



Progress in the Medium-term Business Plan "PEGASUS Phase" (2014 ~ 2015)





*Notes to this presentation material are on page 43.

December 12, 2014

SHOWA DENKO K.K.

Hideo Ichikawa, President and CEO

[Contents]

Review of PEGASUS (2011 ~ 2014)

Outlook and business strategies for 2015

Toward post-PEGASUS

Review of PEGASUS (2011 ~ 2014)

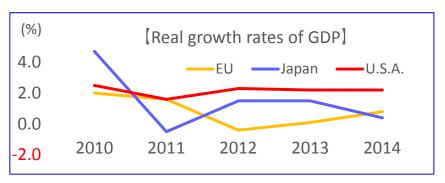
Changes in macro economic environment

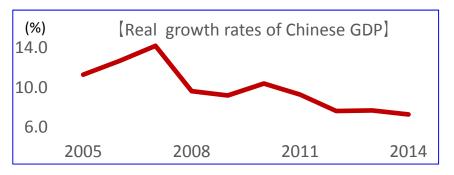
Structural change in the world economy

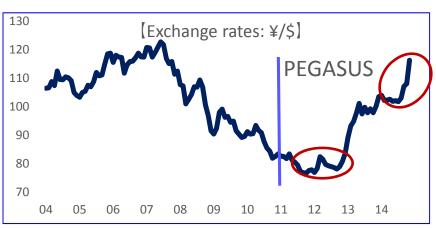
Drastic changes in exchange rates

Tough global competition in manufacturing industry

Rise in electricity cost







Changes in the business environment-1

"Two wings" of PEGASUS

Hard disc (HD) media

Stable demand

Restructuring of HD industry is

in progress

Shift in application

(from PCs to servers)

SDK increases its share in

the OEM HD media market



Graphite electrodes (GE)

Failed to achieve our goal due to upheaval in the business environment

Easy supply-demand balance in global steel market

USA: Market remains firm

EU: Recovery expected but sluggish

China: Oversupply continues



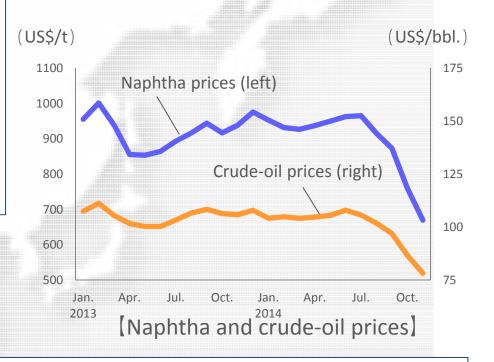
Changes in the business environment-2

Naphtha and petrochemicals prices plummeted

- 'Increase in shale oil & gas production
- Crude-oil prices plummeted

China restricts rare-earth export Aluminum price soared in East Asia





In Japan, extremely strong yen damaged SDK's revenue base

Structural changes in customer industries (Electronics, Cars)
Rise in material and energy cost of basic chemicals (Electricity, LNG)

Measures taken in PEGASUS

PEGASUS

Structural reform to cope with drastic changes in the business environment

- 1) Strategy to accelerate growth
- 2) Restructuring of business scheme
- 3) R&D focusing on promising themes
- 2015: Acceleration of structural reform

Improvement in earning power

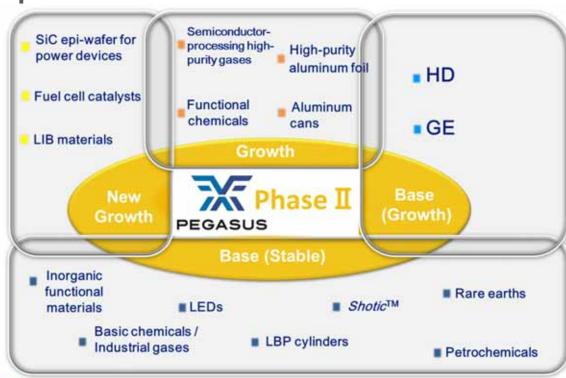


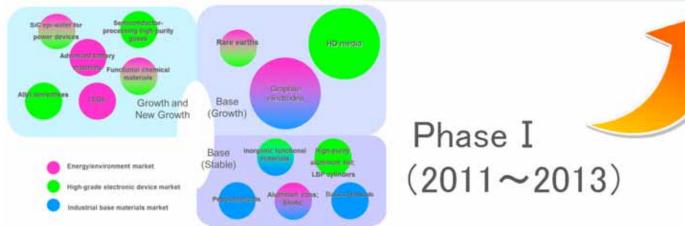
PEGASUS (2011-2015)
Phase
(2011-2013)
(2014-2015)

