



Medium-term Business Plan PEGASUS **Phase II** (2014-2015)

December 13, 2013

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Performance forecast 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. 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.

1. Outline of PEGASUS
2. Review of Phase I (2011-2013)
3. Phase II (2014-2015): Business strategy
4. Phase II : Financial goals
5. Phase II : Strategies for major businesses
6. Phase II : R & D strategy
7. Summary

1. Outline of PEGASUS

2. Review of Phase I (2011-2013)

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4. Phase II : Financial goals

5. Phase II : Strategies for major businesses

6. Phase II : R & D strategy

7. Summary

1. **Phase II** : Aiming to strengthen and develop businesses in line with the basic strategy under PEGASUS

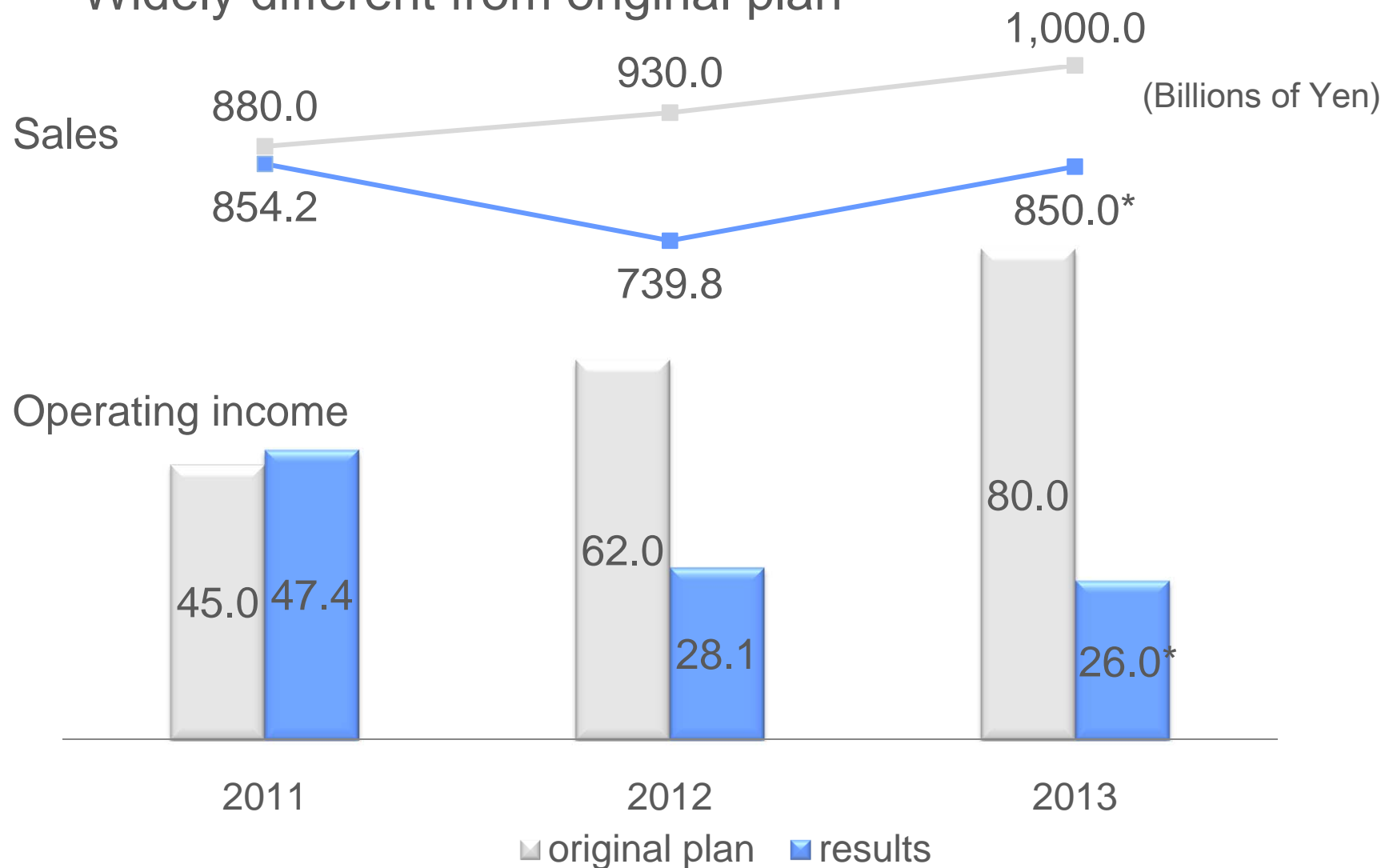
- The two “Wing” businesses (HD/GE) are at a standstill; their foundations are to be consolidated
- Improve profitability through restructuring of business portfolio



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2. Review of Phase I Business trends

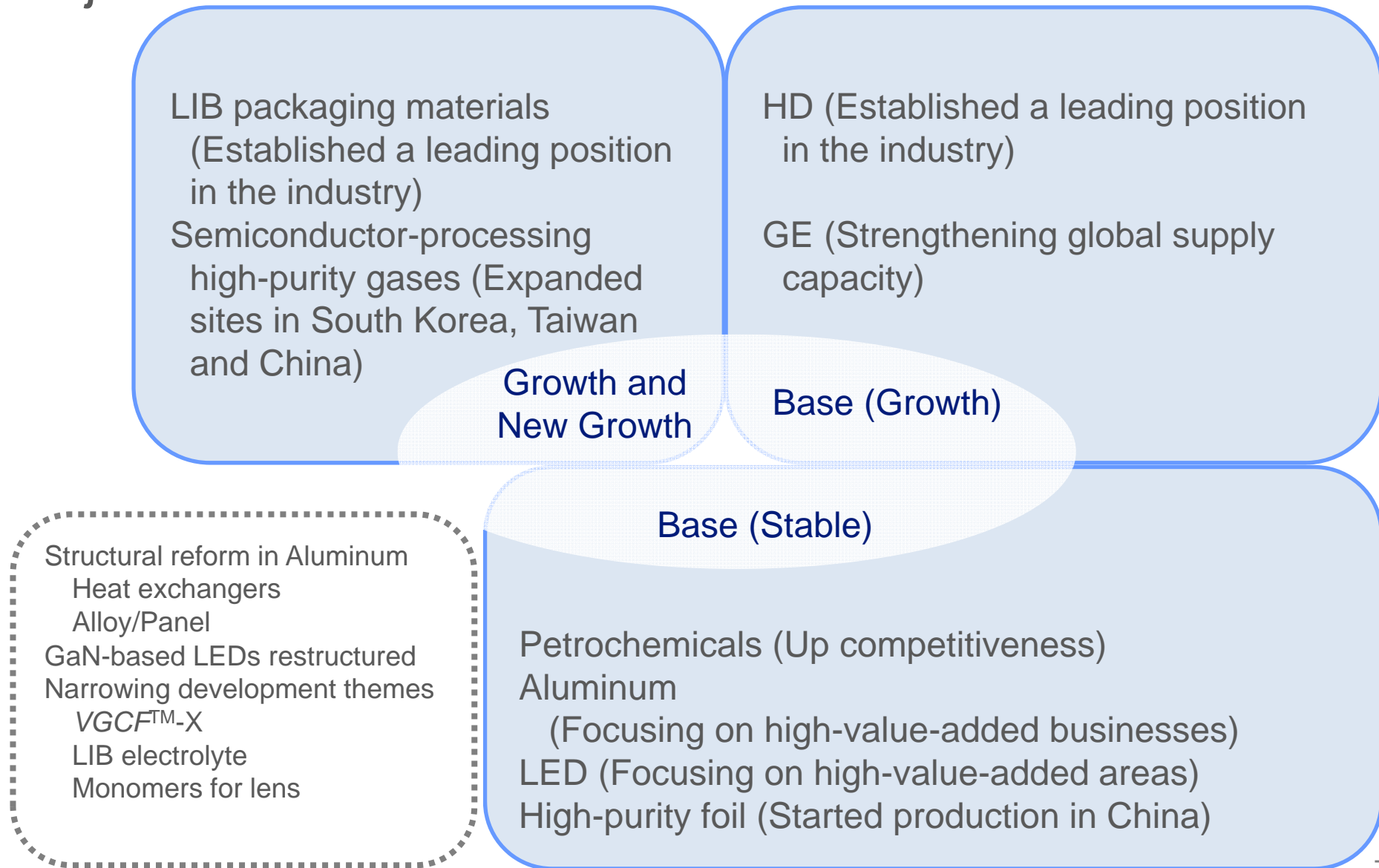
- Widely different from original plan



* 2013 revised forecast was announced on July 29.

