SHOWA DENKO K.K.

# Consolidated Financial Statements

For the first half year (January 1 to June 30, 2016)

## Ⅰ. Consolidated Financial Results

Aug 9th, 2016

(1) Results of operations:

(¥ in millions, US$ in thousands, except for profit attributable to owners of parent per share)

| | Results for the first half year (Jan.1–Jun.30) | | | |
|---|---|---|---|---|
| | 2015 | **2016** | Increase (Decrease) | **2016** |
| | ¥ | **¥** | % | **$** |
| Net sales | 396,980 | **321,572** | (19.0) | **3,124,793** |
| Operating income | 16,109 | **11,536** | (28.4) | **112,102** |
| Ordinary income | 15,500 | **7,010** | (54.8) | **68,120** |
| Profit attributable to owners of parent | 1,280 | **1,592** | 24.4 | **15,468** |
| Profit attributable to owners of parent per share: Basic | 8.96 | **11.15** | — | **0.11** |
| Profit attributable to owners of parent per share: Diluted | — | **—** | — | **—** |

SDK consolidated every ten shares of its common stock into one share on July 1, 2016. The above-mentioned "Profit(s) attributable to owners of parent per share: Basic/Diluted" are calculated on the assumption that the share consolidation had been carried out at the beginning of 2015.

Notes

Important changes in accounting policies : applicable

Comprehensive income :

Results for the year ended January 1 to June 30, 2016 ¥-20,644million

Results for the year ended January 1 to June 30, 2015 ¥7,600million

(2) Financial position:

(¥ in millions, US$ in thousands, except for stockholders' equity ratio)

| | Dec.31, 2015 | **Jun.30, 2016** | **Jun.30, 2016** |
|---|---|---|---|
| | ¥ | **¥** | **$** |
| Total assets | 941,314 | **887,694** | **8,625,925** |
| Total equity | 309,774 | **284,816** | **2,767,623** |
| | % | **%** | **%** |
| Stockholders' equity ratio | 31.6 | **30.6** | **30.6** |

(3) Dividends:

| | 2015 | **2016 Forecast** |
|---|---|---|
| Q1 dividends per share (¥) | — | **—** |
| Q2 dividends per share (¥) | — | **—** |
| Q3 dividends per share (¥) | — | **—** |
| End of Term dividends per share (¥) | 3.00 | **30.00** |
| Annual dividends per share (¥) | 3.00 | **30.00** |

SDK consolidated every ten shares of its common stock into one share on July 1, 2016. The above forecast is calculated on the basis of the number of outstanding shares after this consolidation. Therefore, the nominal dividends per share after the consolidation are ten times larger than those before the consolidation. However, this does not mean there is real change in the forecast for dividends per share.

## Ⅱ. Forecast of performance for the year ending December 31, 2016

(¥ in millions, US$ in thousands, except for profit attributable to owners

| | fiscal year | |
|---|---|---|
| | ¥ | $ |
| Net sales | 670,000 | 6,510,543 |
| Operating income | 30,000 | 291,517 |
| Ordinary income | 23,000 | 223,496 |
| Profit attributable to owners of parent | 9,000 | 87,455 |
| Profit attributable to owners of parent per share: Basic | 63.10 | 0.61 |

SDK consolidated every ten shares of its common stock into one share on July 1, 2016. The above-mentioned "Profit attributable to owners of parent per share: Basic" is calculated on the basis of the number of outstanding shares after this consolidation.

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 ¥102.91 throughout this statement for convenience only.

[Business Results and Financial Conditions]
1. Analysis of business results

(1) Summary

During the first half of 2016 (January 1 – June 30), the Japanese economy continued to be at a standstill, due partly to bearish tendencies in export and production resulting from harsh business environment including Kumamoto Earthquakes that occurred in April. Consumer spending remained sluggish, though there was an improvement in the employment situation. Corporate earnings entered a no-growth period, and increasing number of companies centering on manufacturing industry expressed cautious business confidence due partly to a rise in the value of the yen. As for overseas economies, the U.S. economy maintained gradual recovery, though there was partial sluggishness. As for the European economy, despite some risk factors including terrorist incidents and refugee issues, there was gradual economic recovery in Germany and the United Kingdom. China continued showing gradual business slowdown. Though the economies of ASEAN countries showed signs of recovery, there was business slowdown in resource-producing countries and emerging countries including Russia and Brazil. The decision made by the United Kingdom in June to exit from the European Union caused violent currency fluctuations and made the financial market unstable. It is feared that this unstable financial market will affect the real economy.

In the petrochemical industry, though prices of products including olefins continued to be influenced by low crude-oil prices, operating rates at domestic petrochemical plants maintained high levels due to strong demand for petrochemical products in Asia. On the other hand, in the electronic parts/materials industry, domestic and overseas production of semiconductors slightly decreased due to a falling tendency in the production of PCs and smartphones.

Under these circumstances, the Showa Denko Group formulated its new medium-term consolidated business plan “Project 2020+” and started it in January 2016. Under this new business plan, in order to achieve continuous growth of the Showa Denko Group, we will expand and strengthen our “individualized businesses,” reform our business structure, and strengthen our revenue base, thereby enhancing our corporate value.

The Group recorded consolidated net sales of ¥321,572 million in the first half of 2016, down 19.0% from the same period of the previous year. Sales decreased in all segments including the Petrochemicals segment where sales decreased due to a fall in prices of products resulting from a decline in raw naphtha price. Operating income of the Group decreased 28.4%, to ¥11,536 million. The Petrochemicals segment recorded higher income due to strong demand in Asia. The Chemicals, Aluminum and Others segments also recorded higher income. However, the Electronics segment recorded lower income due to lower shipment volumes of HD media. The Inorganics segment also recorded lower income due to a fall in market prices of graphite electrodes. The Group recorded ordinary income of ¥7,010 million, down 54.8%, due partly to the incurrence of foreign exchange losses caused by the yen’s appreciation. The Group posted profit attributable to owners of the parent of ¥1,592 million in the first half of 2016, up 24.4% from the same period of the previous year, due to a significant decrease in extraordinary loss.

