NEWS RELEASE

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Progress in 2016 and Tasks and Strategies for 2017 on the Business Plan
—The Essence of Business Strategy Briefing on "Project 2020＋"—

Showa Denko (SDK) (Tokyo: 4004) today held a conference in Tokyo to explain its management conditions for 2016 and business strategy for 2017. The essence of the briefing offered at the conference is as follows:

1. Estimated business results for 2016 and performance forecast for 2017 (image)
   (1) Estimated business results for 2016 (announced on December 13)
   SDK announced today a revision of its earlier forecast of consolidated business results for full-year 2016 in view of the recent business trends. SDK expects that its income for the full-year 2016 will greatly exceed the earlier forecast announced on August 9, 2016. In its Petrochemicals segment, the spread (the difference between the prices of raw materials and products) of ethylene etc. has increased more than expected, reflecting the tight supply-demand balance in the East Asian market, while the crude oil prices continue to be at low levels. In its hard disk (HD) media business, shipment volumes of HD media has been recovering since the second quarter of 2016, and the effect of streamlining of HD media production capacity has been realized. (For further details, please refer to the news release "Showa Denko Revises Full-year Performance Forecast" announced today)

   (2) Performance forecast for 2017 (image)
   With regard to the world economy, while the US economy is expected to lead gradual improvement in the global economy, we should carefully observe the course of politics and economy of each country because of the uncertainty concerning the effects of Brexit and the inauguration of the new President of the United States. As for the Japanese economy for 2017, a mood of uncertainty is growing because its recovery is expected to remain mild, but not strong enough, due to the influences of the world economy and appreciation of the yen.

   In view of such business environment, and based on the assumptions described below, including an expected exchange rate of ¥100 per US dollar, SDK expects to record consolidated net sales of ¥700 billion, operating income of ¥37 billion, and net income of ¥19 billion, an increase in both income and profits over the estimated business results for 2016.

   SDK will formally announce its performance forecast for 2017 simultaneously with the announcement of its 2016 financial results.

【Financial goals】 (Billions of yen)

	2016 Latest forecast	2017 Image	2017 "Project 2020＋" target*
Net sales	670	700	850
Operating income	36	37	50
Net income**	12	19	--

* "Project 2020＋" target for 2017 was announced in December 2015.
** "Net income" represents "Profit attributable to owners of parent."

[Basic assumptions for 2017]
Exchange rate: ¥100 per US dollar
Japanese economy: Mild growth
Economy outside Japan:
US economy: Accelerated growth
Chinese economy: Slower growth becomes normality

2. Progress in 2016 and tasks and strategies for 2017

Under its medium-term consolidated business plan "Project 2020＋," SDK is aiming to realize a business structure which has high profitability with low volatility, and promoting expansion of "individualized businesses," which maintains profitability and stability at high levels, and overseas business operations.

In 2016, which is the first year of the "Project 2020＋," SDK implemented measures to strengthen the Showa Denko Group's revenue bases. In Growth-accelerating and Advantage-establishing businesses, SDK promoted capital investments to increase production capacities and development of new products. In Base-shaping businesses, SDK implemented structural reform of Base-shaping businesses, centering on HD media and graphite electrode (GE) businesses.

In 2017, SDK will strive to achieve further progress in Growth-accelerating and Advantage-establishing businesses and early integration of its GE business with that of SGL GE Holding GmbH (SGL GE). SDK will also strive to achieve "discontinuous" growth through M&A and business alliances in order to expand its individualized businesses in the medium- and long-term perspective.

3. Measures to be taken for each business

(1) Growth-accelerating businesses

① High-purity gases for electronics

The demand for high purity gases for electronics will continue increasing during 2017 due to start-up of new factories to produce semiconductor chips and liquid crystal display (LCD) panels in global scale, centering on East Asia, and progress in adoption of multi-layer structure in design of semiconductor chips, and production of LCD panels with higher definition.

SDK has been promoting establishment and expansion of high-purity gas plants and global supply chain management system, and formation of business alliances with other high-purity gas manufacturers, centering on East Asia which occupies 80% of the global demand for high-purity gases. In 2017, SDK will further expand sales and use of its high-purity gases in East Asia, establish new sales bases in the United States where many semiconductor manufacturers have their mother

factories, and consider implementation of measures to achieve discontinuous growth including M&A and business alliances, aiming to firmly establish its status as the top manufacturer of high-purity gases in the world.

② Functional chemicals

SDK has been taking various measures to increase sales of functional chemicals in its target market domains, centering on “Infrastructure” and “Mobility.” In the market domain of “Infrastructure,” we started to market “non-styrene vinylester resin aqueous emulsion” for lining, and also started OEM production of vinylester resin and synthetic resin emulsion in the ASEAN market. In November 2016, SDK started trial operation of its thermosetting resin production plant in Zhuhai, China, which will start mass production for automotive and other applications in the early months of 2017. In 2016, SDK also decided to terminate production and sales of *Bionolle*™, a biodegradable plastic.

For 2017, SDK expects that the domestic construction market, which is the major market for functional resins and monomers, will remain strong due to the increase in public works and urban redevelopment projects. SDK also expects that the public investment for infrastructure in China and ASEAN area will continue increasing due to their economic growth. SDK will increase the market share of its functional chemicals through development of new-grade products and expansion of sales of them, and accelerate expansion of its functional chemicals business in Asian countries.

③ Aluminum cans

In Japan, though the market for aluminum cans for soft drinks is slightly expanding due to the increase in demand for cans for coffee beverages, the market for aluminum cans for beer and beer-like beverages is scaling down. The diversification of cans is in progress due to ongoing diversification in consumers’ likes. On the other hand, in the overseas markets, the demand for aluminum cans continue increasing, centering on emerging countries where income levels of people are rapidly improving.

