



NEWS RELEASE

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Progress in 2017 and Tasks and Strategies for 2018 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 2017 and business strategy for 2018. The essence of the briefing offered at the conference is as follows:

1. Estimated business results for 2017

SDK announced today a revision of its earlier forecast of consolidated business results for full-year 2017 in view of the recent business trends. SDK expects that its operating income for full year 2017 will exceed the earlier forecast announced on July 24, 2017, which was ¥50 billion, and it will also exceed the target operating income for 2017 set in its medium-term business plan “Project 2020+,” which was ¥60 billion. In SDK’s Petrochemicals segment, the spreads (the differences between the prices of products and raw naphtha as main material) of ethylene, propylene, etc. hover above the earlier forecast, reflecting the tight supply-demand situation in the East Asian market throughout the year and high operating rate of domestic ethylene plants. In its hard disk (HD) media business, operating income is expected to increase due to the year-round contribution of the streamlining of production capacity and cost reduction both of which we implemented in 2016, in addition to the increase in shipment volumes of HD media from that in the previous year. In its graphite electrode business, operating income is expected to exceed the earlier forecast due to high operating rate of our production facilities and the increase in shipment volumes, in addition to the sudden increase in prices of graphite electrodes in the Chinese market. (For further details, please refer to the news release “Showa Denko Revises 2017 Performance Forecast” announced today.)

As for SDK’s performance forecast for 2018, SDK will announce it simultaneously with the announcement of its 2017 financial results, which is scheduled to be in February 2018, because SDK’s negotiation with customers for graphite electrodes concerning sales prices for 2018 still continues and we cannot fix the forecast of average sales prices of graphite electrodes, which will affect our 2018 performance forecast significantly. In addition, it takes time for SDK to calculate the goodwill to be posted concerning the acquisition of former SGL GE Holding GmbH and the new rate of taxation after the acquisition.

2. Progress in 2016-2017 and tasks and strategies for 2018 under “Project 2020+”

(1) Measures taken (2016-2017)

In Growth-accelerating and Advantage-establishing businesses, SDK favorably expanded its businesses. In businesses of high-purity gases for electronics, functional chemicals, and aluminum cans, which are Growth-accelerating businesses, SDK decided and/or executed establishment or expansion of its production/sales bases, and accelerated expansion of its overseas business operations. As for Base-shaping businesses, in HD media business, we streamlined production capacity and implemented cost reduction measures. In graphite electrode business, we implemented acquisition of SGL GE Holding GmbH and, simultaneously, streamlined our domestic production capacity and took cost reduction measures. In petrochemicals business, we continued safe and stable operation of plants throughout the year, improved and maintained profitability through consolidation of polypropylene production subsidiary. As for Rebuilding businesses, we promoted structural reform in order to change earnings structure. Thus SDK steadily took measures to improve profitability, and its profitability is continuously improving. However, we are also aware that we need implementation of further steps to expand our individualized businesses.

(2) Business strategies for 2018

In the five market domains on which we focus our efforts, namely “Electronics,” “Mobility,” “Energy,” “Infrastructure,” and “Living environment,” expansions of markets are accelerating. In the market domain of “Electronics,” the spread of “Internet of things” (IoT) and “artificial intelligence” (AI), substantial increase in generated data, and progress in utilization of big data will lead to the expansion of the market for semiconductors and storage devices. Also in the market domain of “Mobility,” the need for weight reduction, downsizing, automation and electrification is increasing. It is our mission to provide these market domains with our products, technologies and services in an appropriate and timely manner. SDK will promote establishment and strengthening of individualized businesses, and execute strategic measures in each business, aiming to improve its business portfolio and increase the share of overseas sales in its net sales.

3. Measures to be taken for each business

(1) Establishment of individualized businesses

① Graphite electrodes

The global market for graphite electrodes continues to be strong due to a rise in operating rate of electric steel furnaces in the United States, the increase in demand for special steel for automotive parts, and the special procurement boom caused by the 2020 Olympic Games in Japan. Moreover, we expect that the tightening of environmental regulation in China and the progress in the reduction of graphite electrode production capacity in global scale will make the tight supply-demand situation in the global graphite electrode market continue throughout 2018. SDK’s graphite electrode production bases in Japan, the United States and China maintain high operating rates. In addition, the new graphite electrode production facility with annual production capacity of 30,000 tons established in the Showa Denko Group’s production base in the United States will start mass production at the beginning of 2018. Thus SDK will maintain stable supply of graphite electrodes to its customers.

In November 2017, SDK completed integration of its graphite electrode business with that of former SGL GE Holding GmbH. SDK will realize the effect of this business integration as early as possible, aiming to establish its position as the leading supplier of graphite electrodes in terms of production capacity, product quality and cost competitiveness. In this way, SDK will strive to realize its medium-term image of a graphite electrode manufacturer which constantly achieves operating income rate of 10% or more.

② HD media

With regard to global shipment volumes of hard disk drives (HDDs), SDK expects that those with large capacity for use in data centers will remain strong, though those for use in PCs will decrease. Thus coexistence of solid state drives (SSDs) and HDDs as storage media will continue. SDK has been pioneering development and launch of leading-edge HD media. For example, in September 2017, SDK launched 2.5-inch HD media with capacity of 1TB per platter, which is the largest in this class. SDK will continue to launch large-capacity HD media for use in data centers, develop next-generation HD media, and improve productivity, thereby supplying leading-edge HD media to the global market.