Post-PEGASUS

Business portfolio in PEGASUS

Phase II (2014~2015)





1) Strategy to accelerate growth

Investment overseas, focusing on Asia



2) Restructuring of business scheme

Aluminum heat exchanger for cars

VGCFTM - X

GaN LED

Ethyl acetate

- Change in production method (Japan)
- Decided to close a plant in Indonesia
 Venalum

Power generation (new contract)

2011 2012 2013 2014

Aluminum panels
Aluminum alloys

Alumina

- ·Closing Yokohama Plant
 - Shifting to new plant in IndonesiaCeramics
 - Integration of domestic plants

[Power generation plant in Kawasaki]

Acquisition of treasury stocks

First case for SDK
Acquired treasury stocks amount to
68.3 million shares (¥10 billion)
Considering repetition

2)-2 Restructuring of aluminum business

Concentrate resources on high value-adding businesses with technical advantages

Materials & processing business

Heat exchanger for cars:

Transferred to Keihin Corp.

Alloy: Transferred to Asahi Seiren Co., Ltd.

Panels:

Transferred to Fukushima Industries Corp.

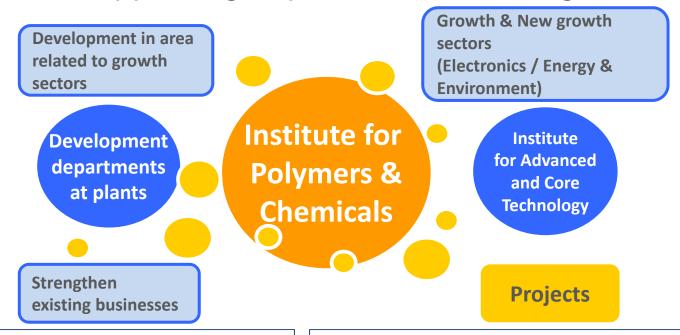
Restructured overseas aluminum refining businesses

Devalued shares of Venalum Termination of Asahan Project



3) R&D focusing on promising themes

Focuses on supporting expansion of existing businesses



[Strengthening]

SiC epitaxial wafers
Plant factory units
Full lineup of nano-carbons
(CNT, Fullerene, Graphene)

[Withdrawal from]

Organic EL panels *VGCF*TM-X for composite materials

Revision of 2014 financial forecast

(Billions of yen)

	2014 Previous forecast*	2014 Latest forecast	Increase/ decrease
Net sales	895.0	885.0	-10.0
Operating Income	32.0	25.0	-7.0
Ordinary Income	26.0	24.0	-2.0
Net Income	7.0	5.0	-2.0

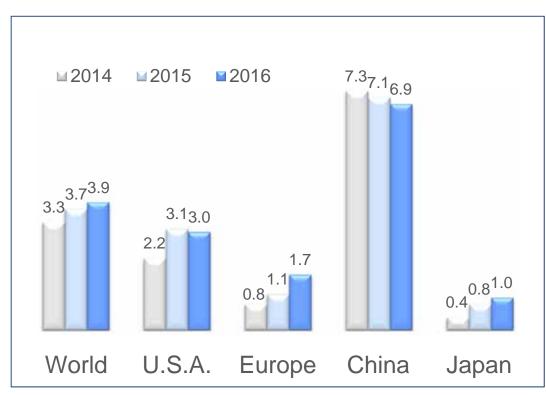
^{*}Announced on July 31, 2014

(Primary factors in the profit decrease)

- 'Petrochemicals: Naphtha price plummeted. Loss margin accrued from the difference between procurement and consumption prices of raw materials.
- 'Aluminum: Rise in aluminum metal price



Outlook for world economy



(OECD: Economic outlook (real GDP growth rates))

(November 2014)

Overseas

U.S.A.: Strong growth

Europe: Delay in recovery

China: Slower growth

continues

Japan

Graver uncertainty
Exchange rates, Oil prices
Tax system including
consumption tax
Electricity rates
Implementation of
growth strategy

2015 Financial outlook: Considerable increase in profit

2015 Management policy

Cope with upheaval in the business environment

Steady implementation of measures

plan

Make utmost effort to come closer to the Phase target Overseas: Put launched projects onto growth paths
In Japan: Steady restructuring
Formulate post-PEGASUS business

Measures for improvement

Petrochemicals:

Make measures effective
Maximize profit (Strengthen
earning power of organics sector.
Achieve high operating rate of
ethylene plant)