(Unit: millions of yen)

| | 1H 2015 | 1H 2016 | Increase/decrease |
|---|---|---|---|
| Sales | 396,980 | 321,572 | -75,407 |
| Operating income | 16,109 | 11,536 | -4,573 |
| Ordinary income | 15,500 | 7,010 | -8,489 |
| Profit attributable to owners of the parent | 1,280 | 1,592 | 312 |

(2) A breakdown of net sales and operating income by segment (January 1 – June 30, 2016)

[Petrochemicals segment]
In the petrochemicals segment, sales decreased 29.0%, to ¥86,044 million. Production of ethylene and propylene in the first half of 2016 slightly decreased from the same period of the previous year due to coinciding periodic shutdown maintenance of plants to produce derivatives in Oita Complex. Sales of olefins decreased due to a decline in prices of products caused by a drop in raw naphtha price, despite strong demand for olefins in Asian market. Sales of organic chemicals also decreased due to a fall in sales prices of vinyl acetate and ethyl acetate resulting from a decline in prices of raw materials. Operating income of the segment increased 23.8%, to ¥7,366 million due to a decline in prices of raw materials and higher shipment volumes of products to the Asian market where the demand for petrochemical products was strong.

(Unit: millions of yen)

| | 1H 2015 | 1H 2016 | Increase/decrease |
|---|---|---|---|
| Sales | 121,234 | 86,044 | -35,191 |
| Operating income | 5,952 | 7,366 | 1,414 |

[Chemicals segment]
In the Chemicals segment, sales decreased 7.6%, to ¥64,913 million. Production of liquefied ammonia and high-purity gases for electronics in the first half of 2016 increased from the same period of the previous year. Sales of basic chemicals decreased due partly to a decline in sales prices of some products including acrylonitrile following a fall in raw material prices, despite continuously high shipment volumes of chloroprene rubber and other products. Sales of functional chemicals decreased due to the transfer of our phenolic resin business to another company which took place in the second half of the previous year. Sales of industrial gases and electronic chemicals slightly increased. Operating income of the segment rose 28.3%, to ¥5,470 million due to an increase in operating income from basic chemicals, industrial gases and functional chemicals.

(Unit: millions of yen)

| | 1H 2015 | 1H 2016 | Increase/decrease |
|---|---|---|---|
| Sales | 70,226 | 64,913 | -5,313 |
| Operating income | 4,263 | 5,470 | 1,206 |

[Electronics segment]
In the Electronics segment, sales decreased 27.8%, to ¥46,914 million. Production of HD media in the first half of 2016 decreased from the same period of the previous year due to a decrease in shipment volumes of media for use in PCs, which could not be compensated by the increase in shipment volumes of media for use in servers. Thus, sales of HD media decreased. Sales of rare earth magnetic alloys and compound semiconductors also

decreased. Operating income of the segment decreased 49.6%, to ¥4,059 million.

(Unit: millions of yen)

| | 1H 2015 | 1H 2016 | Increase/decrease |
|---|---|---|---|
| Sales | 65,009 | 46,914 | -18,095 |
| Operating income | 8,047 | 4,059 | -3,988 |

[Inorganics segment]
In the Inorganics segment, sales decreased 24.7%, to ¥24,903 million. Production of graphite electrodes in the first half of 2016 decreased from the same period of the previous year. Sales of graphite electrodes decreased due to a decline in market prices resulting from the adjustment of production in the steel industry of Asia and the United States under the influence of overproduction in China, in addition to the decrease in production volumes. Sales of ceramics decreased due to a decline in shipment volumes. The segment recorded an operating loss of ¥4,350 million, a deterioration of ¥4,326 million.

(Unit: millions of yen)

| | 1H 2015 | 1H 2016 | Increase/decrease |
|---|---|---|---|
| Sales | 33,072 | 24,903 | -8,169 |
| Operating income | -24 | -4,350 | -4,326 |

[Aluminum segment]
In the Aluminum segment, sales decreased 4.5%, to ¥47,775 million. Production of high-purity foil for aluminum electrolytic capacitors in the first half of 2016 increased from the same period of the previous year due to an increase in production of air conditioners and electronic parts for automobiles. In addition, Showa Denko Aluminum (Nantong) Co., Ltd.'s shipment volumes of high-purity foil for aluminum electrolytic capacitors in China also increased. Thus sales of rolled products increased. Sales of aluminum specialty components decreased due to lower shipment volumes for automotive applications. Sales of aluminum cans increased due to higher shipment volumes recorded by Hanacans Joint Stock Company of Vietnam. Operating income of the segment increased 5.3%, to ¥1,482 million.

(Unit: millions of yen)

| | 1H 2015 | 1H 2016 | Increase/decrease |
|---|---|---|---|
| Sales | 50,004 | 47,775 | -2,228 |
| Operating income | 1,408 | 1,482 | 74 |

[Others segment]
In the Others segment, sales fell 8.3%, to ¥72,868 million. Sales of lithium ion battery (LIB) materials in the first half of 2016 increased due to an increase in shipment volumes for automotive applications, in addition to higher shipment volumes for use in smartphones. Shoko Co. Ltd.'s sales decreased. Operating income of the segment increased 464.9%, to ¥1,012 million due mainly to higher shipment volumes of LIB materials.

(Unit: millions of yen)

| | 1H 2015 | 1H 2016 | Increase/decrease |
|---|---|---|---|
| Sales | 79,448 | 72,868 | -6,581 |
| Operating income | 179 | 1,012 | 833 |

(3) Major steps taken or decided in the first half of 2016

[General]

- Consolidation of shares and change in the number of shares per share unit

SDK resolved at its 107th ordinary general meeting of shareholders held on March 30, 2016 that it would consolidate its shares and change number of shares per trading unit (share unit). On July 1, 2016, based on this resolution, SDK changed number of shares per share unit from 1,000 shares to 100 shares. Along with the change in the share unit, SDK also consolidated its shares (ten shares into one share) in order to maintain the level of investment unit considered desirable for SDK's shares by Japan's stock exchanges (50,000 yen or more and less than 500,000 yen). Number of authorized shares was decreased from 3.3 billion shares to 330 million shares according to the ratio of the consolidation of shares.

