

# NEWS RELEASE

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## **SDK Makes Progress toward Achieving Goals under PEGASUS --Current State of Businesses and Strategy for 2012; Evolution into a Company that Creates Added Value--**

Showa Denko K.K. (SDK) is making progress toward achieving goals under its new medium-term consolidated business plan PEGASUS for the 2011-2015 period. Despite the severe business environment this year—the Great East Japan Earthquake Disaster and resultant restrictions in power supply, damage caused by typhoons, the floods in Thailand, and the exchange rate of the yen remaining at historically high levels—, SDK will be able to exceed the operating income target of ¥45 billion for the initial year of PEGASUS.

Our accomplishments in the first year of PEGASUS and our business strategy for 2012 are described below.

### 1. Business environment

Despite the financial crisis in Europe and the delay in recovery of the U.S. economy, the Chinese economy is expected to continue steady growth due to the government's easy money policy and other economic measures, although the growth rate will be lower than before. Due to the slowdown in the economies of advanced countries, the world economy is expected to shift at an accelerated pace to emerging countries, including China. We will therefore place greater importance on our relations with Asian new economies called VIP (Vietnam, Indonesia and the Philippines) in addition to BRICs.

In Japan, the rate of the yen will remain at historically high levels for a long time. Domestic demand will be increasingly matured with no prospect of substantial rises in personal consumption and capital investments. Meanwhile, demand due to reconstruction efforts will peak in 2012. Restrictions in power supply, which largely affected corporate activities in 2011, will not be removed for the time being and continue to affect the Japanese economy in 2012.

### 2. Our accomplishments in 2011

In the first and second quarters, our operations were largely affected by the Great East Japan Earthquake Disaster and restrictions in power supply resulting from the accident at the nuclear power plant. We had to temporarily stop production at plants in the affected areas and our customers cut their production. However, production of cars and other items recovered at a pace faster than expected. Furthermore, the electric appliance industry and other manufacturers increased their inventories to restore the supply chain hit by the disaster. As a result, Showa Denko's performance recovered steadily.

In and after the third quarter, uncertain conditions continued due to the historic appreciation of the yen, slowdown of economies in Europe and the United States, as well as the influence of the Chinese Government's tight money policy. In October, the floods in Thailand caused serious damage to local production sites of car and electric appliance makers. As many suppliers of parts have been affected, the supply chain has partially been damaged. The supply chain is still in the process of restoration, and full-scale restoration will be realized sometime in 2012.

Despite such factors, Showa Denko will exceed the ¥45 billion operating income target for 2011 under PEGASUS, which was worked out at the end of last year.

This year, we started implementing a new management system based on road maps and milestones so as to resolve many issues. As PEGASUS runs from 2011 through 2015, we will aim to speedily implement our business plans and exceed our targets in that period.

### 3. Business strategy for 2012; Performance

In the 1990s, we started implementing our plan to become a unique chemical company with "individualized" products, having many businesses with competitive advantages. This is in contrast to the traditional concept of "multi-line" chemical companies. To further clarify the objective and encourage positive action, we have established a new slogan for 2012: "Evolution into a Company that Creates Added Value."

To achieve this goal, we will take the following measures:

#### (1) Accelerate globalization: Strengthen our capability to cope with higher yen

In view of the historic appreciation of the yen and the increasingly matured domestic market, the Showa Denko Group will accelerate its pace of globalization.

#### (2) Optimize our business model

We will review existing business models in the areas of electronic materials, chemicals, aluminum and petrochemicals, by considering alliance and other options. Thus, we will aim to drastically improve the profitability of these businesses.