GE: Tight supply and demand in North America Price revision Aluminum cans:

Soaring aluminum metal price
Make sales prices fair
Realize the benefits of weaker yen
Reduce extraordinary losses by
making considerable progress in
restructuring

Financial goals and assumptions

(Billions of yen)

	2014 Latest forecast	2015 Image	2015 Phase target
Net sales	885.0	960.0	950.0
Operating income	25.0	40.0	50.0
Net income	5.0	15.0	25.0
ROA (%)*	2.5	4.0	5.0

^{*}Operating income / Total assets

[2015 assumptions]

Exchange rate: 115 yen to USD

Naphtha price: 60,000 yen per KL

Factors in deviation from 2015 initial plan

Factors to increase income

Business slowdown in Japan and China

Sluggish demand

GE: Delay in recovery of market price

Aluminum cans and High-purity aluminum foil:

Substantial rise in aluminum metal price and energy cost

RE: Delayed market recovery

LIB materials: Delay in

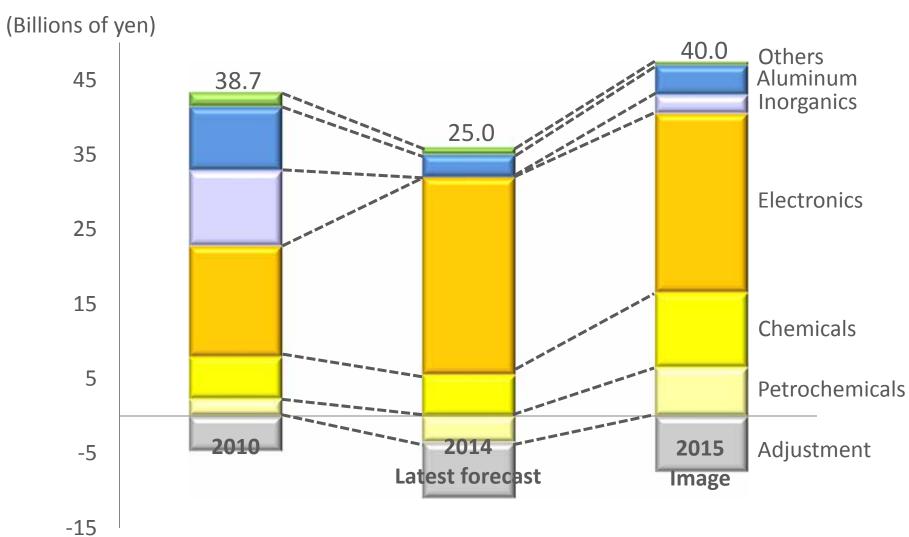
dissemination of car use

Factors to decrease income

Semiconductor-processing
high-purity gas:
Market expansion in Asia
Successful expansion strategy