- Introduction of performance-linked stock compensation scheme

SDK resolved at its 107th ordinary general meeting of shareholders held on March 30, 2016 that it would revise its compensation scheme for Directors and Corporate Officers, and introduce a performance-linked stock compensation scheme utilizing a trust service ("the Scheme"). The Scheme became effective in May 2016. The purpose of the introduction of the Scheme is to further clarify the linkage between compensation for non-Outside Directors and Corporate Officers and the share value of SDK, thereby enhancing their awareness of the need to contribute to the efforts to achieve improved business performance and greater enterprise value in the medium to long term. SDK has in place a Compensation Advisory Committee, a majority of which comprises Outside Directors and Outside Audit and Supervisory Board Members, which serves as an advisory body to the Board of Directors. Prior to the board meeting resolution to introduce the Scheme that decides compensation for Directors and Corporate Officers, this committee deliberated on the proposal.

- Acquisition of highest-level environmental rating from Development Bank of Japan

In March 2016, SDK received a loan from Development Bank of Japan (DBJ) under the scheme of DBJ Environmentally Rated Loan Program, after acquiring the highest-level rating from DBJ for its environmental management. This Program is a loan program utilizing a rating system developed by DBJ that evaluates enterprises on the level of their environmental management and then sets preferential loan conditions when an enterprise is rated high. This time, SDK has acquired the highest-level environmental rating from DBJ because of its identification of important issues related to its own medium to long term management themes, continuous activities to improve its CSR-conscious procurement, its introduction of an integrated comprehensive chemicals management system, and promotion of Diversity Management, which is a management policy to enhance the value of diversity among its employees.

[Chemicals segment]

- Alliance with Azelis in cosmetic materials

In April 2016, SDK agreed with Azelis that the two parties form a business alliance to market SDK's cosmetic raw materials in Europe. Azelis, of Luxembourg, is a leading global specialty chemicals distributor with business bases in 40 countries. SDK and Azelis concluded an exclusive distributorship agreement to enable Azelis to market SDK's vitamin derivatives, a slimming agent and hair care products in Europe. Azelis started its marketing activities for SDK's products in this April. Whether a cosmetic material can demonstrate enough effectiveness depends on development of formulas. Moreover, the needs of customers to cosmetics greatly vary by region. SDK expects that the sales of its cosmetic raw materials in Europe will significantly increase, taking advantage of Azelis'

sales network in European countries and expertise and know-how about development of formulas that meet European Customers' needs.

- Increasing capacity to produce high-purity boron trichloride

In March 2016, SDK increased its capacity to produce high-purity boron trichloride ($BCl_3$), which is a kind of high-purity gas for electronics, to 1.5 times of the previous level and started operation of the expanded facilities. High-purity $BCl_3$ is a specialty gas mainly used for fine-etching of aluminum circuits in the manufacturing process of LCD panels and silicon semiconductors. In recent years, electronic material manufacturers have been making capital investment in the fields of organic light emitting diode (OLED) display panels and low temperature poly-silicon (LTPS) LCD panels, both of which are equipped with aluminum circuits. Therefore, the demand for high-purity $BCl_3$ gas is expected to be stable in the future. Under its ongoing medium-term consolidated business plan "Project 2020+," SDK classifies its business in high-purity gases for electronics into the category of "Growth-accelerating" business. SDK will continue aiming to further strengthen and expand its business in high-purity gases for electronics, responding rapidly to the expansion of the global electronic materials market.

- Ammonia production process utilizing used plastic containers received Silver Prize in the Eco-Mark Awards 2015

In January 2016, SDK's ammonia production process that recycles plastic containers received a "Silver Prize in the Eco-Mark Awards 2015" hosted by Japan Environment Association (JEA). The award-winning ammonia production process utilizes hydrogen gas extracted from gasified used plastics through chemical recycling method as a part of raw materials, and synthesizes ammonia. SDK will continue developing environment friendly products and production processes, thereby contributing to the sustainability of society.

[Aluminum segment]

- Development of high-strength version of ST60 aluminum plate

SDK developed "ST60-HSM" aluminum plate, a new grade product of ST60-series aluminum plates which boast high thermal conductivity and high strength. SDK started to manufacture samples of ST60-HSM in April 2016. ST60-series aluminum plates have thermal conductivity and heat radiation capacity equal to pure aluminum, and also have strength equal to A5052 aluminum alloy which is widely used as material for frames. In recent years, manufacturers of mobile devices including smartphones and tablets tend to apply metal enclosures to products in order to give them enhanced rigidity and better designs. Moreover, these manufacturers expressly prefer to apply aluminum enclosures in order to take advantage of attractiveness of anodized surfaces. ST60-HSM is as bendable as ST60-T3, which has been used as heat sink in electronic devices, and is stronger than ST60-T8, which features high-strength and has been used mainly as metallic base panels. By putting ST60-HSM on the market, SDK aims to expand adoption of its aluminum plates by manufacturers as enclosures for mobile devices.

[Others segment]

- Expansion of production capacities for LIB materials in response to increasing LIB use in vehicles

SDK has decided to expand its production capacity for *SCMG*™ carbon-based anode material, and implemented expansion of production capacity for *SDX*™ carbon-coated aluminum foil which is used as collector for cathode, both for LIBs. The rage of LIBs' use is rapidly increasing. These days, more and more LIBs are used not only in small devices such as smartphones but also to in large equipment, especially in electric vehicles

(EVs). In China, the demand for large LIBs for use in EVs and electric buses has been significantly increasing in recent years due to stricter emission control and subsidies to EVs by governments. Orders for *SCMG*™ have been increasing because it has advantages of low resistance and long life, and demonstrates high performance when used in LIBs for EVs. In June 2016, SDK decided to expand the production capacity for *SCMG*™ at Omachi Plant by 50%, to 1500t per year by the end of 2016. SDK also started to outsource a part of its *SCMG*™ production to a manufacturer in China in June 2016. In January 2016, SDK started to outsource a part of its production of *SDX*™ carbon-coated aluminum foil for cathodes in LIBs. *SDX*™ has the advantages of low resistance and close adhesion to cathode materials in LIBs, thereby improving charge/discharge performance of LIBs and contributing to a reduction in the amount of conduction supportive agents and binders added to cathode materials in LIBs. SDK positions its LIB materials business as an advantage-establishing business in its medium-term business plan "Project 2020+," and will maintain stable supply of high-quality LIB materials to the continuously expanding market.