2. Review of Phase I

Steadily implemented measures to strengthen major businesses

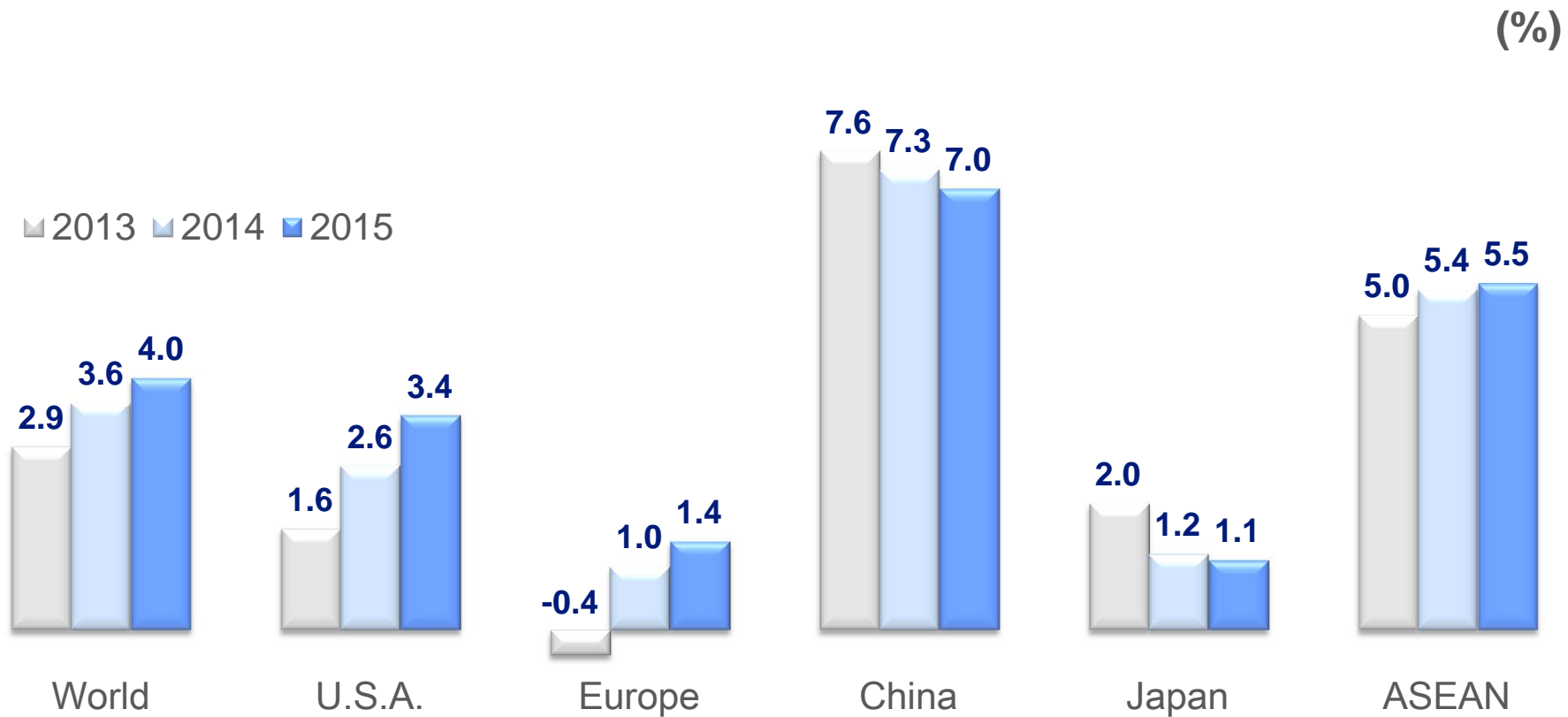


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3. Phase II Business strategy

Forecast of world economy

- Developed countries: U.S.A. Growth accelerating
- Europe: Getting out of recession; headed for gradual recovery
- Emerging countries: Slowdown in China and India
- Japan: Slow growth to continue

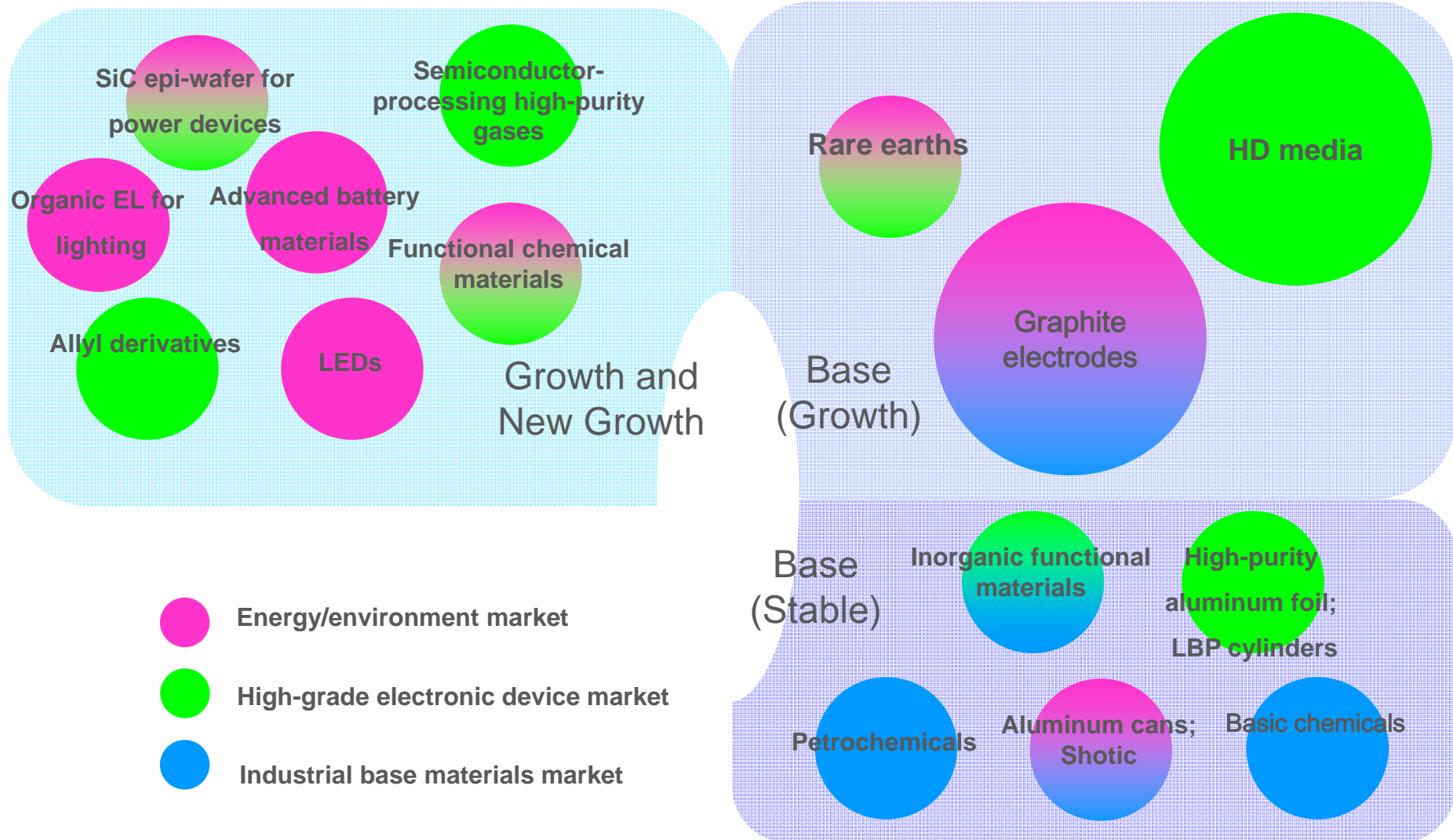


【World economy forecast (real GDP growth rates)】

IMF (October 2013)