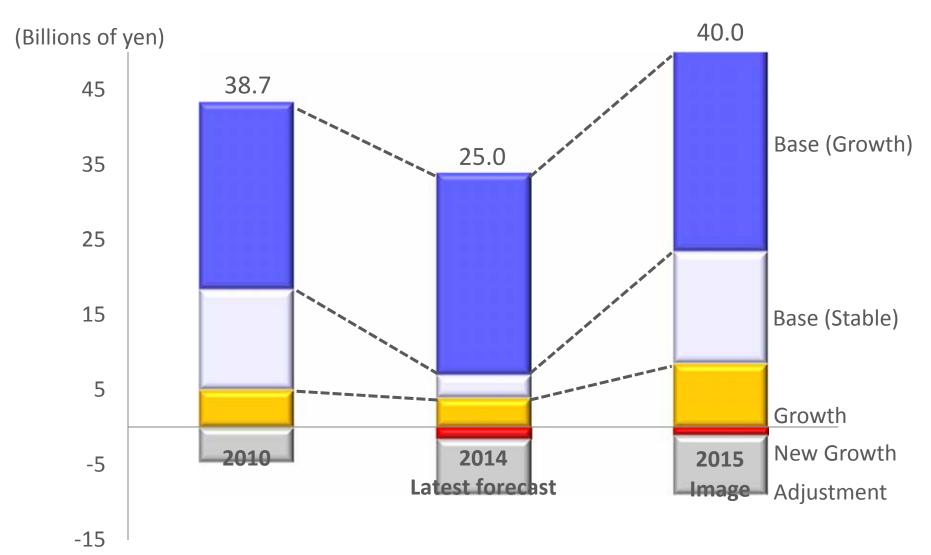
Benefit of a weak yen

Operating income by segment

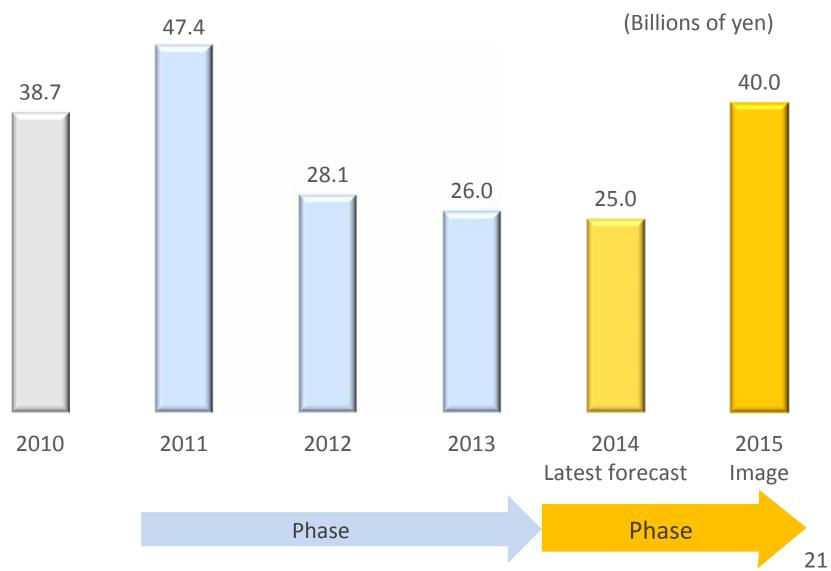


^{*}The data of 2010 is recalculated with new segmentation.

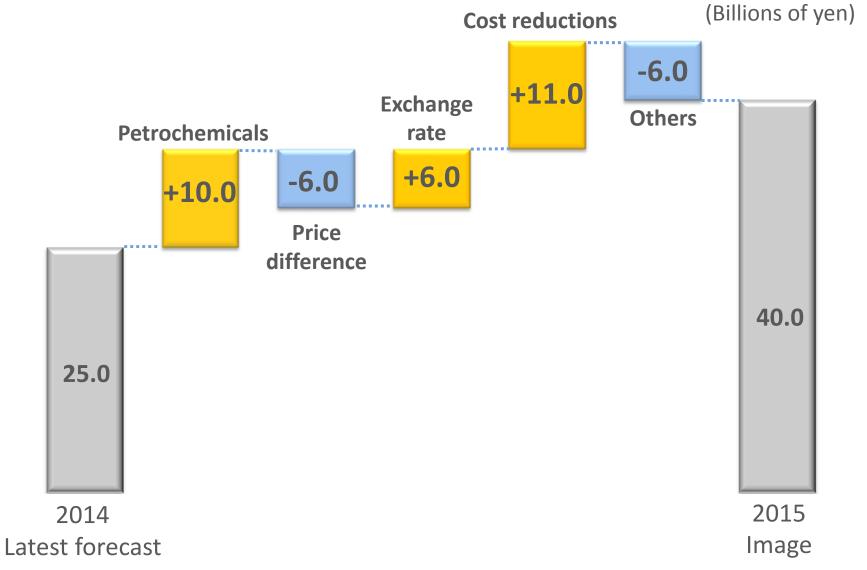
Operating income by business portfolio



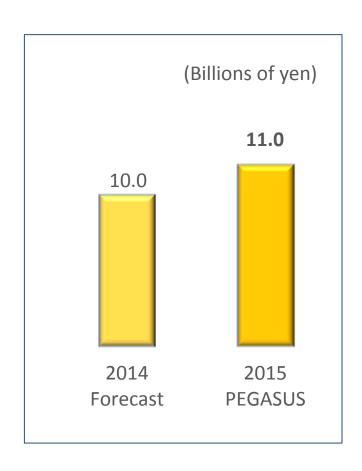
Operating income



Analysis of changes in operating income by factor (2014 vs. 2015)



Cost reduction plan



Major cost reduction efforts

HD: Optimize functions of each site to produce aluminum substrates

RE: Reinforce materials recycling plant in Vietnam

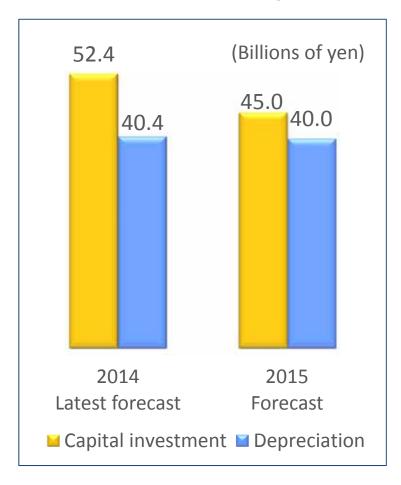
Chemicals: Wider use of recycled plastics as materials to produce ammonia