- Expansion of capacity for producing high-grade SiC epitaxial wafers

SDK expanded its capacity for producing high-quality-grade silicon carbide (SiC) epitaxial wafers for power devices, which had already been marketed under the trade name of "High-Grade Epi" (HGE), and started mass production of HGE wafers in June 2016. The expanded production facility has a capacity to produce 3,000 wafers per month*[1]. In HGE developed by SDK, the number of surface defects and basal plane dislocation*[2], which is the typical crystal defect, is controlled to be 0.1/cm$^2$ or less. Since the launch in October 2015, HGE has been successfully getting good reputation among device manufacturers at home and abroad. Moreover, the establishment of technology to lower the number of defects enabled us to mass-produce thick-film epitaxial wafers*[3] and p-type epitaxial wafers*[4], both for potential use in bipolar power devices. We expect that thick-film HE we market will significantly contribute to the development of SiC-IGBT*[5] which can be used as ultra-high-voltage devices for power generation/transmission systems. The size of the market for SiC epitaxial wafers for power devices is expected to reach ¥100 billion in 2025 as the early use of SiC power devices in vehicles is under consideration. SDK will continue meeting the need of the market for high-quality SiC epitaxial wafers, aiming to contribute to the improvement in energy efficiency of power devices.

*1 This number is based on a conversion into SiC epitaxial wafers for power devices having withstanding voltage of 1,200 V.
*2 Dislocation that occurs on a basal plane of a single crystal SiC.
*3 These thick-film epitaxial wafers have thickness of about 100μm or more. (1μm=1/1,000mm)
*4 A type of electrical conduction in semiconductors
In p-type semiconductors, positively charged holes are the majority carriers of electric energy.
*5 IGBT: insulated gate bipolar transistor
SiC-IGBT has both high-speed-switching capabilities equal to MOSFET and controls on high voltage and high current equal to bipolar transistor.

- Promotion of SDK's plant factory systems in overseas markets

A plant factory system developed by SDK as a package of *SHIGYO*™ Method fast-track plant cultivation technology, LED light, aluminum racks for plant cultivation and other equipment has been adopted by Isetan Cool Japan SDN. BHD. (ICJ) in order to be installed and displayed as an example of "Cool Japan" (Japanese esprit) at "ISETAN The Japan Store Kuala Lumpur" which is scheduled to open in October 2016 at Kuala Lumpur, Malaysia. This store is expected to be a new model that disseminates and shares "excellent Japanese products and services," expresses Japanese esprit, and creates new

demands in the local market as well as spinoff impact to the Japanese market.

Moreover, SDK, Marubeni Corporation, and Chiyoda Corporation will jointly develop an overseas artificially-lit plant factory business. SDK will provide plant factory system including *SHIGYO*™ Method; Marubeni will promote and conduct market development of plant factories in overseas countries; and Chiyoda will conduct design, procurement and management of the factory by utilizing the know-how it has gained through the experimental study of crop cultivation in the International Space Station. As the first stage in this business, the three companies have reached an agreement with Al Ghurair Group, one of the largest conglomerates in the United Arab Emirates, to introduce a demonstration plant of their plant factory in Dubai in January 2017. The three companies will use this demonstration plant as a showroom for customers who are considering introducing their own plant factory and proceed with overseas market promotion with a primary focus on the Middle East.

2. Financial conditions for the January 1 – June 30, 2016 period (as compared with the conditions at December 31, 2015)

a) Situation of assets, liabilities and net assets

Total assets at June 30, 2016 amounted to ¥887,694 million, a decrease of ¥53,620 million from the level at December 31, 2015. Total assets were down due mainly to the decrease in accounts receivable-trade and the decrease in the amount of Japanese yen conversion of assets of overseas subsidiaries caused by the yen's appreciation. Total liabilities decreased ¥28,661 million, to ¥602,878 million, due partly to the decrease in accounts payable-trade. Net assets at June 30, 2016 amounted to ¥284,816 million, a decrease of ¥24,958 million from the level at December 31, 2015, due partly to the decrease in foreign currency translation adjustment caused by the yen's appreciation.

b) Situation of cash flows

Net cash provided by operating activities during the first half of 2016 amounted to ¥20,636 million, a decrease of ¥674 million from the same period of the previous year, due partly to the decrease in allowance for doubtful accounts, despite the increase in the income before income taxes and minority interests. Net cash used in investing activities increased ¥6,389 million from the same period of the previous year, to ¥24,643 million, due partly to the decrease in proceeds from sales of investment securities. Thus free cash flow ended up in expenditure of ¥4,007 million, a deterioration of ¥7,062 million from the same period of the previous year. Cash flows from financing activities ended up in the proceeds of ¥69 million, an increase in proceeds of ¥7,648 from the same period of the previous year, due mainly to the increase in 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 ¥9,212 million from the level at December 31, 2015, to ¥54,418 million.

3. Performance forecast

a) Revision of performance forecast

We announced our revised performance forecast for 2016 on August 9, 2016. The table below shows our revised performance forecast for the full year.