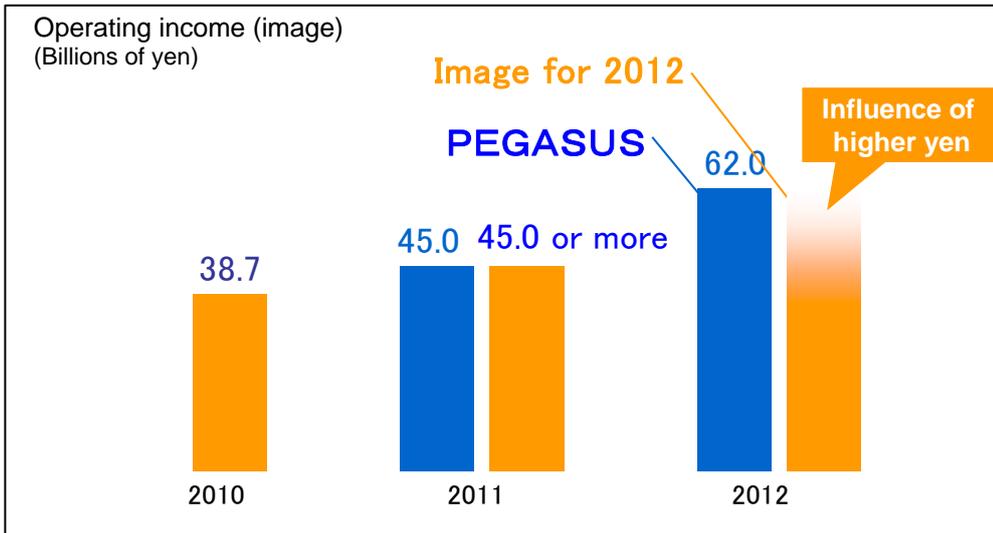
#### (3) Review and strengthen the supply chain

As for our main products and socially important product items with high market shares, we will review and strengthen the supply chain, covering the whole stages from components suppliers to our customers.

#### (4) Increase the speed in realizing R&D results

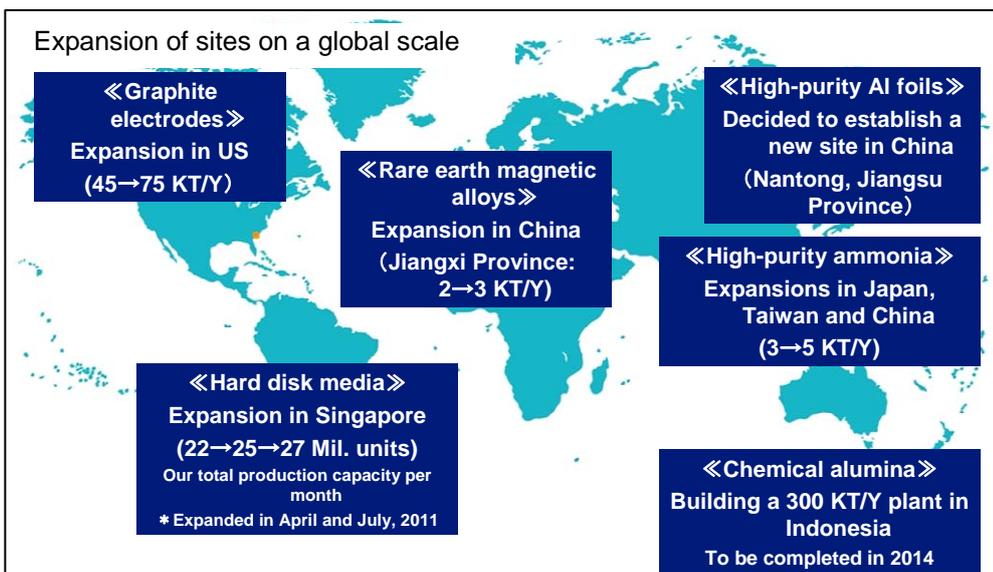
We will aim to soon commercialize new products that will drive the future growth of the Showa Denko Group.

While PEGASUS was worked out on the basis of the exchange rate of ¥90 to the U.S. dollar, the actual exchange rate in 2012 will be much higher. Because of the business structure of the Group, the appreciation of the yen will adversely affect our profit. We will take various measures to increase profit.



#### 4. Expanding businesses on a global scale and strengthening the supply chain management

The Showa Denko Group is quickly expanding its overseas operation sites and increasing profit in core businesses. As for our businesses in hard disk media, rare earth magnetic alloys, and high-purity ammonia, we have already expanded production capacities at overseas sites. In the area of graphite electrodes, high-purity aluminum foils for capacitors, and chemical alumina, we have decided to establish new sites or expand capacities at overseas sites. Part of the construction work has already begun.