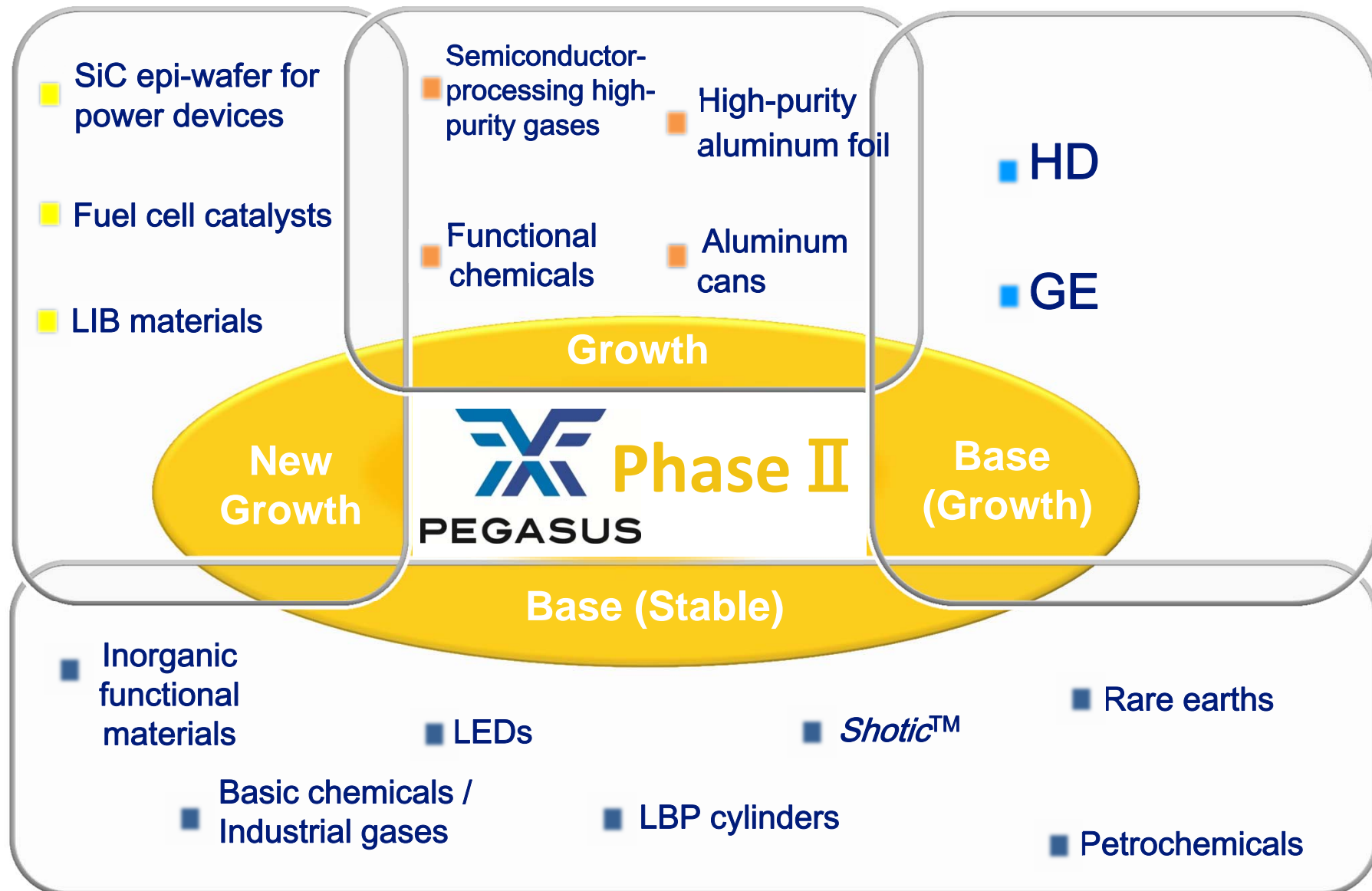
3. Phase II Business strategy

Business portfolio in Phase I



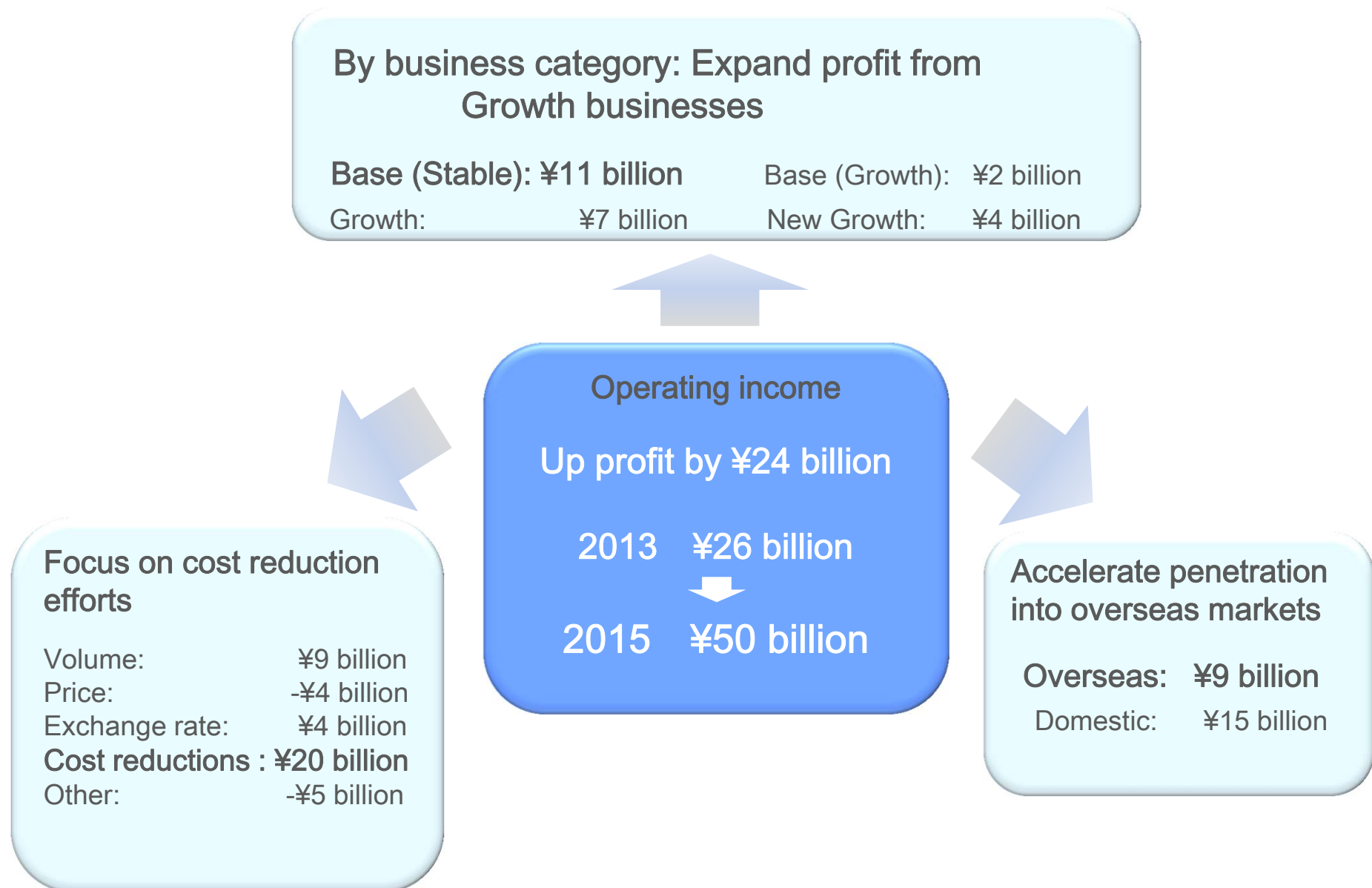
3. Phase II Business strategy

Business portfolio in Phase II



3. Phase II Business strategy

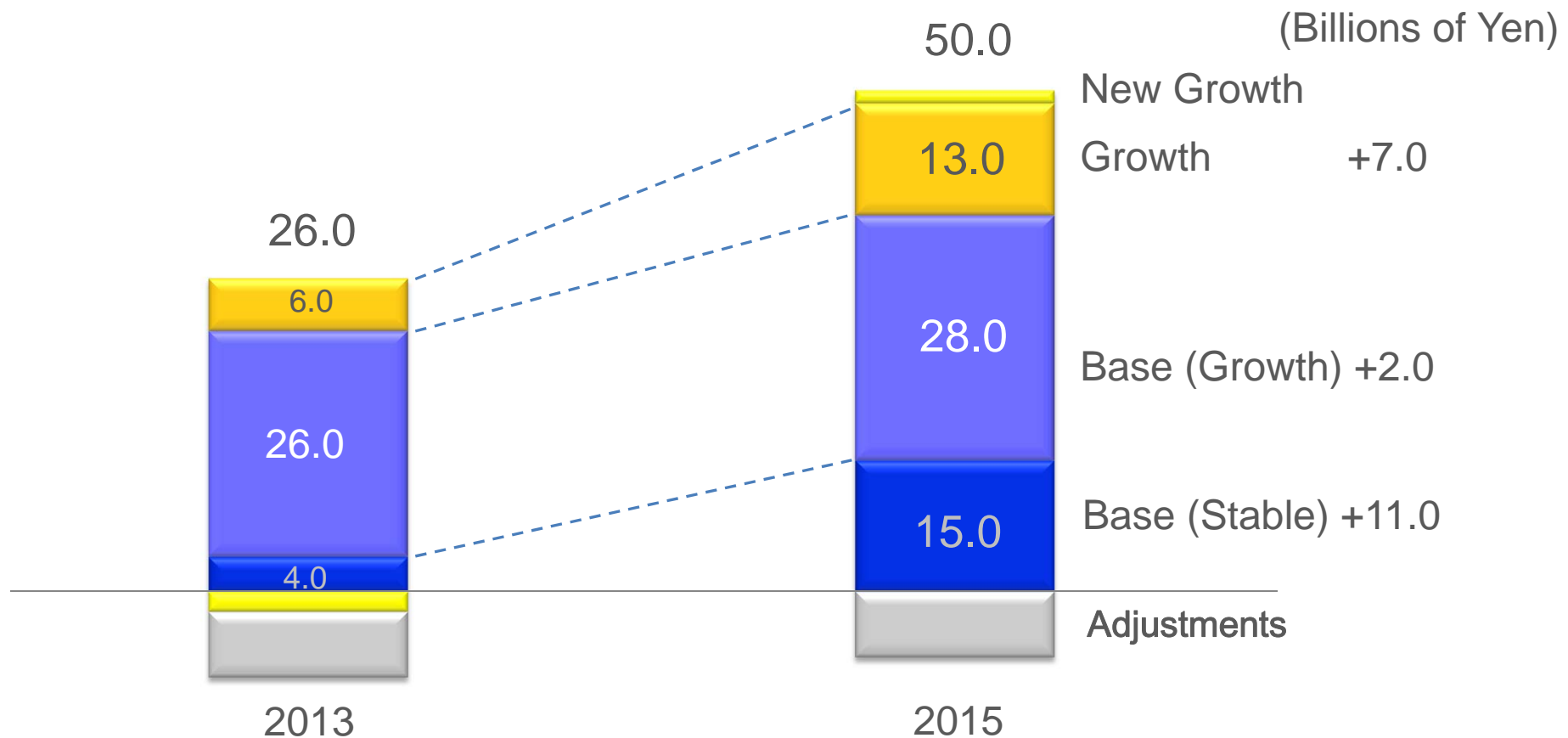
Expand operating income



3. Phase II Business strategy

Targeted operating income by business category

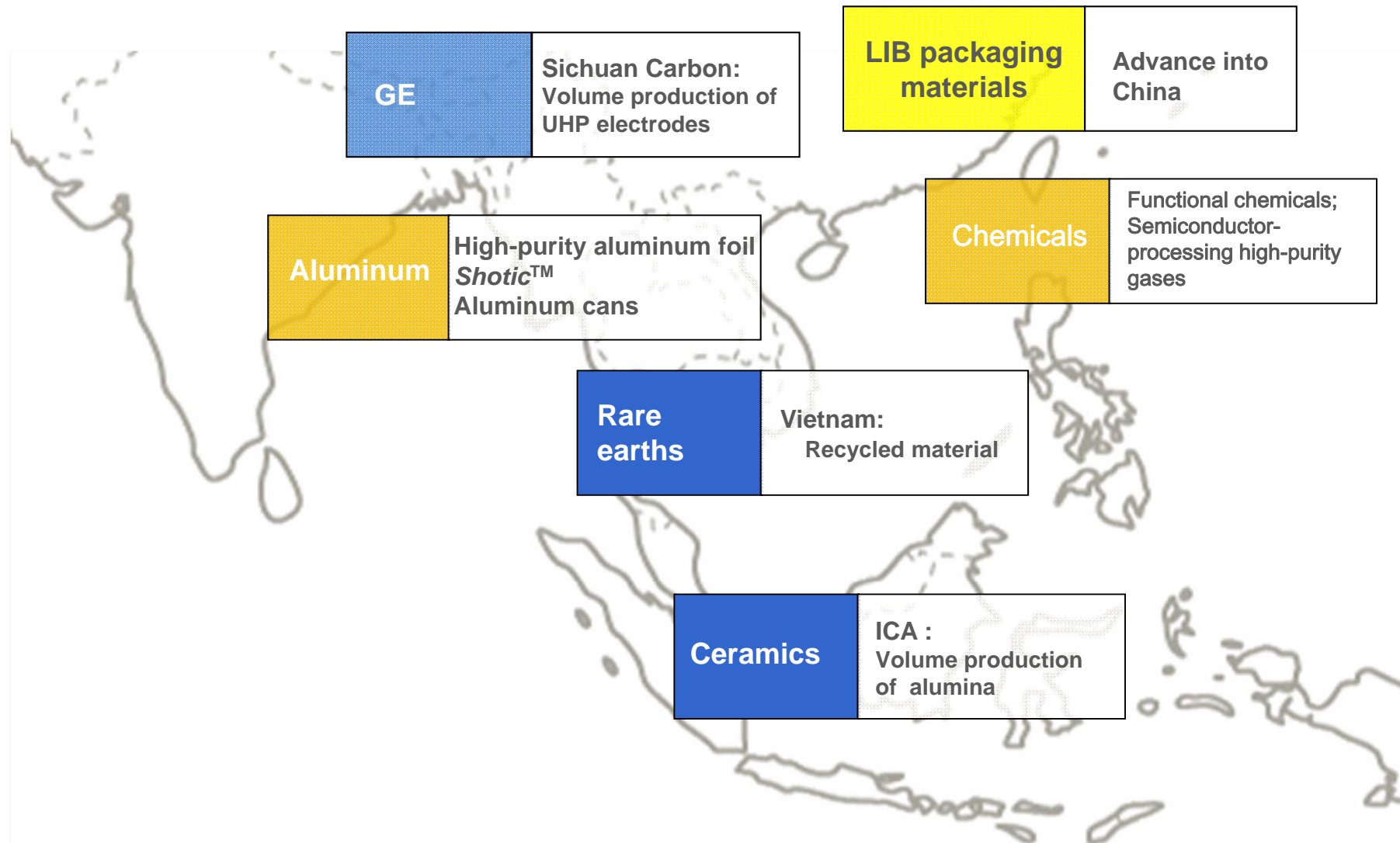
- Increase profit from Growth businesses
- Recover profitability of Base (Stable) businesses