(Unit: Millions of yen)

| | Net sales | Operating income | Ordinary income | Profit attributable to owners of parent |
|---|---|---|---|---|
| Revised forecast for the full year | 670,000 | 30,000 | 23,000 | 9,000 |

Taking recent changes in economic trend including appreciation of the yen into account, we revised our assumptions about exchange rate and naphtha price on which we forecast the Company's performance in the second half of 2016 (July 1 – December 31, 2016) as follows:

Exchange rate: ¥100 to the U.S. dollar (Initial assumption: ¥119 to the U.S. dollar)
Naphtha price: ¥32,200/KL (Initial assumption: ¥42,200/KL)

b) Revision of dividends forecast

SDK resolved at its 107th ordinary general meeting of shareholders held on March 30, 2016 that it would consolidate its shares and change number of shares per trading unit (share unit). Based on this resolution, SDK consolidated every ten shares of its common stock into one share on July 1, 2016. Therefore, SDK revised the forecast for nominal amounts of the dividends per share for the year ending December 31, 2016 to be ten times larger than those before the consolidation, in order to make the forecast consistent with the rate of consolidation. However, this revision does not mean there is real change in the forecast for dividends per share.

Revision of forecast about dividends per share for the year ending December 31, 2016 (Unit: yen)

| | Q2 dividends per share | End of term dividends per share | Annual dividends per share |
|---|---|---|---|
| Initial forecast (February 10, 2016) | — | 3.00 | 3.00 |
| Revised forecast | — | 30.00 | 30.00 |
| Actual results for 2016 | — | | |
| Actual results for the year ended December 31, 2015 | — | 3.00 | 3.00 |

For details of the consolidation of shares and the change in the number of shares per share unit, please refer to the news release "SDK to Consolidate Its Shares, Change Number of Shares per Share Unit, and Partially Amend the Articles of Incorporation" announced on February 10, 2016.

# Consolidated Balance Sheets

(¥ in millions, US$ in thousands)

| | Dec. 31, 2015 | Jun. 30, 2016 | Jun. 30, 2016 |
|---|---|---|---|
| Assets | ¥ | ¥ | $ |
| Current assets | | | |
| Cash and deposits | 64,054 | 54,799 | 532,492 |
| Notes and accounts receivable-trade | 136,602 | 113,312 | 1,101,080 |
| Merchandise and finished goods | 48,660 | 46,802 | 454,783 |
| Work in process | 14,692 | 12,356 | 120,070 |
| Raw materials and supplies | 42,573 | 37,391 | 363,339 |
| Other | 27,374 | 34,576 | 335,981 |
| Allowance for doubtful accounts | (880) | (434) | (4,219) |
| Total current assets | 333,076 | 298,802 | 2,903,526 |
| Noncurrent assets | | | |
| Property, plant and equipment | | | |
| Buildings and structures, net | 81,529 | 77,095 | 749,152 |
| Machinery, equipment and vehicles, net | 112,940 | 108,657 | 1,055,843 |
| Land | 251,851 | 251,559 | 2,444,453 |
| Other, net | 54,968 | 49,172 | 477,811 |
| Total property, plant and equipment | 501,288 | 486,482 | 4,727,259 |
| Intangible assets | | | |
| Other | 12,514 | 11,453 | 111,289 |
| Total intangible assets | 12,514 | 11,453 | 111,289 |
| Investments and other assets | | | |
| Investment securities | 76,568 | 68,694 | 667,513 |
| Other | 32,682 | 34,858 | 338,718 |
| Allowance for doubtful accounts | (14,816) | (12,594) | (122,381) |
| Total investments and other assets | 94,435 | 90,957 | 883,851 |
| Total noncurrent assets | 608,237 | 588,892 | 5,722,400 |
| Total assets | 941,314 | 887,694 | 8,625,925 |
| Liabilities | | | |
| Current liabilities | | | |
| Notes and accounts payable-trade | 103,927 | 88,611 | 861,054 |
| Short-term loans payable | 69,000 | 67,323 | 654,192 |
| Current portion of long-term loans payable | 49,386 | 44,386 | 431,312 |
| Commercial papers | 12,000 | 17,000 | 165,193 |
| Current portion of bonds | 10,000 | 20,000 | 194,345 |
| Provision | 2,175 | 3,104 | 30,158 |
| Other | 83,794 | 69,757 | 677,847 |
| Total current liabilities | 330,283 | 310,181 | 3,014,100 |
| Noncurrent liabilities | | | |
| Bonds payable | 35,000 | 25,000 | 242,931 |
| Long-term loans payable | 193,449 | 197,133 | 1,915,587 |
| Provision | 1,852 | 2,496 | 24,254 |
| Net defined benefit liability | 15,185 | 12,973 | 126,063 |
| Other | 55,770 | 55,095 | 535,368 |
| Total noncurrent liabilities | 301,256 | 292,697 | 2,844,202 |
| Total liabilities | 631,539 | 602,878 | 5,858,302 |
| Net assets | | | |
| Shareholders' equity | | | |
| Capital stock | 140,564 | 140,564 | 1,365,888 |
| Capital surplus | 62,221 | 62,221 | 604,616 |
| Retained earnings | 55,822 | 53,326 | 518,178 |
| Treasury stock | (10,157) | (10,495) | (101,983) |
| Total shareholders' equity | 248,449 | 245,615 | 2,386,698 |
| Accumulated other comprehensive income | | | |
| Valuation difference on available-for-sale securities | 3,927 | (1,234) | (11,995) |
| Deferred gains or losses on hedges | (326) | (1,367) | (13,281) |
| Revaluation reserve for land | 31,307 | 32,933 | 320,016 |
| Foreign currency translation adjustment | 18,611 | 65 | 633 |
| Remeasurements of defined benefit plans | (4,835) | (4,045) | (39,308) |
| Total accumulated other comprehensive income | 48,683 | 26,352 | 256,065 |
| Non-controlling interests | 12,642 | 12,849 | 124,860 |
| Total net assets | 309,774 | 284,816 | 2,767,623 |
| Total liabilities and net assets | 941,314 | 887,694 | 8,625,925 |