The problem of damage to the supply chain has attracted attention due to the earthquake disaster and floods. We have taken various measures, including the establishment of two or more sites.

In the hard disk media business, we have four production sites—Singapore, Taiwan, Chiba and Yamagata (Japan). This reflects the fact that Asia serves as the center for the world's HDD industry through the concentration of parts production and HDD assembly operations in the region. We have taken steps to ensure stable supply of hard disk media, fully utilizing our network of the four production sites.

In the rare earth magnetic alloy business, we established our first production site in China in 2003 in view of the fact that 90% of rare earth raw materials are supplied by China.

We now have two production sites in China, namely, in Inner Mongolia and the Jiangxi Province. The two sites account for about 50% of the Showa Denko Group's total magnetic alloy production capacity. In addition, we established a rare earth metal recycling plant in Vietnam last year. Thus, we have established an integrated supply chain covering the whole processes of raw material procurement, processing of recycled metal and production of magnetic alloys, ensuring stable production and supply.

## 5. Situation of respective businesses and our strategy

### (1) Base (Growth)

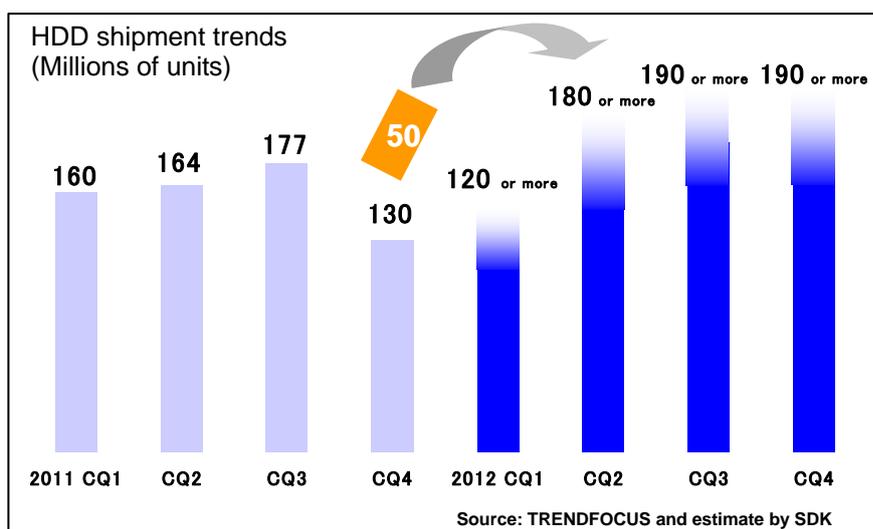
In the business category of Base (Growth), we completed expansion of our hard disk media production capacity, to 27 million disks per month, in June this year. After the completion of expansion, full-capacity production started in the third quarter. During the period, we achieved record-high hard disk media shipments due to the expansion and brisk demand for HDDs. We started commercial production of the world's first sixth-generation hard disk media based on perpendicular magnetic recording technology (2.5-inch 500 GB media).

In the graphite electrode business, we decided to expand the capacity at Showa Denko Carbon, Inc., of the United States, to meet growing demand. We also started renewal of our Omachi Plant.

In the rare earth magnetic alloy business, we completed capacity expansion at our plant in Jiangxi Province, China, from 2,000 t/y to 3,000 t/y. Our total rare earth magnetic alloy production capacity (Chichibu, Japan, and two sites in China) have reached 9,000 t/y. Our recycling plant in Vietnam, completed last year, has started full-scale operation.

#### a) Current state of the HD business and our strategy

Major HDD makers have been affected by the floods in Thailand. HDD shipments in the world for the fourth quarter 2011 are expected to fall from the initial forecast of 180 million units to 130 million units. As a result, we have been adjusting our HD shipments since November.