3. Phase II Business strategy

Accelerate expansion in overseas markets, centering on Asia

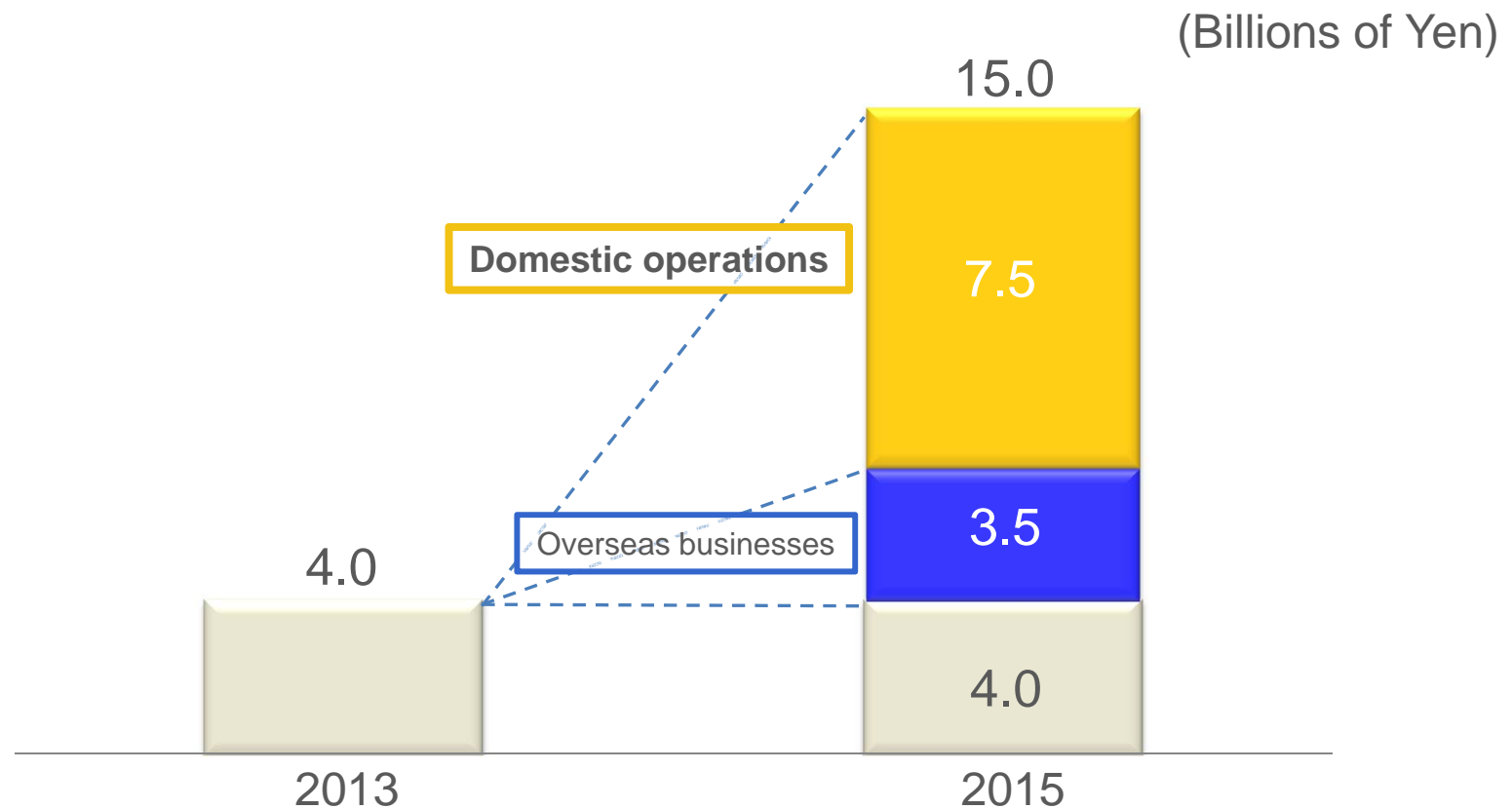
- Operating income to increase by ¥9 billion



3. Phase II Business strategy

Improve profitability of Base (Stable) businesses

- Redesign business models for domestic operations
- Shifting to high-value-added businesses