# Consolidated Statements of Income

(¥ in millions, US$ in thousands)

| | Results for the first half year (Jan.1-Jun.30) | | |
|---|---|---|---|
| | 2015 | 2016 | 2016 |
| | ¥ | ¥ | $ |
| Net sales | 396,980 | 321,572 | 3,124,793 |
| Cost of sales | 336,986 | 269,837 | 2,622,067 |
| Gross profit | 59,994 | 51,735 | 502,726 |
| Selling, general and administrative expenses | 43,884 | 40,199 | 390,624 |
| Operating income | 16,109 | 11,536 | 112,102 |
| Non-operating income | | | |
| Interest income | 138 | 175 | 1,696 |
| Dividends income | 1,183 | 502 | 4,881 |
| Equity in earnings of affiliates | 1,064 | 1,872 | 18,191 |
| Miscellaneous income | 2,552 | 1,655 | 16,079 |
| Total non-operating income | 4,936 | 4,204 | 40,847 |
| Non-operating expenses | | | |
| Interest expenses | 2,076 | 1,609 | 15,633 |
| Foreign exchange losses | 976 | 3,932 | 38,210 |
| Miscellaneous expenses | 2,494 | 3,189 | 30,986 |
| Total non-operating expenses | 5,546 | 8,730 | 84,829 |
| Ordinary income | 15,500 | 7,010 | 68,120 |
| Extraordinary income | | | |
| Gain on sales of noncurrent assets | 100 | 329 | 3,198 |
| Other | 1,826 | 129 | 1,254 |
| Total extraordinary income | 1,926 | 458 | 4,451 |
| Extraordinary loss | | | |
| Loss on sales and retirement of noncurrent assets | 1,433 | 2,027 | 19,700 |
| Impairment loss | 444 | 1,552 | 15,080 |
| Provision of allowance for doubtful accounts | 12,885 | — | — |
| Other | 2,767 | 2,479 | 24,086 |
| Total extraordinary losses | 17,529 | 6,058 | 58,865 |
| Loss before income taxes | (103) | 1,410 | 13,706 |
| Income taxes | 5,256 | (754) | (7,329) |
| Profit (loss) | (5,359) | 2,165 | 21,035 |
| Profit (loss) attributable to non-controlling interests | (6,639) | 573 | 5,567 |
| Profit (loss) attributable to owners of parent | 1,280 | 1,592 | 15,468 |

# Consolidated Statements of Comprehensive Income

(¥ in millions, US$ in thousands)

| | Results for the first half year (Jan.1-Jun.30) | | |
|---|---|---|---|
| | 2015 | 2016 | 2016 |
| | ¥ | ¥ | $ |
| Profit (loss) | (5,359) | 2,165 | 21,035 |
| Other comprehensive income: | | | |
| Valuation difference on available-for-sale securities | 3,420 | (5,337) | (51,863) |
| Deferred gains or losses on hedges | (800) | (977) | (9,495) |
| Revaluation reserve for land | 3,733 | 1,824 | 17,727 |
| Foreign currency translation adjustments | 3,511 | (18,408) | (178,878) |
| Remeasurements of defined benefit plans, net of tax | 2,866 | 796 | 7,731 |
| Share of other comprehensive income of entities accounted for using equity method | 229 | (706) | (6,864) |
| Total other comprehensive income | 12,958 | (22,809) | (221,642) |
| Comprehensive income | 7,600 | (20,644) | (200,607) |
| (Comprehensive income attributable to) | | | |
| Comprehensive income attributable to owners of parent | 14,330 | (20,569) | (199,872) |
| Comprehensive income attributable to non-controlling interests | (6,731) | (76) | (735) |

# Consolidated Statements of Cash Flows

(¥ in millions, US$ in thousands)

| | Results for the first half year (Jan. 1-Jun. 30) | | |
|---|---|---|---|
| | 2015 | 2016 | 2016 |
| | ¥ | ¥ | $ |
| **Net cash provided by (used in) operating activities** | | | |
| Income before income taxes and minority interests | (103) | 1,410 | 13,706 |
| Depreciation and amortization | 21,015 | 19,578 | 190,242 |
| Impairment loss | 444 | 1,552 | 15,080 |
| Amortization of goodwill | 720 | 38 | 374 |
| Increase (decrease) in allowance for doubtful accounts | 12,986 | (1,209) | (11,746) |
| Increase (decrease) in net defined benefit liability | (7,714) | (2,206) | (21,436) |
| Interest and dividends income | (1,321) | (677) | (6,577) |
| Interest expenses | 2,076 | 1,609 | 15,633 |
| Equity in (earnings) losses of affiliates | (1,064) | (1,872) | (18,191) |
| Loss (gain) on sales and valuation of investment securities | (1,663) | (58) | (561) |
| Loss on retirement of noncurrent assets | 1,307 | 2,012 | 19,547 |
| Loss (gain) on sales of noncurrent assets | 26 | (313) | (3,045) |
| Decrease (increase) in notes and accounts receivable-trade | 30,239 | 21,723 | 211,090 |
| Decrease (increase) in inventories | 5,911 | 5,500 | 53,443 |
| Increase (decrease) in notes and accounts payable-trade | (20,796) | (16,571) | (161,024) |
| Other, net | (19,957) | (9,074) | (88,172) |
| Subtotal | 22,106 | 21,443 | 208,363 |
| Interest and dividends income received | 2,741 | 3,094 | 30,061 |
| Interest expenses paid | (2,072) | (1,570) | (15,254) |
| Income taxes paid | (1,466) | (2,330) | (22,643) |
| Net cash provided by (used in) operating activities | 21,310 | 20,636 | 200,527 |
| **Net cash provided by (used in) investing activities** | | | |
| Purchase of property, plant and equipment | (19,790) | (20,414) | (198,369) |
| Proceeds from sales of property, plant and equipment | 116 | 487 | 4,735 |
| Proceeds from transfer of business | 905 | - | - |
| Purchase of investment securities | (838) | (362) | (3,522) |
| Proceeds from sales of investment securities | 2,787 | 153 | 1,483 |
| Net decrease (increase) in short-term loans receivable | (472) | (205) | (1,990) |
| Payments of long-term loans receivable | - | (2,684) | (26,085) |
| Collection of long-term loans receivable | 115 | 107 | 1,039 |
| Other, net | (1,077) | (1,724) | (16,751) |
| Net cash provided by (used in) investing activities | (18,254) | (24,643) | (239,460) |
| Net increase (decrease) in short-term loans payable | 612 | (195) | (1,896) |
| Net increase (decrease) in commercial papers | 8,000 | 5,000 | 48,586 |
| Proceeds from long-term loans payable | 25,517 | 27,669 | 268,868 |
| Repayment of long-term loans payable | (45,272) | (25,836) | (251,050) |
| Proceeds from issuance of bonds | 10,000 | - | - |
| Cash dividends paid | (4,260) | (4,256) | (41,357) |
| Cash dividends paid to non controlling shareholders | (354) | (319) | (3,097) |
| Other, net | (1,821) | (1,994) | (19,379) |
| Net cash provided by (used in) financing activities | (7,579) | 69 | 675 |
| **Effect of exchange rate change on cash and cash equivalents** | 2,066 | (5,411) | (52,579) |
| **Net increase (decrease) in cash and cash equivalents** | (2,457) | (9,348) | (90,838) |
| **Cash and cash equivalents at beginning of period** | 66,515 | 63,630 | 618,312 |
| **Increase in cash and cash equivalents from newly consolidated subsidiary** | 3,002 | 136 | 1,322 |
| **Decrease in cash and cash equivalents resulting from exclusion of subsidiaries** | (7) | - | - |
| **Increase in cash and cash equivalents resulting from merger** | 161 | - | - |
| **Cash and cash equivalents at end of period** | 67,215 | 54,418 | 528,795 |

