Statements of Income

(¥ in millions, US\$ in thousands)

	Results for the first half year (Jan. 1-Jun. 30)		
	2014	2015	2015
	¥	¥	\$
Net sales	411,627	394,236	3,219,565
Cost of sales	359,140	334,309	2,730,168
Gross profit	52,487	59,927	489,398
Selling, general and administrative expenses	42,178	43,984	359,199
Operating income	10,309	15,943	130,199
Non-operating income			
Interest income	88	138	1,127
Dividends income	1,040	1,183	9,659
Equity in earnings of affiliates	396	1,392	11,368
Miscellaneous income	1,853	2,552	20,838
Total non-operating income	3,376	5,264	42,993
Non-operating expenses			
Interest expenses	2,078	2,076	16,955
Miscellaneous expenses	4,633	3,476	28,384
Total non-operating expenses	6,711	5,552	45,339
Ordinary income	6,974	15,656	127,853
Extraordinary income			
Gain on sales of investment securities	717	1,707	13,940
Gain on sales of Patent right and other	345	—	—
Other	31	219	1,791
Total extraordinary income	1,092	1,926	15,732
Extraordinary loss			
Loss on sales and retirement of noncurrent assets	714	1,433	11,701
Provision of allowance for doubtful accounts	—	12,885	105,229
Other	6,102	3,211	26,221
Total extraordinary losses	6,816	17,529	143,151
Income (loss) before income taxes and minority interests	1,251	53	434
Income taxes	5,466	5,259	42,945
Loss before minority interests	(4,215)	(5,206)	(42,511)
Minority interests in income (loss)	(242)	(6,761)	(55,211)
Net income (loss)	(3,973)	1,555	12,700

## Consolidated Statements of Comprehensive Income

(¥ in millions, US\$ in thousands)

	Results for the first half year (Jan. 1-Jun. 30)		
	2014	2015	2015
Income (loss) before minority interests	¥ (4,215)	¥ (5,206)	\$ (42,511)
Other comprehensive income:			
Valuation difference on available-for-sale securities	12	3,420	27,928
Deferred gains or losses on hedges	314	(800)	(6,533)
Revaluation reserve for land	—	3,733	30,486
Foreign currency translation adjustments	(4,266)	3,522	28,761
Remeasurements of defined benefit plans, net of tax	—	2,866	23,405
Share of other comprehensive income of entities accounted for using equity method	(81)	229	1,869
Total other comprehensive income	(4,020)	12,970	105,917
Comprehensive income	(8,236)	7,764	63,406
(Comprehensive income attributable to)			
Comprehensive income attributable to owners of parent	(7,764)	14,616	119,367
Comprehensive income attributable to minority interests	(472)	(6,852)	(55,961)

## Consolidated Statements of Cash Flows

(¥ in millions, US\$ in thousands)