3. Phase II Business strategy

Base (Stable) businesses: themes of high priority

Development of high-quality products and advanced technologies

Development of new demand and markets

Consolidation of operation sites

Strengthening of competitive power through renewal of facilities

Utilization of electric power resources



【Volume production of Dy-free alloys】

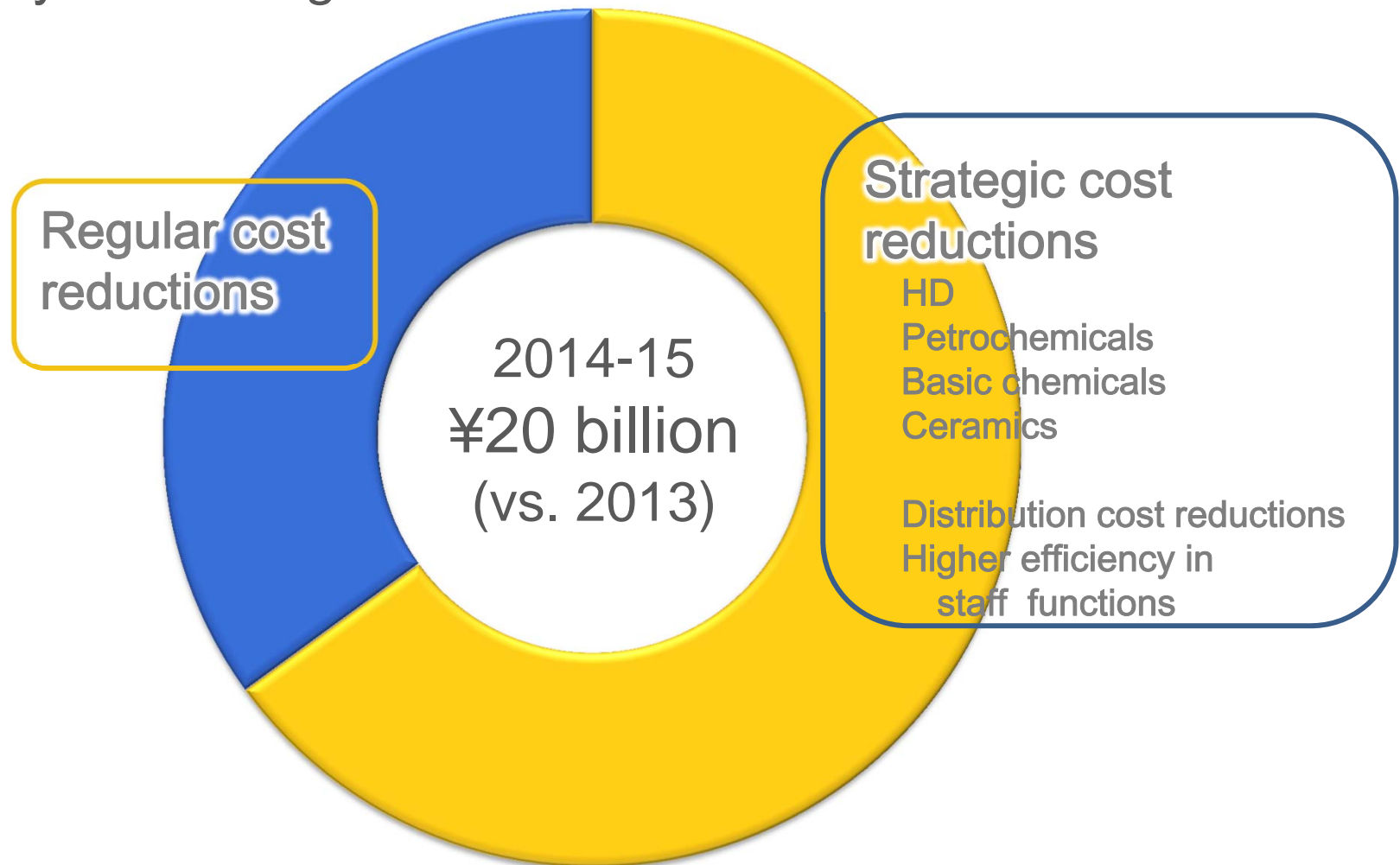


【Full use of recycled plastic as raw material】

3. Phase II Business strategy

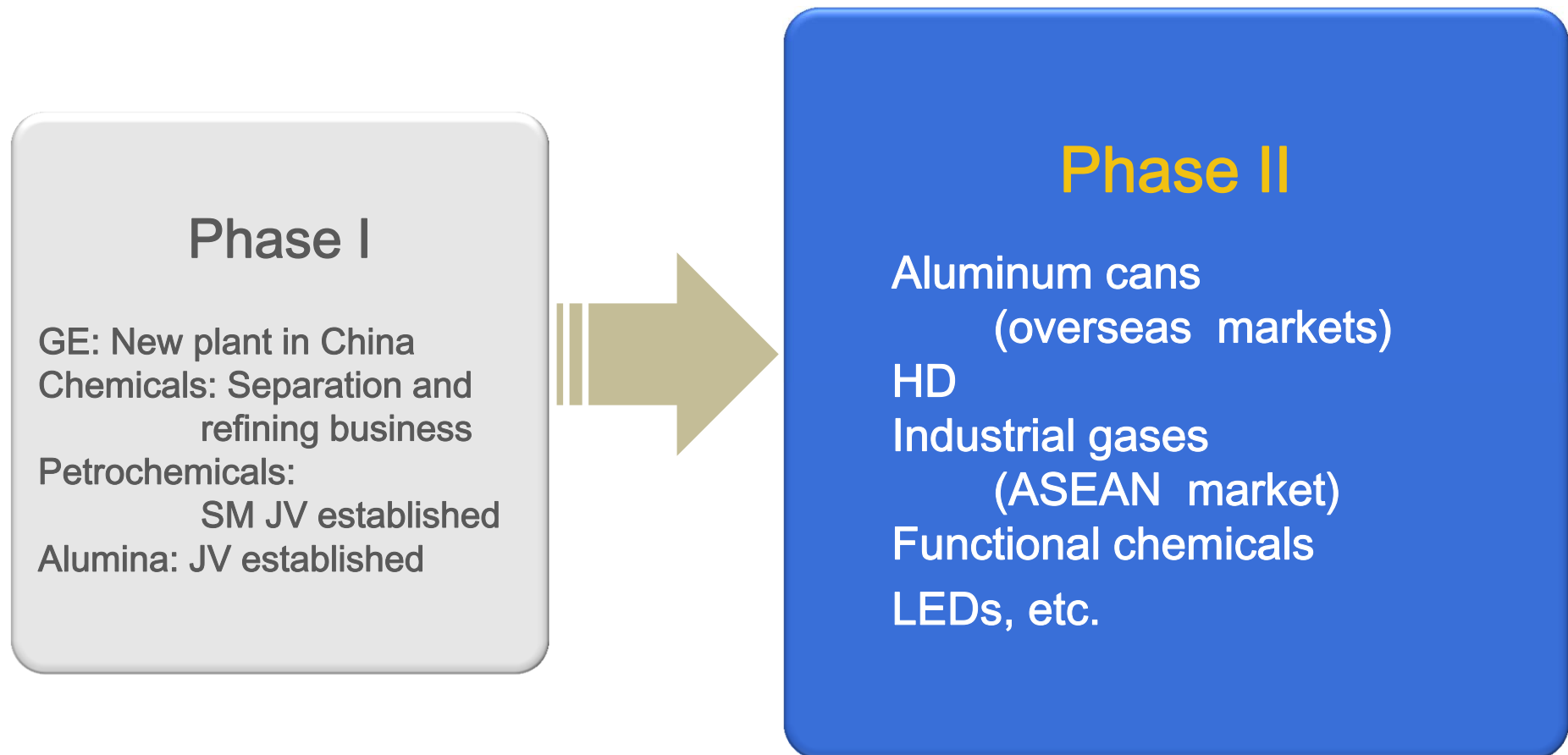
Cost reduction efforts

- Carry out strategic measures



3. Phase II Business strategy

Catch opportunities for new businesses through M&A and alliance



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4. Phase II Financial goals

Financial goals and assumptions

(Billions of Yen)

| | 2013 Revised forecast** | 2014 Plan | 2015 Plan |
|------------------|-------------------------------|--------------|--------------|
| Net sales | 850.0 | 880.0 | 950.0 |
| Operating income | 26.0 | 32.0 | 50.0 |
| Net income | 10.0 | 14.0 | 25.0 |
| ROA (%)* | 2.7 | 3.2 | 5.0 |

*Operating income / Total assets

**Announced on July 29, 2013

Assumptions:

Exchange rate: 100 yen to USD

Naphtha price: 65,000 yen per KL

4. Phase II Financial goals

Sales and operating income targets by segment

(Billions of Yen)

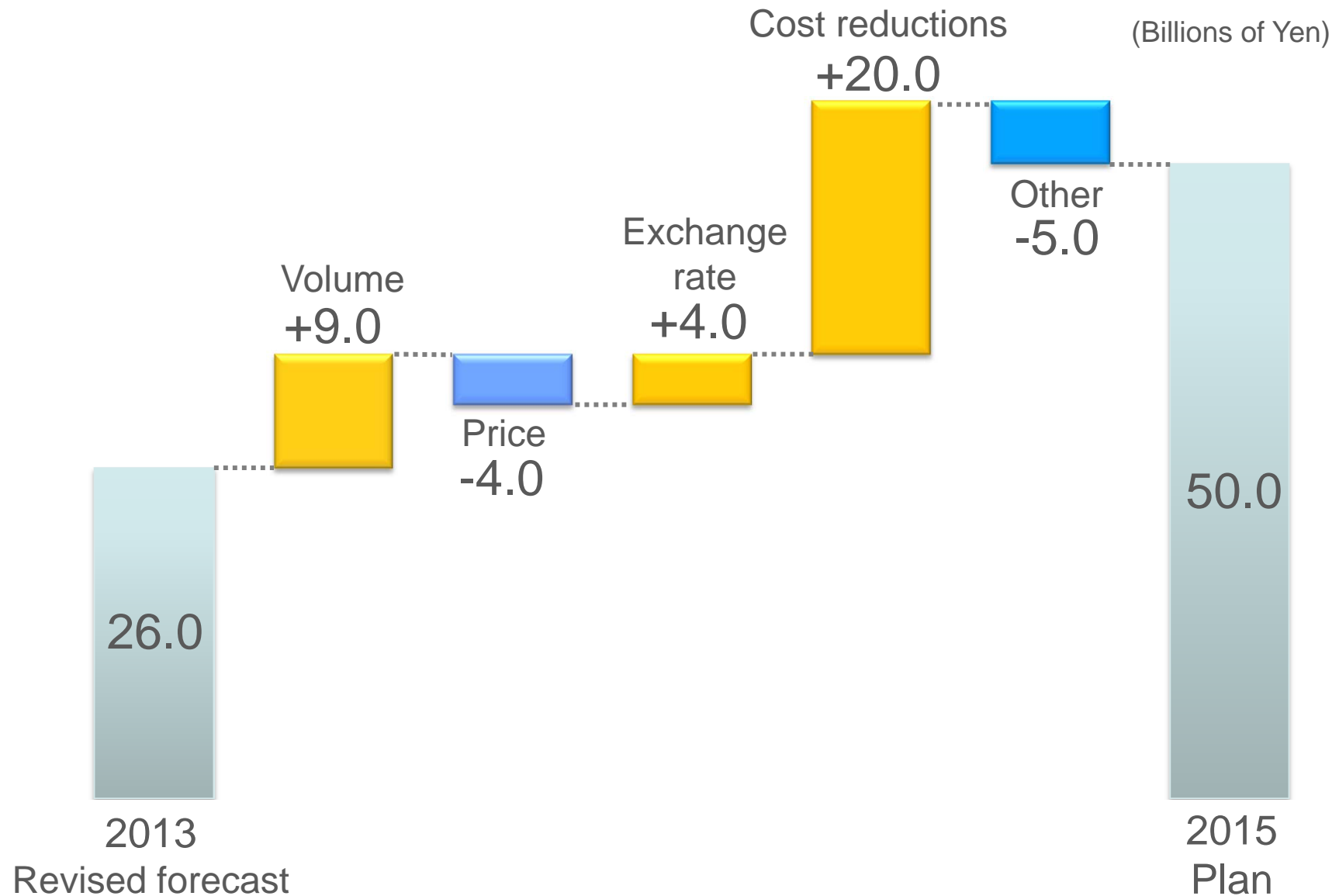
| | | 2013 Revised forecast* | 2015 Plan | Increase/ decrease |
|----------------|-----------|------------------------------|--------------|-----------------------|
| Petrochemicals | Net Sales | 270.0 | 290.0 | 20.0 |
| | O.I. ** | 1.5 | 6.0 | 4.5 |
| Chemicals | Net Sales | 136.0 | 155.0 | 19.0 |
| | O.I. | 4.0 | 8.0 | 4.0 |
| Electronics | Net Sales | 148.0 | 160.0 | 12.0 |
| | O.I. | 22.5 | 28.0 | 5.5 |
| Inorganics | Net Sales | 71.0 | 85.0 | 14.0 |
| | O.I. | 0.0 | 5.0 | 5.0 |
| Aluminum | Net Sales | 98.0 | 120.0 | 22.0 |
| | O.I. | 6.0 | 9.0 | 3.0 |
| Other | Net Sales | 170.0 | 185.0 | 15.0 |
| | O.I. | -0.5 | 1.5 | 2.0 |
| Adjustments | Net Sales | -43.0 | -45.0 | -2.0 |
| | O.I. | -7.5 | -7.5 | 0.0 |
| Total | Net Sales | 850.0 | 950.0 | 100.0 |
| | O.I. | 26.0 | 50.0 | 24.0 |