③ Lithium-ion battery (LIB) materials

The market for new-energy-driven cars including electric vehicles (EVs) and plug-in hybrid vehicles (PHVs) is expected to expand faster than the previous forecasts. In addition, the need for advanced properties of LIBs including fast charging, long-range cruising, and enhanced safety is increasing. SDK has been developing and manufacturing LIB materials that provide LIBs with such values as “high capacity, low resistance, and long life.” In 2017, SDK expanded its production capacity for VGCFTM: carbon nanofiber added to cathodes and anodes of LIBs to improve electrical conductivity. In the future, SDK will soon launch Si-graphite hybrid anode additives, of which SDK is now evaluating samples, and promote further expansion of its VGCFTM production facilities, thereby responding to the need of customers.

④ 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 in medium to long term. SDK has been producing SiC epitaxial wafer for power devices with top-level quality in the world. In 2017, SDK decided to acquire assets and intellectual properties concerning SiC wafers from Nippon Steel & Sumitomo Metal Group, and also decided to further expand its capacity to produce high-grade SiC epitaxial wafer marketed under the trade name of “High-Grade Epi.” SDK will continue development of technologies that promote practical use of full-SiC-based power modules, aiming to contribute to full-swing spread of SiC-based power devices.

(2) Acceleration in expansion of global business operation

① High-purity gases for electronics

The amount of high purity gases for electronics used in manufacturing of semiconductors, LEDs, etc. is increasing due to the take-off of the production of 3D-NANDs in 2017. Under these circumstances, SDK newly established and/or expanded its facilities to produce etching gases, its sales bases in North America and China, and strengthened its administrative functions for logistics, procurement,

and marketing. In 2018, SDK will continue implementation of measures including development and launch of high-value-added new gases, investment in plant and equipment, and formulation of alliances with other companies, aiming to achieve the target concerning increase in sales set under the medium-term business plan, which is 40% increase in sales by 2018 from those of 2015.

② Aluminum cans

In the East Asian markets including that of Vietnam, the demand for aluminum cans for beverages continues to increase. In 2017, SDK decided to establish its Vietnamese subsidiary's second can manufacturing plant in Da Nang City, Vietnam, and also decided to establish a joint corporation and its new plant with a leading beverage manufacturer in Thailand. In 2018, SDK will finish construction of these new plants and start to provide customers with our Group's high-quality aluminum cans. On the other hand, in the domestic aluminum can market which has already matured, our customers need further improvement in the quality of aluminum cans. Therefore, SDK will strengthen its aluminum can production system to make it further optimized for production of multiple models in smaller lots.

4. Other topics

(1) Research and development strategy

Since the establishment of "Institute for Integrated Product Development" in January 2016, SDK has been accelerating integration and harmonization of R&D activities of the Group companies under the leadership of the Institute, aiming to enhance profitability and competitiveness of the Group's existing businesses and expand the Group's business domain into promising fields surrounding our existing businesses.

With regard to the enhancement of profitability and competitiveness of existing businesses, SDK continues R&D activities which are expected to contribute to the expansion of its "individualized businesses." For example, SDK is promoting: development of technologies for realization of ammonia-based hydrogen station, which realizes easy production of hydrogen gas for fuel cell vehicles from ammonia; development of aqueous binder for anodes of LIBs; and development of repairing materials to be used in cold districts. As for the expansion of the Group's business domain into promising fields surrounding our existing businesses, for example, our customers ask SDK to provide them with high performance materials which help realization of heat solutions including thermal resistance and heat radiation. Supply of these materials for heat solutions is expected to enable our automotive industry customers to promote electrification, miniaturization, and weight reduction of cars. SDK will continue responding to our customers' needs with proposals of hybrid materials developed through combination of our aluminum, resin and ceramics products.

As for our strategic technology to produce fullerene, which is a carbon material, we will promote expansion of the range of its use and accelerate development of technologies to establish high-yield production process.

(2) Financial strategy

Our performance concerning the financial targets we set in "Project 2020 +," namely D/E ratio, free cash flow, ROA and ROE, favorably continue to surpass

these targets. In 2018, we will aim to surpass our targets concerning management indexes through continuous pursuit of improvement in profitability, efficient use of business assets, inventory reduction, etc. As for the dividend payout ratio, we will aim to achieve 30% in 2018.

(3) Next medium-term business plan

In order to contribute to sustainable growth of society, the Showa Denko Group deals with social issues through its business activities. Aiming to “contribute to the creation of society where prosperity and sustainability are harmonized,” the Group makes the most of its business portfolio, appropriately grasps values that society and customers desire, and adds peerless value to products. When we provide products, technologies, and services, we give thoughtful attention to environment and recycling of resources more than ever. In addition, we will make the Group a “stage” where each employee, who creates values mentioned above, can work lively, and we will strive continuously to keep the Showa Denko Group growing.

We plan to start formulation of our next medium-term business plan from 2019. In the next medium-term business plan, we will focus on numerical targets, aiming to promote management filled with a sense of speed, in order to cope with rapidly changing business environment, while maintaining medium- to long-term perspective.

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.