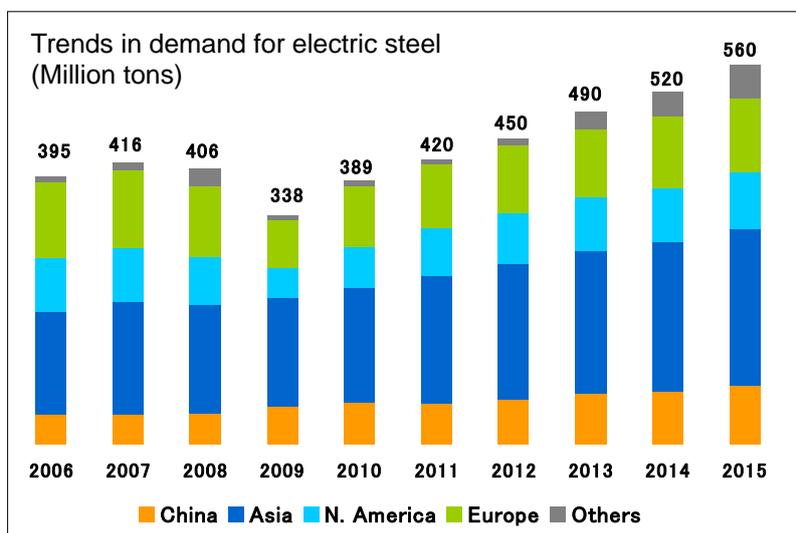
Due to the fall in production in the fourth quarter, the supply of HDDs will become tight on a global scale. We will make sure to meet the rapidly growing demand after the recovery of HDD production. There is a possibility that our capacity may not be sufficient to fully meet the seasonal demand in the second half of 2012. We will

therefore optimize all our production lines and increase their efficiency, thereby increasing our production capacity.

We will also make sure that all our production lines are ready to produce the sixth-generation PMR media. Although the fifth-generation PMR media (2.5-inch 320 GB) are the mainstream product in 2011, the sixth-generation PMR media will gradually increase their market share, and become the mainstream product by the end of 2012. By that time, all our production lines will be fully prepared for the production of the sixth-generation PMR media.

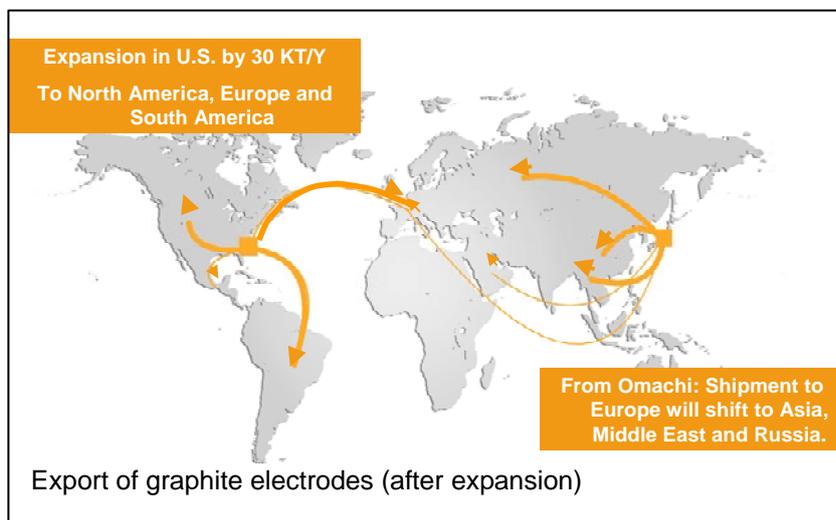
b) Current state of the graphite electrode business and our strategy

Steel production will remain steady due to brisk demand in emerging countries, despite such uncertain factors as the slowdown of economy in the United States and Europe. Electric steel production, which uses graphite electrodes, will grow gradually, reflecting the rise in the volume of scrap iron in emerging countries. In particular, electric steel production in China will increase about 10% a year through 2015.



In February this year, we decided to expand the capacity at our U.S. subsidiary Showa Denko Carbon, Inc. The expansion work will be completed in the second half of 2013, increasing our global supply capacity from 105,000 t/y to 135,000 t/y.