** O.I.: operating income

*Announced on August 1, 2013

4. Phase II Financial goals

Analysis of changes in operating income by factor



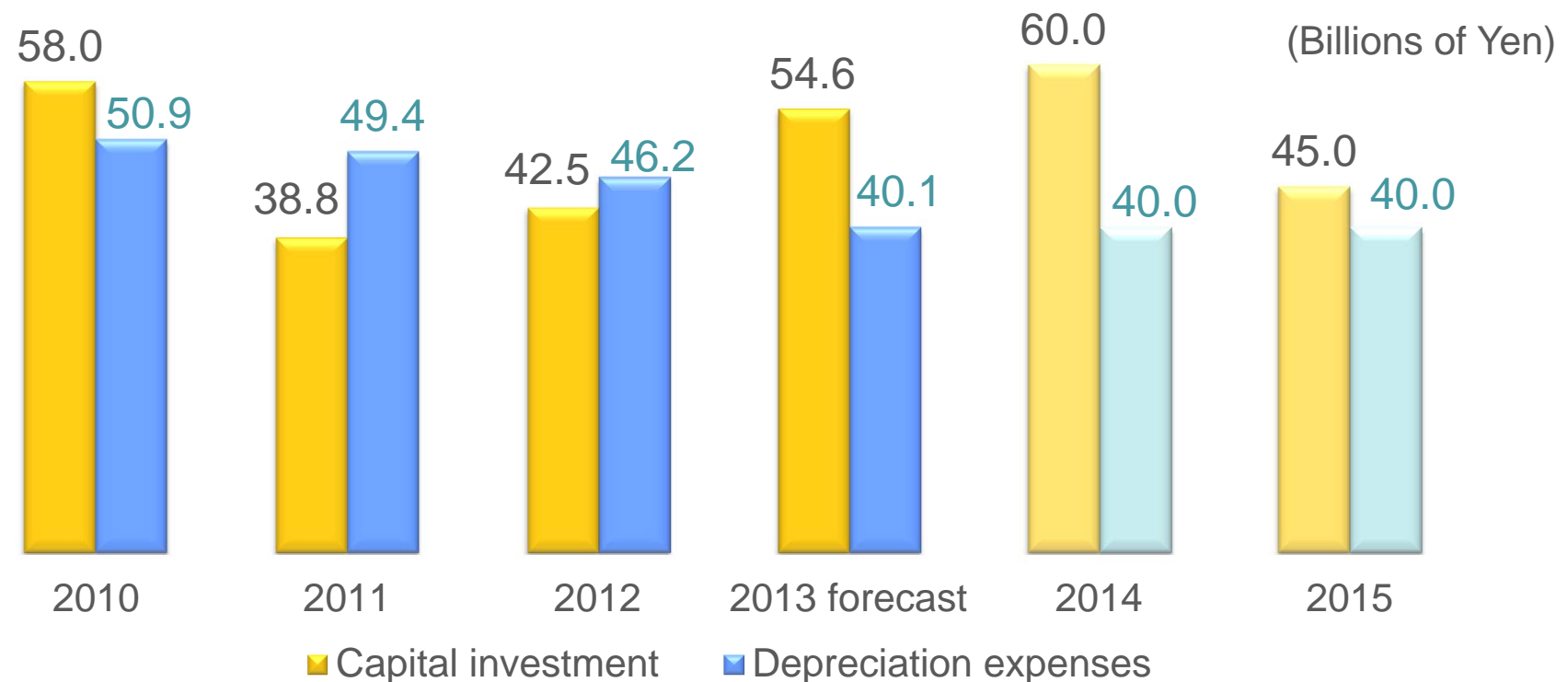
4. Phase II Financial goals

Capital investment plan-1

Concentrating on carefully selected projects

- Amount of capital investment *
: Totaling ¥105 billion for 2014-2015
- Depreciation expenses
: Totaling ¥80 billion for 2014-2015

* On a decision-making basis



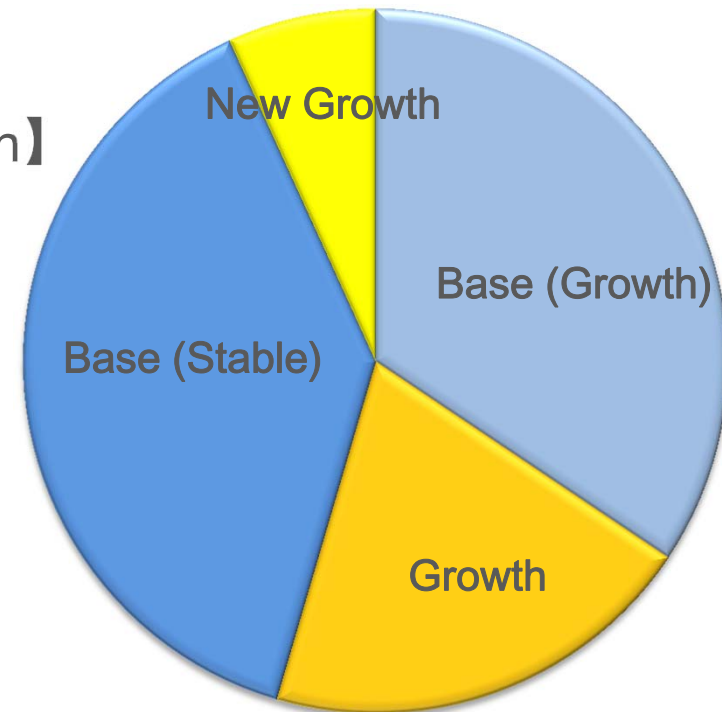
4. Phase II Financial goals

Capital investment plan-2 Main themes

- HD: Introduction of thermally assisted magnetic recording (TAMR) technology
- Semiconductor-processing high-purity gases: Strengthen operations at overseas sites
- Petrochemicals: Build a new butadiene plant based on a new process technology
- LIB: Expand capacity for packaging materials

* On a decision-making basis

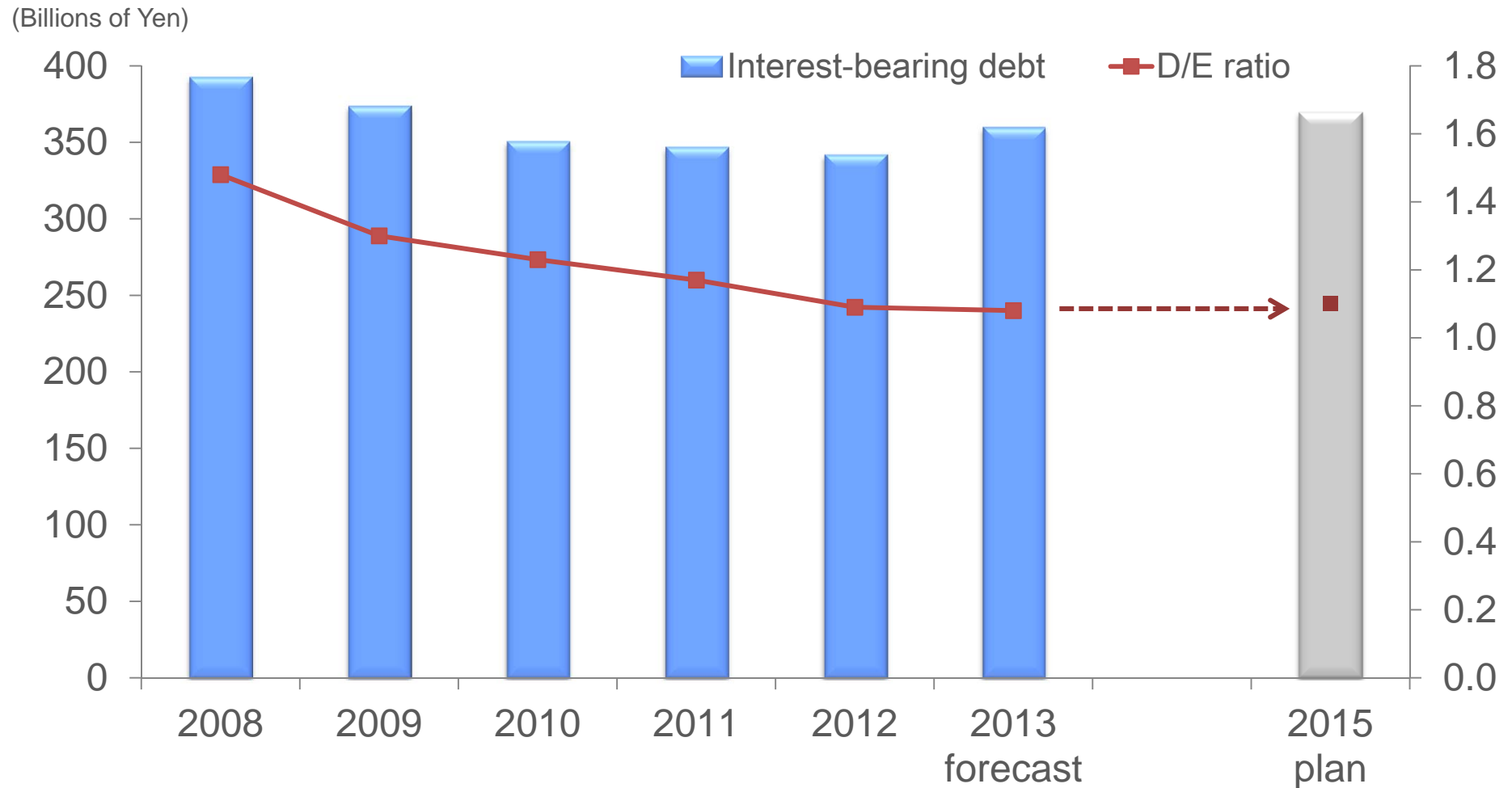
【Image of fund allocation】



4. Phase II Financial goals

Financial index

Aiming to create ¥30 billion of FCF in 2015



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HD: Responding to the changes in market

① Expand the business in HD media for server applications

② Maximize our strength as an integrated manufacturer of aluminum substrates and media (high performance and high efficiency)

③ Meet the need for media with higher capacity: Promote the BIC strategy and prepare for volume production of SMR- and TAMR-based media