Organics: Full year use of new method to produce ethyl acetate

Alumina: Stop Yokohama Plant

→ Start production in Indonesia

Capital investment plan



Major investments

(2014)

GE: Plant expansion in U.S.A. completed
Petrochemicals: Periodic maintenance in large
scale, Change in method of ethyl acetate
production

SHOTICTM:

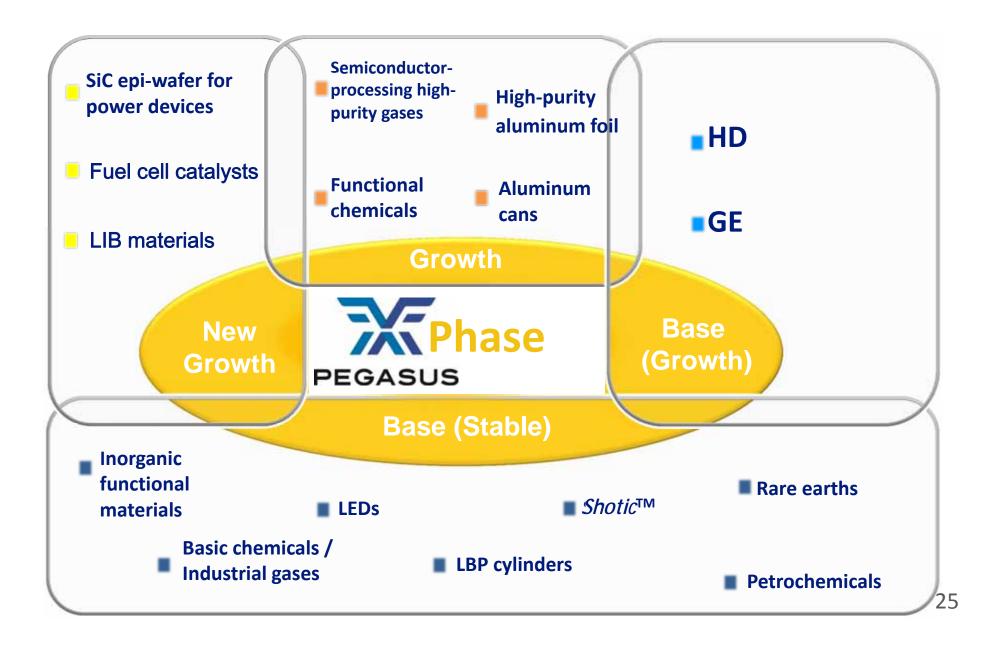
New plant in Malaysia starts operation LIB packaging materials: Plant expansion

(2015)

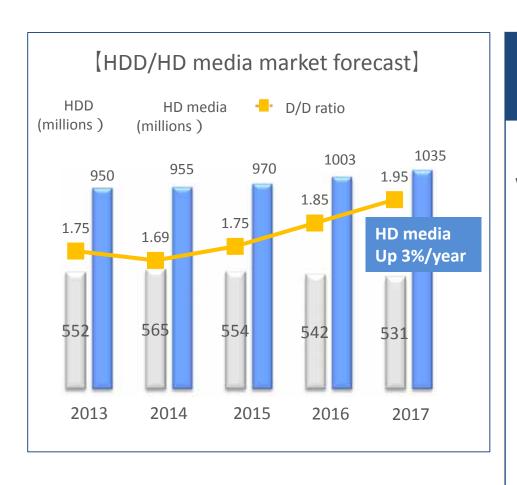
Aluminum cans: Reinforce subsidiary's plant in Vietnam

Semiconductor-processing high-purity gases:
Reinforce production facilities in Asia
Major investment will be finished by 2015
Increase in free cash flow