	Results for the first half year (Jan. 1-Jun. 30)		
	2014	2015	2015
	¥	¥	\$
<b>Net cash provided by (used in) operating activities</b>			
Income before income taxes and minority interests	1,251	53	434
Depreciation and amortization	19,672	21,015	171,619
Impairment loss	1,576	444	3,625
Amortization of goodwill	737	679	5,547
Increase (decrease) in allowance for doubtful accounts	88	13,127	107,201
Increase (decrease) in provision for retirement benefits	(3,238)	-	-
Increase (decrease) in net defined benefit liability	-	(7,714)	(62,994)
Interest and dividends income	(1,128)	(1,321)	(10,786)
Interest expenses	2,078	2,076	16,955
Equity in (earnings) losses of affiliates	(396)	(1,392)	(11,368)
Loss (gain) on sales and valuation of investment securities	3,317	(1,663)	(13,584)
Loss on retirement of noncurrent assets	701	1,307	10,672
Loss (gain) on sales of noncurrent assets	(1)	26	210
Decrease (increase) in notes and accounts receivable-trade	11,546	30,554	249,525
Decrease (increase) in inventories	2,549	5,911	48,274
Increase (decrease) in notes and accounts payable-trade	(13,822)	(20,898)	(170,667)
Other, net	(12,802)	(20,508)	(167,477)
Subtotal	12,128	21,696	177,185
Interest and dividends income received	1,494	2,741	22,384
Interest expenses paid	(1,900)	(2,072)	(16,919)
Income taxes paid	(423)	(1,466)	(11,968)
Net cash provided by (used in) operating activities	11,298	20,900	170,681
<b>Net cash provided by (used in) investing activities</b>			
Payments into time deposits	(3,048)	(19,788)	(161,605)
Proceeds from withdrawal of time deposits	11,681	11,624	94,932
Purchase of property, plant and equipment	(26,365)	(20,380)	(166,433)
Proceeds from sales of property, plant and equipment	444	116	947
Purchase of investment securities	(2,226)	(838)	(6,844)
Proceeds from sales of investment securities	3,973	2,787	22,760
Purchase of investments in subsidiaries resulting in change in scope of consolidation	(5,507)	-	-
Net decrease (increase) in short-term loans receivable	(59)	(472)	(3,851)
Collection of long-term loans receivable	113	115	935
Other, net	(970)	(172)	(1,407)
Net cash provided by (used in) investing activities	(21,966)	(27,008)	(220,565)
Net increase (decrease) in short-term loans payable	640	612	4,996
Net increase (decrease) in commercial papers	(5,000)	8,000	65,333
Proceeds from long-term loans payable	52,922	25,517	208,384
Repayment of long-term loans payable	(26,313)	(45,272)	(369,717)
Proceeds from issuance of bonds	15,000	10,000	81,666
Payments for retirement by purchase of Preferred equity securities	(24,000)	-	-
Cash dividends paid	(4,463)	(4,260)	(34,793)
Cash dividends paid to minority shareholders	(1,019)	(354)	(2,890)
Other, net	(1,601)	(821)	(6,704)
Net cash provided by (used in) financing activities	6,167	(6,579)	(53,725)
Effect of exchange rate change on cash and cash equivalents	(1,047)	1,231	10,055
Net increase (decrease) in cash and cash equivalents	(5,547)	(11,456)	(93,554)
Cash and cash equivalents at beginning of period	56,084	55,162	450,482
Increase in cash and cash equivalents from newly consolidated subsidiary	996	3,002	24,519
Decrease in cash and cash equivalents resulting from exclusion of subsidiaries	-	(7)	(57)
Increase in cash and cash equivalents resulting from merger	-	161	1,315
Cash and cash equivalents at end of period	51,533	46,862	382,704

(Reference)

**SEGMENT INFORMATION (previous 2Q ended)**

The operations of the Companies for the 6 Months ended June 30, 2014 and 2015 was summarised by industry segment as follows:

<b>6 Months ended June 30, 2014</b>		Millions of yen						
	Petrochemicals	Chemicals	Electronics	Inorganics	Aluminium	Others	Elimination	Consolidated
<b>Sales</b>								
Outside customers	¥116,425	¥61,606	¥68,553	¥28,996	¥41,678	¥94,368	¥-	¥411,627
Inter-segment	3,301	5,531	956	4,350	4,125	3,197	(21,460)	-
Total	119,726	67,137	69,509	33,346	45,803	97,565	(21,460)	411,627
Operating income (loss)	(¥1,941)	¥1,387	¥13,202	(¥761)	¥1,792	¥103	(¥3,473)	¥10,309

<b>6 Months ended June 30, 2015</b>		Millions of yen						
	Petrochemicals	Chemicals	Electronics	Inorganics	Aluminium	Others	Elimination	Consolidated
<b>Sales</b>								
Outside customers	¥118,687	¥63,635	¥64,067	¥28,753	¥46,095	¥72,999	¥-	¥394,236
Inter-segment	2,547	6,256	942	4,319	3,905	4,043	(22,013)	-
Total	121,234	69,892	65,009	33,072	50,000	77,042	(22,013)	394,236
Operating income (loss)	¥5,952	¥4,263	¥8,047	(¥24)	¥1,408	¥13	(¥3,716)	¥15,943

<b>6 Months ended June 30, 2015</b>		Thousands of U.S. dollars						
	Petrochemicals	Chemicals	Electronics	Inorganics	Aluminium	Others	Elimination	Consolidated
<b>Sales</b>								
Outside customers	\$969,268	\$519,685	\$523,207	\$234,813	\$376,441	\$596,151	\$-	\$3,219,565
Inter-segment	20,804	51,091	7,693	35,272	31,890	33,019	(179,768)	-
Total	990,072	570,776	530,900	270,084	408,331	629,169	(179,768)	3,219,565
Operating income (loss)	\$48,609	\$34,817	\$65,713	(\$195)	\$11,495	\$103	(\$30,343)	\$130,199