(Reference)

SEGMENT INFORMATION (previous 2Q ended)

The operations of the Companies for the 6 Months ended June 30, 2015 and 2016 was summarised by industry segment as follows:

| 6 Months ended June 30, 2015 | Millions of yen | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Petrochemicals | Chemicals | Electronics | Inorganics | Aluminium | Others | Elimination | Consolidated |
| Sales | | | | | | | | |
| Outside customers | ¥118,687 | ¥63,970 | ¥64,067 | ¥28,753 | ¥46,099 | ¥75,405 | ¥– | ¥396,980 |
| Inter-segment | 2,547 | 6,256 | 942 | 4,319 | 3,905 | 4,043 | (22,013) | – |
| Total | 121,234 | 70,226 | 65,009 | 33,072 | 50,004 | 79,448 | (22,013) | 396,980 |
| Operating income (loss) | ¥5,952 | ¥4,263 | ¥8,047 | (¥24) | ¥1,408 | ¥179 | (¥3,716) | ¥16,109 |

| 6 Months ended June 30, 2016 | Millions of yen | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Petrochemicals | Chemicals | Electronics | Inorganics | Aluminium | Others | Elimination | Consolidated |
| Sales | | | | | | | | |
| Outside customers | **¥83,757** | **¥56,786** | **¥46,281** | **¥21,411** | **¥43,843** | **¥69,494** | **¥–** | **¥321,572** |
| Inter-segment | **2,286** | **8,127** | **633** | **3,492** | **3,932** | **3,374** | **(21,844)** | **–** |
| Total | **86,044** | **64,913** | **46,914** | **24,903** | **47,775** | **72,868** | **(21,844)** | **321,572** |
| Operating income (loss) | **¥7,366** | **¥5,470** | **¥4,059** | **(¥4,350)** | **¥1,482** | **¥1,012** | **(¥3,503)** | **¥11,536** |

| 6 Months ended June 30, 2016 | Thousands of U.S. dollars | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Petrochemicals | Chemicals | Electronics | Inorganics | Aluminium | Others | Elimination | Consolidated |
| Sales | | | | | | | | |
| Outside customers | **$813,887** | **$551,800** | **$449,723** | **$208,058** | **$426,037** | **$675,289** | **$–** | **$3,124,793** |
| Inter-segment | **22,218** | **78,973** | **6,151** | **33,933** | **38,208** | **32,784** | **(212,266)** | **–** |
| Total | **836,104** | **630,773** | **455,874** | **241,991** | **464,245** | **708,073** | **(212,266)** | **3,124,793** |
| Operating income (loss) | **$71,578** | **$53,152** | **$39,442** | **($42,266)** | **$14,400** | **$9,835** | **($34,039)** | **$112,102** |

SHOWA DENKO K.K.

Aug. 9, 2016

# First Half, 2016 Consolidated Financial Results (Summary)

## Ⅰ. First Half 2016 Results

### 1. Summary

(Unit: billions of yen, except for profit attributable to owners of parent per share and net income per share)

| Items | 1st half, 2015 (Jan.-Jun.) | 1st half, 2016 (Jan.-Jun.) | Increase/ decrease |
|---|---|---|---|
| Net Sales | 397.0 | 321.6 | -75.4 |
| Operating Income | 16.1 | 11.5 | -4.6 |
| Profit attributable to owners of parent | 1.3 | 1.6 | 0.3 |
| Profit attributable to owners of parent per share | ¥8.96 | ¥11.15 | ¥2.19 |
| Stockholders' equity per share | ¥2,191.77 | ¥1,908.21 | ¥-283.56 |

SDK consolidated every ten shares of its common stock into one share on July 1, 2016. The above-mentioned “per share” indicators are calculated on the assumption that the share consolidation had been carried out at the beginning of 2015.

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

(Unit: billions of yen)