Business portfolio in Phase



HD-1 Market environment of HDD & HD media

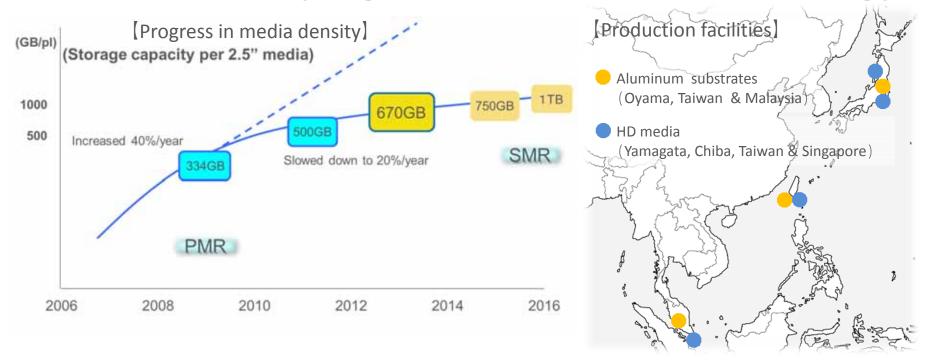


Market forecast

Number of HDDs sold in 2015 will be at the same level as 2014 For PCs: Steady demand Needs for near-line servers will increase

Shipment of aluminum media will increase
Aluminum substrates:
Supply and demand situation will be tight

HD-2 Further progress in "Best in Class" strategy



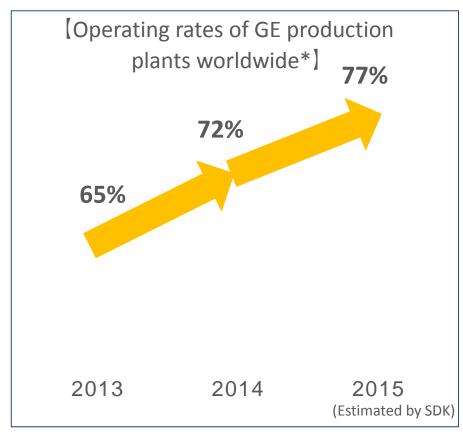
Important themes

Accelerate development of high-density media

Optimize functions of each site to produce aluminum substrates

Increase media shipment for HDDs to be used in servers

GE-1 Trends in electric furnace steel and graphite electrode market



^{*} Except China

Electric furnace steel market forecast

Supply-demand gap will be gradually narrowed from 2015
U.S.A.: Strong demand, narrower supply demand gap
Japan: Steady demand by automotive industry
Europe: Delay in recovery

China: Still needs time for solution of steel overproduction issue

GE-2 SDKC's plant expanded, starts sales







(Omachi Plant)

Important themes

Thorough cost reduction of materials needed Normalize sales prices

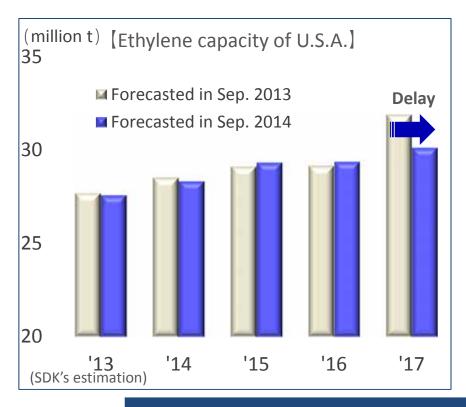
SDKC: Sales of GE produced by new facilities will start in 2Q, 2015

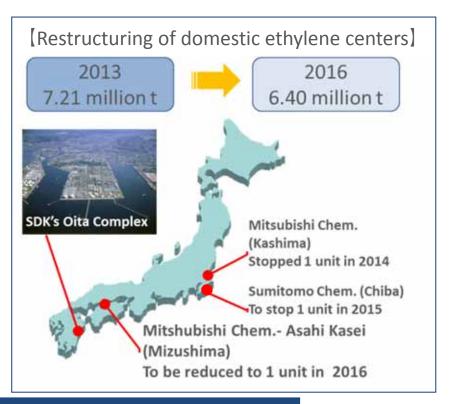
Omachi: Strengthen earning power through productivity improvement

Sichuan: Establish UHP electrode production facilities and start volume

production

Petrochemicals-1 Asian market outlook





Market forecast

Steady demand and supply, unstable oil prices

U.S.A.: Delay in shift to shale-oil petrochemicals

China: Business slowdown but steady demand

Petrochemicals-2 "Compact, Open, Well balanced"







[Left: New ethyl acetate plant, Middle: Ethylene plant, Right: SHORAYALTM]

Important themes

Olefins: Stable operation at full capacity

Butadiene: Establish new production method

Reinforce cooperation with upstream (oil refining)

Organics: Increase profitability

Ethyl acetate: Operate new plant at full capacity

SHORAYALTM: Expand sales

Ceramics-1 "Attain Global top position"