After the 30,000 t/y capacity expansion, Showa Denko Carbon's products will be shipped to Europe, in addition to the growing North and South American markets. Meanwhile, shipments from Omachi will shift from Europe to the growing markets in Asia, Middle East and Russia. Thus, our global supply chain will be optimized.



c) Current state of the rare earth magnetic alloy business and our strategy

Rare earth raw material prices continued to rise, hitting record-high levels in July this year. After that, the prices fell due partly to the outflow of speculative money. However, the prices are still higher than the levels of last year before the sharp rise began, and will remain at high levels. We will closely watch the supply-demand situation, including the situation of inventories in the distribution channel.

Supply of rare earth raw materials involves uncertain factors, including the Chinese Government's policy. However, demand for rare earth magnetic alloys will continue growing at high rates, for applications in such environment-friendly cars as hybrid cars and electric vehicles as well as in energy-saving electric appliances. To meet growing demand, we will diversify our supply sources, including full-scale operation of our metal recycling plant in Vietnam. There is concern about the supply of dysprosium, a kind of rare earth, added in magnetic alloys to keep magnet performance at high temperatures. We will step up our R&D efforts to reduce the amount of dysprosium added in magnetic alloys.

(2) Base (Stable)

In the business category of Base (Stable), we established a joint venture this year with Nippon Steel Chemical Co., Ltd. for the production of styrene monomer and BTX (benzene, toluene and xylene) at the Oita Complex. We will drastically improve production efficiency at the complex, including feedstock and derivatives. We will aim to increase the competitiveness of our Oita Complex by strengthening ties with the adjacent refinery and derivative manufacturers within the complex.

In the Aluminum segment, our automotive heat exchanger plant in Thailand has been affected by the floods since October. Restoration work has started, but full recovery will be in 2012. We have started full-scale backup production at Oyama Plant for major products. The transfer of this business to Keihin Corporation will be realized in January 2012 as scheduled.

In the capacitor-grade high-purity aluminum foils business, we decided to strengthen our purification capacity at the Sakai Plant and establish a new production site in China to meet growing demand in Japan and China. As a result, our high-purity aluminum foils production capacity will increase from 2,000 tons a month to 3,000 tons a month in 2014.

In the Chemicals segment, we will reorganize the Group's industrial gas operations next year, strengthening marketing activities and clarifying responsibility for businesses. In our

major business in high-purity gases for semiconductor/LCD production, we will expand our operation sites in Asia and improve our product mix, thereby increasing our scale of operation.

### (3) Growth & New Growth

In the business category of Growth & New Growth, we are expanding production capacities for lithium-ion battery (LIB) materials, such as *VGCF*<sup>TM</sup> (additive in cathodes and anodes), *SCMG*<sup>TM</sup> (anode material), *SDX*<sup>TM</sup>, and aluminum laminated films, to meet growing demand. In addition, we will aim to soon commercialize electrolyte, binder, tab lead and other materials based on our proprietary technology. Thus, we will aim to sell ¥50 billion of advanced battery materials in 2015.

As for glass-substitute heat-resistant transparent film *Shoraya*<sup>TM</sup> for use in touch screens of smart phones, we started operating our pilot plant this year. We are providing samples to device manufacturers for evaluation. We will officially launch the product in 2012, and study our plans to build a commercial plant.

Silicon carbide epitaxial wafers will be used in power devices on a commercial scale in and after 2012. In preparation for the start of full-scale commercial production, we will step up our efforts to improve product quality and establish the production system.

## 6. Our strategy for 2012

First, we will make sure to meet the strong demand resulting from reconstruction efforts after the earthquake disaster. It is our social responsibility to quickly supply sufficient amount of materials and components to assist reconstruction. The Showa Denko Group will make utmost efforts to fulfill this responsibility.

Second, we will work to reduce risks pertaining to the supply chain through close cooperation with component suppliers and customers. Furthermore, we will promote globalization to optimize the supply chain amid the continuation of the historically high exchange rate of the yen.

We expect substantial changes in the business environment, such as tightening supply of HD media, growing demand for graphite electrodes, and bottoming out of the petrochemicals market. The Showa Denko Group will accurately respond to such changes to improve profitability, and develop new businesses to ensure sustainable growth.

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