| Segment | | 1st half, 2015 (Jan.-Jun.) | 1st half, 2016 (Jan.-Jun.) | Increase/ decrease | CQ1, 2016 (Jan. - Mar.) | CQ2, 2016 (Apr. - Jun.) |
|---|---|---|---|---|---|---|
| Net Sales | Petrochemicals | 121.2 | 86.0 | -35.2 | 42.9 | 43.1 |
| | Chemicals | 70.2 | 64.9 | -5.3 | 32.1 | 32.8 |
| | Electronics | 65.0 | 46.9 | -18.1 | 22.3 | 24.7 |
| | Inorganics | 33.1 | 24.9 | -8.2 | 12.4 | 12.5 |
| | Aluminum | 50.0 | 47.8 | -2.2 | 22.0 | 25.8 |
| | Others | 79.4 | 72.9 | -6.6 | 36.2 | 36.7 |
| | Adjustments | -22.0 | -21.8 | 0.2 | -10.5 | -11.4 |
| | Total | 397.0 | 321.6 | -75.4 | 157.4 | 164.1 |
| Operating Income | Petrochemicals | 6.0 | 7.4 | 1.4 | 1.5 | 5.9 |
| | Chemicals | 4.3 | 5.5 | 1.2 | 2.5 | 2.9 |
| | Electronics | 8.0 | 4.1 | -4.0 | 1.7 | 2.4 |
| | Inorganics | 0.0 | -4.4 | -4.3 | -2.0 | -2.4 |
| | Aluminum | 1.4 | 1.5 | 0.1 | 0.2 | 1.2 |
| | Others | 0.2 | 1.0 | 0.8 | 0.5 | 0.5 |
| | Adjustments | -3.7 | -3.5 | 0.2 | -1.7 | -1.8 |
| | Total | 16.1 | 11.5 | -4.6 | 2.9 | 8.7 |

### 3. Cash Flow (Consolidated)

(Unit: billions of yen)

| Cash Flows from: | 1st half, 2015 (Jan.-Jun.) | 1st half, 2016 (Jan.-Jun.) | Increase/ decrease |
|---|---|---|---|
| Operating Activities | 21.3 | 20.6 | -0.7 |
| Investing Activities | -18.3 | -24.6 | -6.4 |
| Free Cash Flow | 3.1 | -4.0 | -7.1 |
| Financing Activities | -7.6 | 0.1 | 7.6 |
| Other | 2.1 | -5.4 | -7.5 |
| Net increase in Cash | -2.5 | -9.3 | -6.9 |

### 4. Reference (Consolidated)

(Unit: billions of yen)

| Items | 1st half, 2015 (Jan.-Jun.) | 1st half, 2016 (Jan.-Jun.) | Increase/ decrease |
|---|---|---|---|
| Capital expenditures | 20.3 | 16.9 | -3.4 |
| Depreciation and amortization | 21.0 | 19.6 | -1.4 |
| R&D expenditures | 10.3 | 8.7 | -1.6 |
| Total assets | 975.6 | 887.7 | -87.9 |
| Interest bearing debt | 384.7 | 370.8 | -13.9 |
| Gap between interest/dividend income and interest expense | -0.8 | -0.9 | -0.2 |
| Total number of employees | 10,746 | 10,147 | -599 |
| Exchange rate (yen/US$) | 120.2 | 111.8 | Yen strengthened by 8.4 |
| Domestic naphtha price (yen/kl) | 47,900 | 33,000 | -14,900 |

SHOWA DENKO K.K.

# Ⅱ. Forecast for 2016

## 1. Summary

(Unit: billions of yen, except for profit attributable to owners of parent per share and net income per share)

| Items | 2015 | 2016 Revised forecast | Increase/ decrease |
|---|---|---|---|
| Net Sales | 781.0 | 670.0 | -111.0 |
| Operating Income | 33.7 | 30.0 | -3.7 |
| Profit attributable to owners of parent | 1.0 | 9.0 | 8.0 |
| Profit attributable to owners of parent per share | ¥6.78 | ¥63.10 | ¥56.31 |
| Cash dividends per share | ¥3.00 | (planned) ¥30.00 | - |

SDK consolidated every ten shares of its common stock into one share on July 1, 2016. The above-mentioned "Profit(s) attributable to owners of parent per share" for 2015 and 2016 (Revised forecast) are calculated on the basis of the number of outstanding shares after this consolidation. The above-mentioned "Cash dividends per share" for 2015 is calculated on the basis of the number of outstanding shares before this consolidation, while that for 2016 (Revised forecast) is calculated on the basis of the number of outstanding shares after this consolidation.

(Note) 2016 forecast was revised on Aug. 9, 2016.

## 2. Net sales and Operating Income by Segment

(Unit: billions of yen)

| Segment | | 2015 | 2016 Revised forecast | Increase/ decrease |
|---|---|---|---|---|
| Net Sales | Petrochemicals | 231.3 | 180.0 | -51.3 |
| | Chemicals | 142.3 | 135.0 | -7.3 |
| | Electronics | 131.5 | 93.0 | -38.5 |
| | Inorganics | 63.5 | 52.0 | -11.5 |
| | Aluminum | 100.8 | 98.0 | -2.8 |
| | Others | 152.5 | 157.0 | 4.5 |
| | Adjustments | -40.8 | -45.0 | -4.2 |
| | Total | 781.0 | 670.0 | -111.0 |
| Operating Income | Petrochemicals | 10.5 | 15.0 | 4.5 |
| | Chemicals | 10.7 | 13.0 | 2.3 |
| | Electronics | 17.5 | 9.5 | -8.0 |
| | Inorganics | -1.2 | -5.5 | -4.3 |
| | Aluminum | 2.6 | 4.0 | 1.4 |
| | Others | 1.5 | 2.0 | 0.5 |
| | Adjustments | -7.9 | -8.0 | -0.1 |
| | Total | 33.7 | 30.0 | -3.7 |

# Ⅲ. Reference

| Items | 2015 | 2016 Revised forecast | Increase/ decrease |
|---|---|---|---|
| Capital expenditures | 44.1 | 50.7 | 6.7 |
| Depreciation and amortization | 42.1 | 39.1 | -3.1 |
| R & D expenditures | 20.3 | 18.8 | -1.5 |
| Interest-bearing debt | 368.8 | 370.0 | 1.2 |
| Gap between interest / dividend income and interest expense | -2.2 | -1.9 | 0.3 |
| Total number of employees | 10,561 | 10,033 | -528 |
| Exchange rate (yen/US$) | (1st half) 120.2<br>(2nd half) 121.9 | (1st half) 111.8<br>(2nd half) 100.0 | (1st half) -8.4<br>(2nd half) -21.9 |
| Domestic naphtha price (yen/kl) | (1st half) 47,900<br>(2nd half) 44,050 | (1st half) 33,000<br>(2nd half) 32,200 | (1st half) -14,900<br>(2nd half) -11,850 |

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.