Photocatalyst LUMI-RESH™



Abrasives & grinding materials



Alumina, boron nitride, and filler



High-purity titanium oxide for capacitors

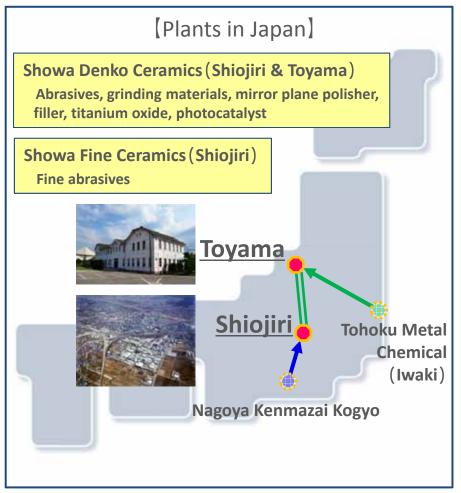


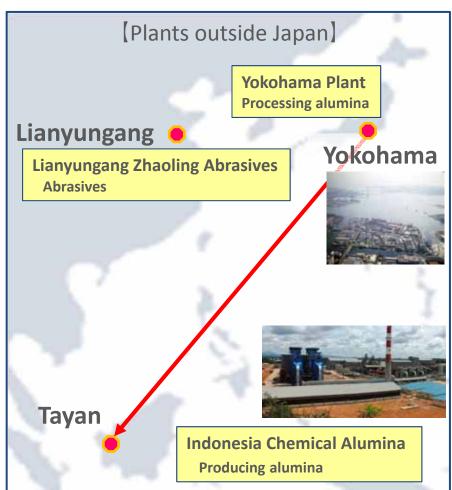
cBN sintered compacts for cutting tools

Important themes

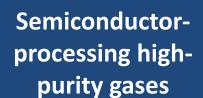
Japan: Make the most of production facility relocation Overseas: Strengthen cost competitiveness of generalpurpose products

Ceramics-2 Reorganizing plants to improve productivity





4 "Growth" businesses: Aggressive investment in Asia





Functional chemicals



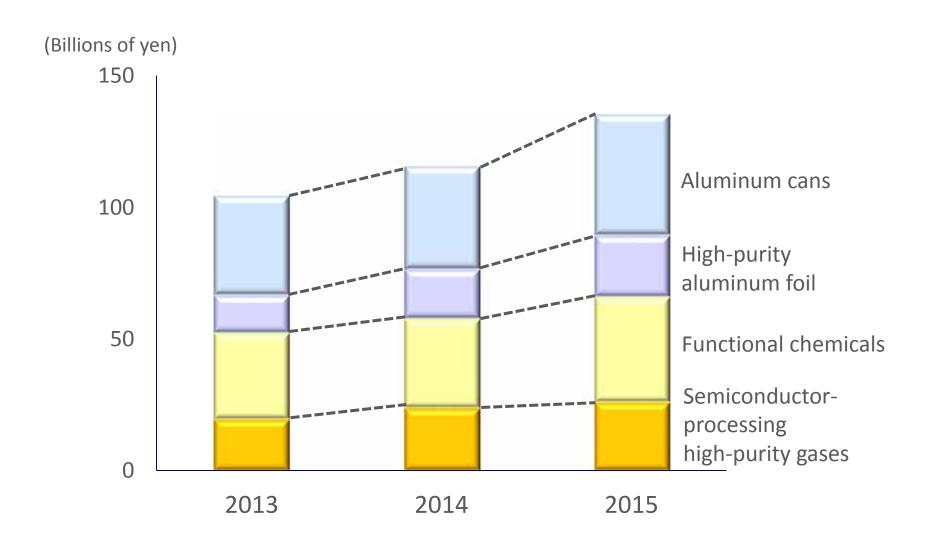
High-purity aluminum foil



Aluminum cans



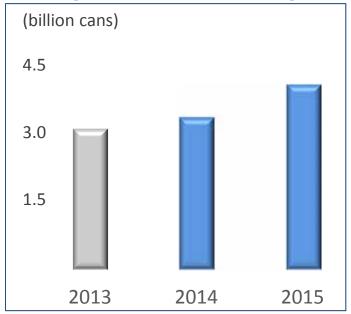
Sales in 4 "Growth" businesses



Growth-1 Aluminum cans



(Hanacans of Vietnam)



(Sales forecast for SDK's cans)

Important themes

Hanacans of Vietnam: Expand business

- Improve printing technology and productivity
- Lid production line to start in 4Q, 2015 Reflect material and energy cost increase into sales prices