In order to respond to changes in the domestic market needs, SDK developed a label printing technology which is suitable for production of small-lot multiple-design cans with photogravure quality. At Hanacans, of Vietnam, the Showa Denko Group will soon start mass production of sleek aluminum cans, which are popular in that country. The Group is also considering re-expansion of can and can end production lines of Hanacans. In 2017, the Group will further cultivate aluminum can market of Vietnam.

(2) Advantage-establishing businesses

① Lithium-ion battery (LIB) materials

The demand for LIBs continues to increase rapidly, centering on large LIBs, due mainly to the take-off of the markets for new-energy vehicles (EV, PHV, etc.) in China and other countries.

SDK has been developing LIB materials that provide such values as “high capacity, low resistance, and long life,” and started outsourcing of production of *SCMG*™ anode material in China. SDK is now promoting expansion of production facilities for *SCMG*™ and *VGCF*™ conductivity enhancer. SDK will strengthen supply systems of LIB materials in accordance with market trends which we continue watching carefully. In January 2017, SDK will change its Advanced Battery

Materials Department into Advanced Battery Materials Division. SDK will firmly establish its position in the LIB-material market, while expanding its LIB materials business on a medium- and long-term outlook.

② SiC epitaxial wafer for power devices

SiC-based power devices are key devices for energy conservation, and the demand for them is expected to continue increasing for medium to long term.

SDK has been producing SiC epitaxial wafer for power devices with top-level quality in the world, and increased its capacity to produce high-grade SiC epitaxial wafer marketed under the trade name of “High-Grade Epi” in June 2016. In 2017, SDK will continue strengthening its supply system for SiC epitaxial wafer to cope with ongoing expantion of the market, aiming to contribute to full-swing spread of SiC power devices.

(3) Base-shaping businesses

① HD media

Though the shipment volumes of hard disk drives (HDDs) is on the decrease, it is expected that the scale of decrease in 2017 will be substantially reduced due to the bottoming out of shipment volumes of HDDs for use in PCs and the increase in HDD demand for use in servers for data centers. In addition, the demand for HD media will show a gradual recovery due to the expansion of the HDD market for servers in data centers, centering on aluminum HD media.

In 2016, SDK streamlined its HD media production capacity in order to cope with the adjustment of production in the global HDD industry, promoted integration of operation of substrate section and media section in all bases at home and abroad, and achieved productivity improvement and thorough cost reduction. On the other hand, SDK continues developing leading-edge HD media that contribute to realization of large-capacity HDDs. Thus, in 2017, SDK will continue pursuing the “best in class” status in the HD media industry and strengthening its HD media business.

② Graphite electrodes (GE)

Global demand for steel, manufacturers of which are the clients of SDK’s GE business, is expected to continue slow growth of 1% a year for a while. In the GE industry, difficult business environment for SDK continues to exist, including sluggish demand and intensifying competition.

Under these circumstances, in 2016, SDK rebuilt its GE production system to make it suitable for the situation of the global demand for GE, and implemented thorough cost reduction measures in all production bases. Moreover, SDK plans to acquire the whole shares of SGL GE, which operates graphite electrode business, from SGL Carbon SE that occupies the second place in the world as GE manufacturer (as of 2015) by the middle months of 2017. Through this acquisition, SDK will establish its status as the leading GE supplier in the world, and revive its GE business to be one of the chief supports of the Group’s revenue base again.

③ Petrochemicals

The operating rate of SDK’s ethylene plant remains high throughout the year, while the price of naphtha as main raw material stabilizes at low level. In the second half of 2017, some petrochemical plants in the United States to use shale gas and oil as

raw material will start their operation. However, the effect of their start-up on the East Asian market is expected to be limited, and the supply-demand situation in ethylene market will continue to be tight.

In September 2016, SDK made a polypropylene manufacturer SunAllomer its consolidated subsidiary in order to strengthen its Oita Complex. SunAllomer is competitive as supplier of raw materials for automotive parts. In 2017, the Group will continuously take measures to strengthen Oita Complex, including business expansion into the market domain of "Mobility," expansion of its derivative business, and promotion of intraregional cooperation with other companies such as oil refining companies and iron manufacturing companies.

(4) Discontinuous growth through M&A and business alliances
SDK places M&A as an important strategy to achieve expansion of its individualized businesses. In 2016, SDK decided to execute integration of business operations with SGL GE in the field of graphite electrode business, and SunAllomer in the field of petrochemicals business, both of which belongs to Base-shaping businesses. In addition, SDK decided in 2016 to acquire GMM Group, which is a non-stick coating chemicals manufacturer, in order to enter into a new business.

In 2017, SDK will actively pursue post-merger integration (PMI) of business operations of these acquired companies and SDK, and continue considering all possible opportunities of M&A, and implement feasible M&A programs.

(5) Research and development
In order to achieve targets of its growth strategy, the Showa Denko Group must continue providing its customers with new values as fruits of its R&D activities, which are expected to bear new products, new technologies and new solutions.

In January 2016, SDK established "Institute for Integrated Product Development" and started to accelerate integration of R&D activities of the Group, aiming to improve the level of customer satisfaction with provision of solutions to satisfy diversified needs of the market, and to solve issues which cannot be settled by resources of the relevant division. Through its R&D activities, the Showa Denko Group will continue providing its customers with best solutions for their problems and needs, under the motto of "We pursue cooperation among people, integration of knowledge, and sharing of information," by making the most of the Group's materials and technologies in the fields of "organics, inorganics, and aluminum."

For further information, contact:
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Note: Performance forecast and other statements pertaining to the future as contained in this news release 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, cost of naphtha and other raw materials, demand for our products, market conditions, and foreign exchange rates.