Expand sales of cans for soft drinks

Growth-2 Semiconductor-processing high-purity gases Accelerate growth through Matrix Strategy



Important themes

Increase production capacity (HBr)

Vitalize overseas plants (N₂O, Cl₂)

Sophisticate SCM in China

High-purity solvent: Locate plants

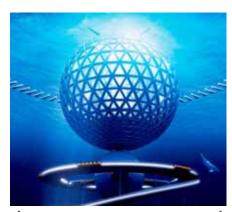
next to customers

Decomposer: Overseas production

Growth-3 Functional chemicals



[Head light reflectors utilizing BMC]



[Idea to utilize FRP/resin concrete]
(OCEAN SPIRAL Photo by Shimizu Corporation)





Important themes

BMC: Increase sales in Asia Composites: Cultivate needs for

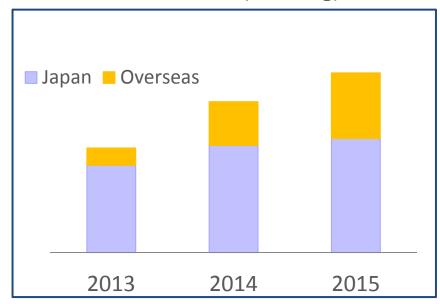
infrastructure and maintenance use and create new markets *Bionolle*TM: New environmental regulations in Europe and China Creation of new prospective market expected

[Biodegradable plastic, BionolleTM]

Growth-4 High-purity aluminum foil



[Showa Denko Aluminum (Nantong), China]



(Sales forecast for our high-purity Al foil)

Important themes

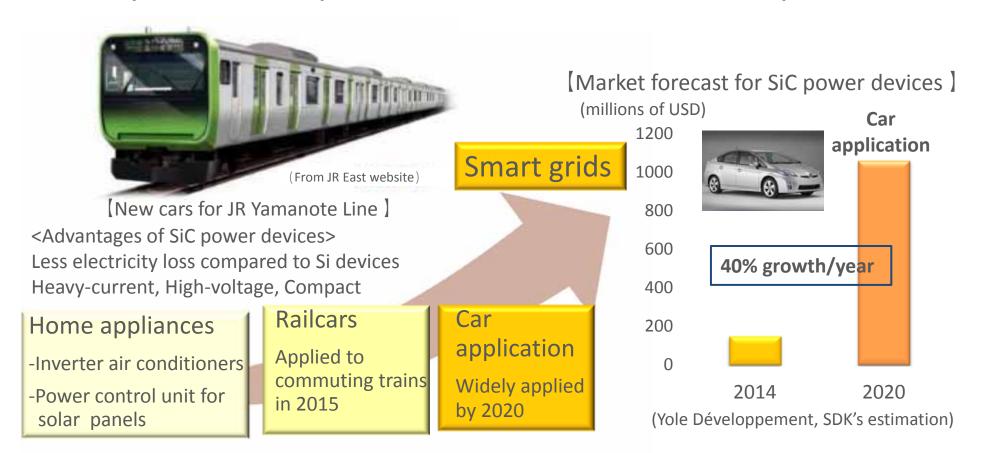
Japan: Increase market share to more than 60%

Revise roll margins
Improve productivity and
profitability

Enhance product grades with highfunctions

China: Increase production capacity of Nantong plant, and increase sales to manufacturers in China

SiC epi-wafer for power devices: 6" wafer mass production



Important themes

Further expand 6" wafer production Implement full-scale marketing

Toward post-PEGASUS (2016 ~)

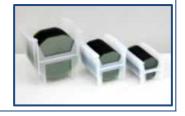
Formulation of post-PEGASUS

Return to growth track

Expand businesses in the growing Asian market

In Japan: Streamline generalpurpose business Add high-value to leadingedge businesses

Realize best mix of capital investment, R&D, and M&A



Management focusing on sustainability

Strengthen safe and stable operation of plants

Daringly contribute to realization of "Clean Energy Society" with less energy consumption and reduced environmental burden

Keep and deepen management based on CSR:

Corporate governance Diversity management



Notes

Performance forecasts and other statements pertaining to the future as contained in this presentation are based on the information available as of today and assumptions as of today regarding risk factors that could affect our future performance. (We will announce our financial forecast for 2015 at the same time of the announcement of our 2014 financial results.) Actual results may differ materially from the forecasts 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.



Shape your ideas! Give your dreams, wishes and ideas Happy Ending!