④ Fully utilize production capacity

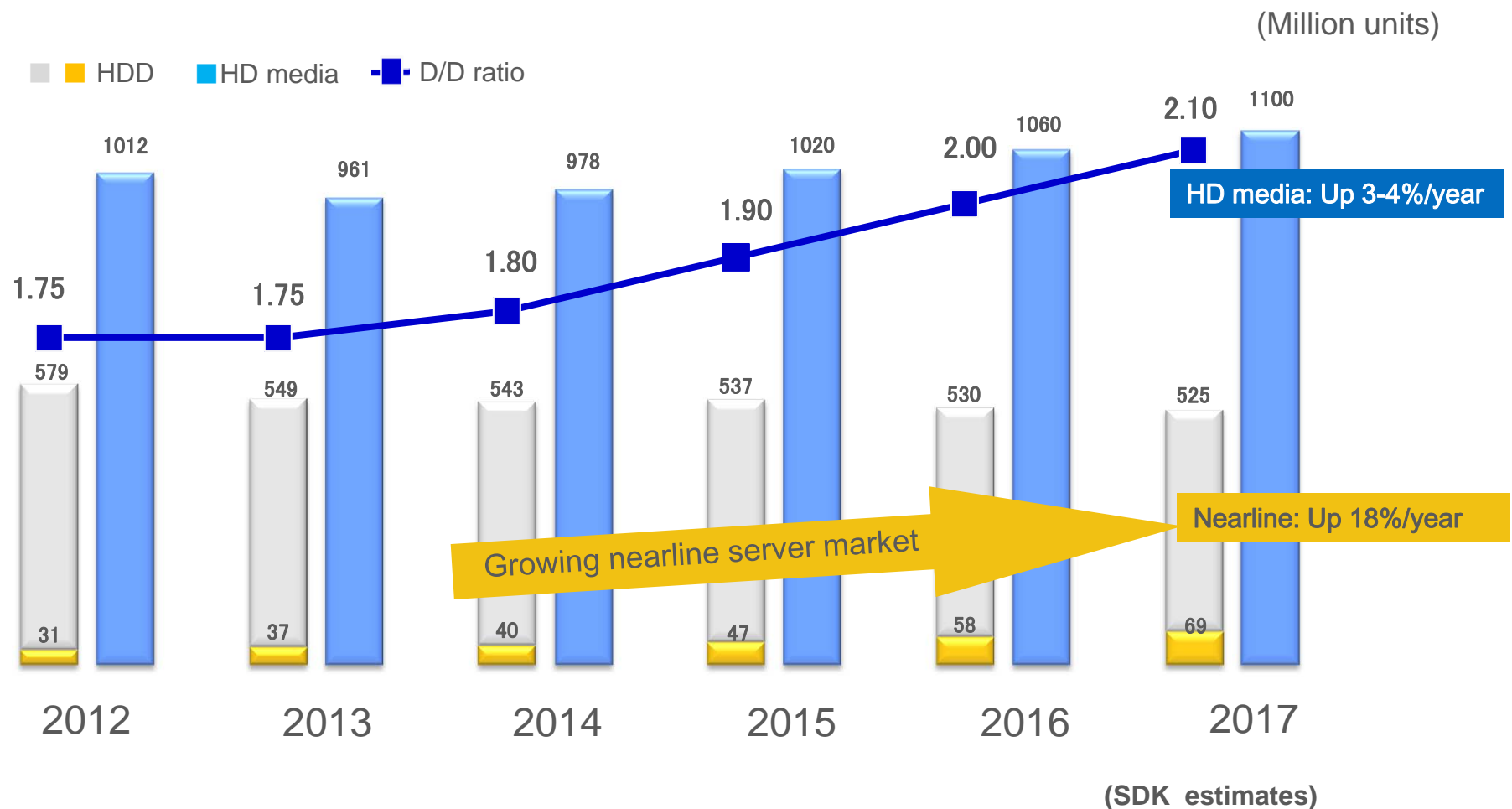
⑤ Enhance productivity



5. Phase II Strategies for major businesses

Base
(Growth)

HD: Growing for server applications;
higher D/D ratio

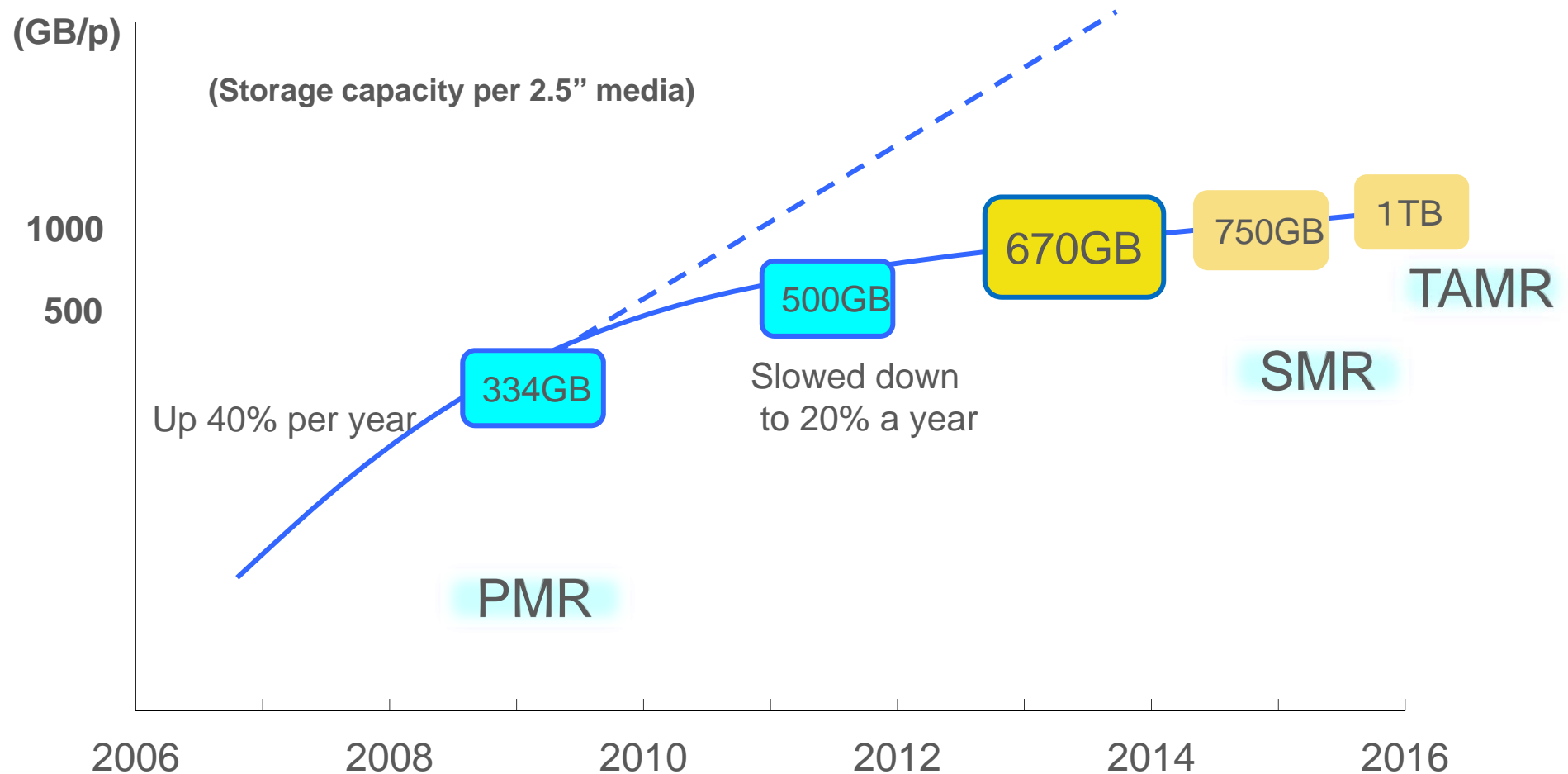


5. Phase II Strategies for major businesses

Base
(Growth)

HD: Keep technical advantages;

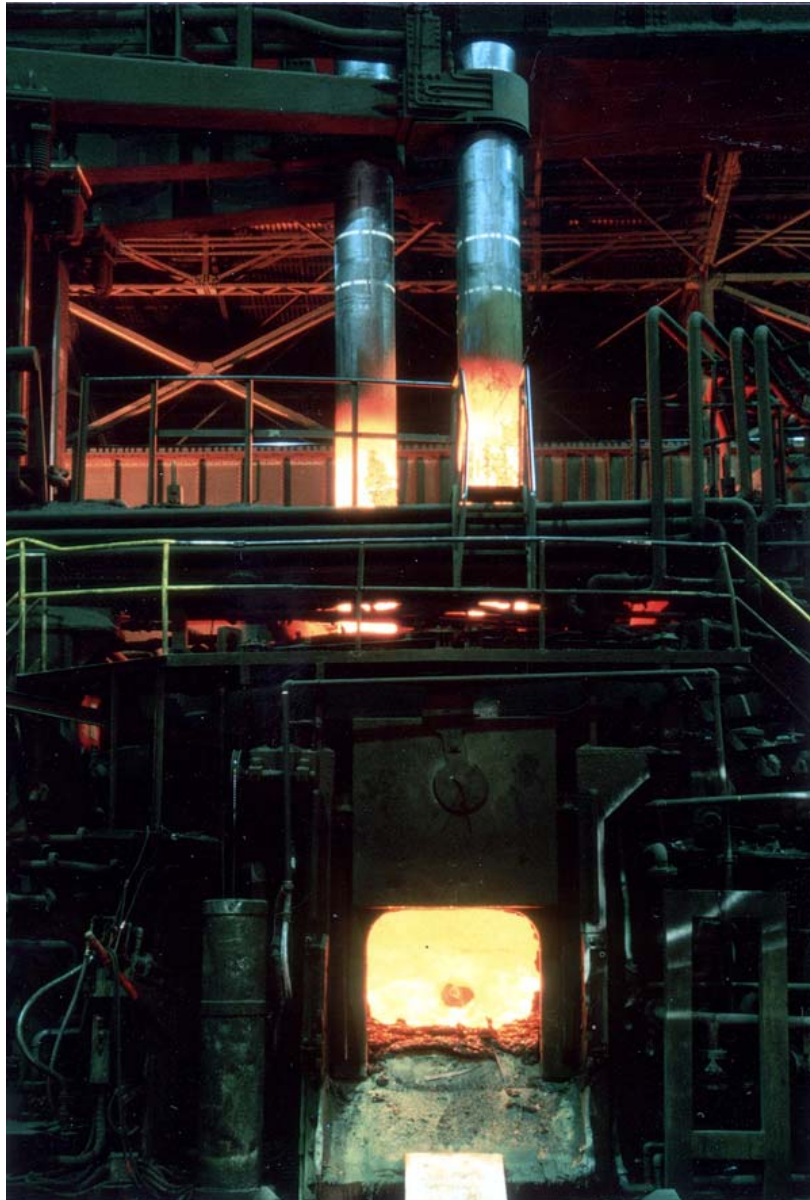
- World's first 670GB/pl. media in production
- Developing a new generation technology



5. Phase II Strategies for major businesses

Base
(Growth)

GE: Strengthen supply system to meet growing demand



SDKC (U.S.A.):

Increasing capacity by 30KT/Y

Operation starting mid 2014

Demand for U.S. and EU markets
increasing

Sichuan:

Started volume production of UHP
electrodes for the Chinese market

Omachi:

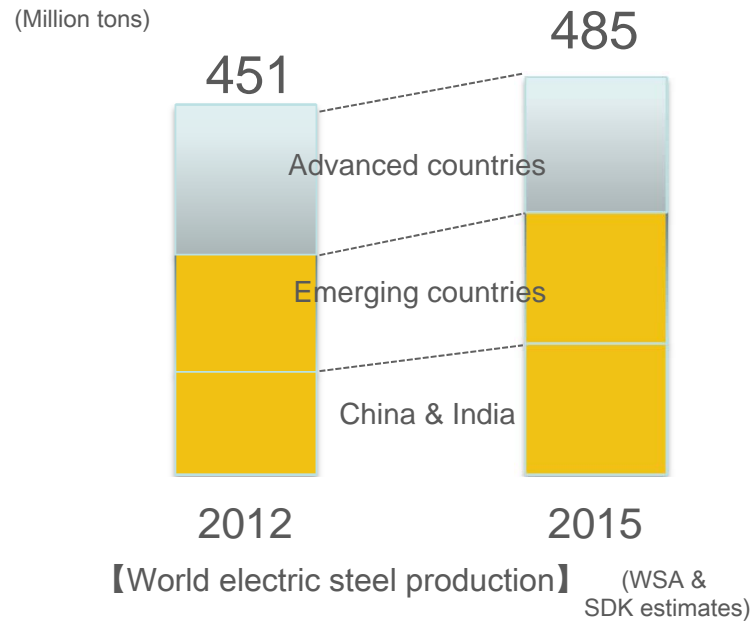
Meet the need of large furnaces in
ASEAN and Middle East markets

Improve cost competitiveness

5. Phase II Strategies for major businesses

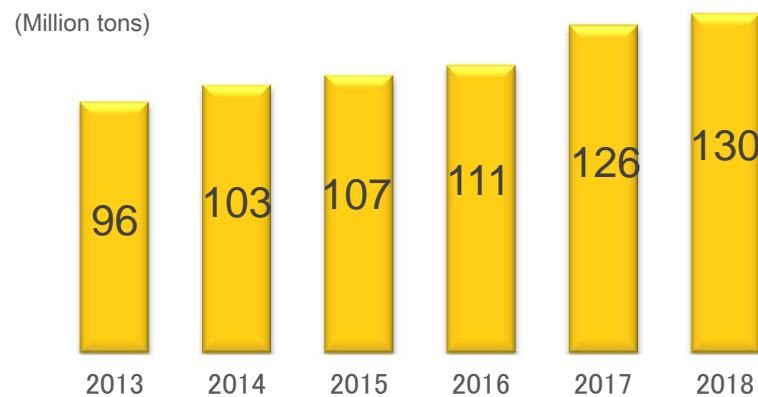
Base
(Growth)

GE: Demand to hit bottom in 2014, and recover gradually



【World's electric steel demand】
Annual growth rate is estimated at 3-5%
Europe: Hitting the bottom
North and South America: Growing
ASEAN: New electric arc furnaces
being built

* DRI (Direct Reduced Iron)
Growing in the U.S., Middle East and
ASEAN markets
⇒ Use of natural gas

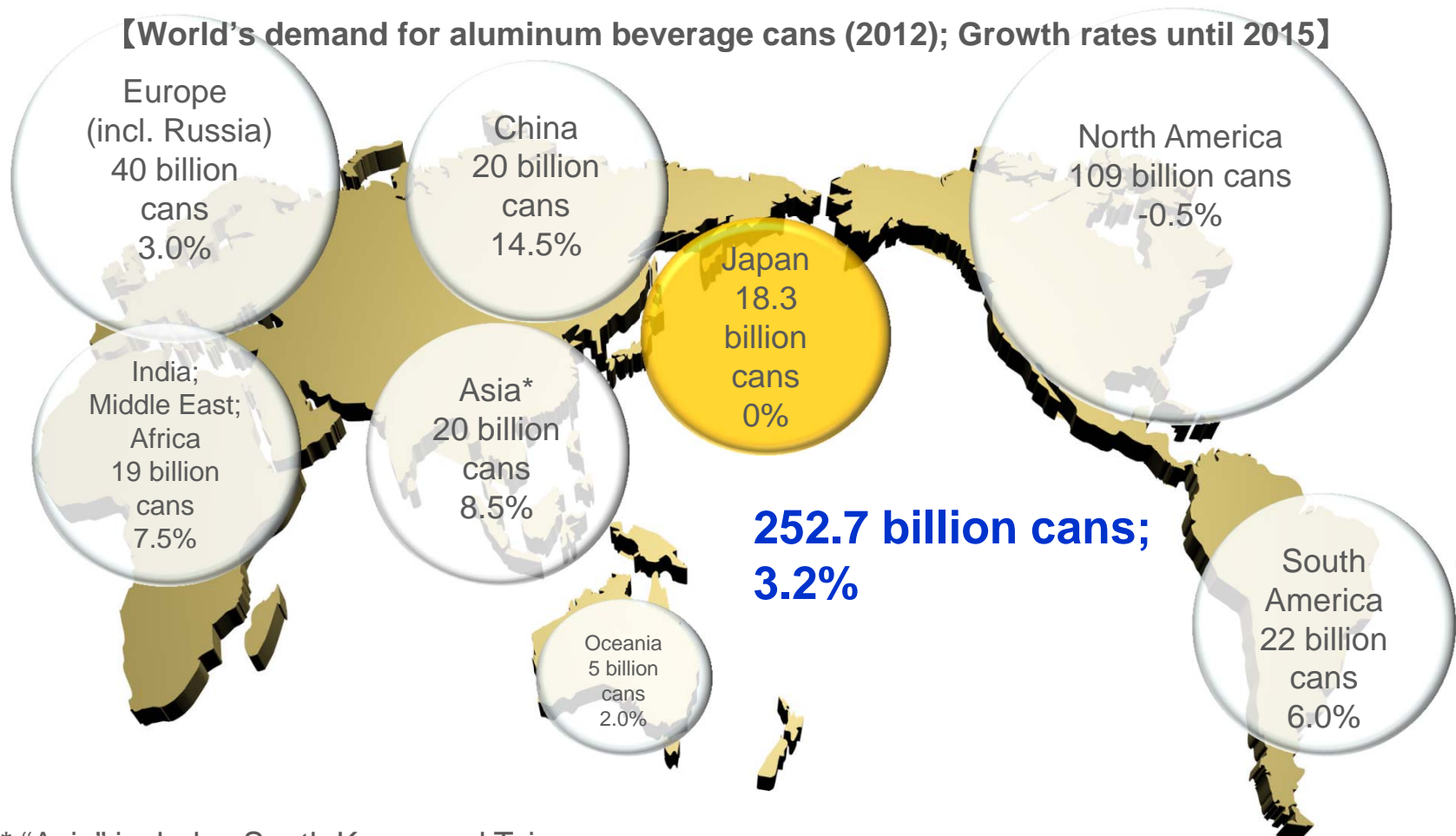


【Electric steel production in N. & S. America】

(SDK estimates)

Aluminum cans: Targeting at growing Asian market

- Domestic market is matured; Meeting diversified needs from customers
- Advancing into growing overseas markets

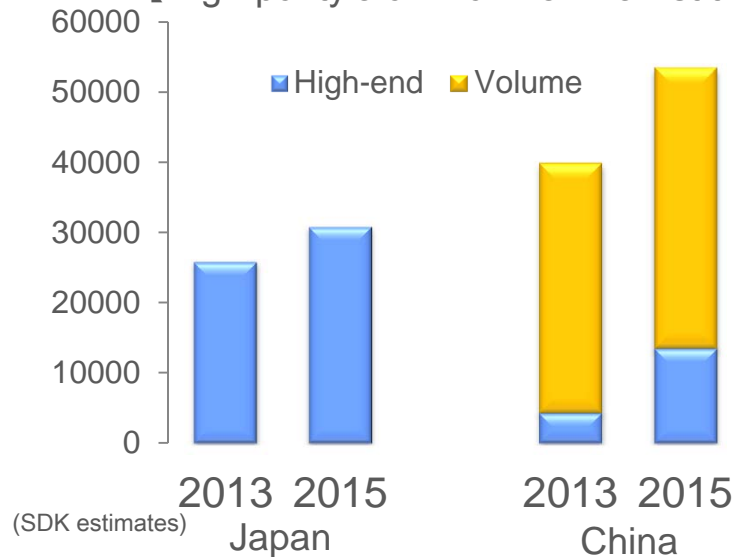


* "Asia" includes South Korea and Taiwan.

5. Phase II Strategies for major businesses

Aluminum rolled products & high-purity gases: Strengthen presence in ASEAN market

(t) 【High-purity aluminum foil market trends】



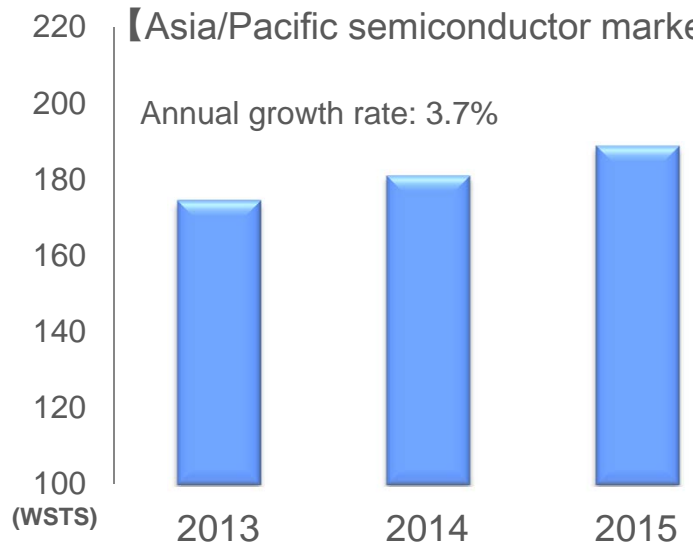
【Aluminum rolled products】

Demand for high-purity aluminum foil is growing in the Chinese market. SDK has strengthened its presence in the market to meet the growing demand.

SDK is establishing a leading position in the world using its proprietary “CJ” process technology.

(Billion dollars)

【Asia/Pacific semiconductor market trends】



【Semiconductor-processing high-purity gases】

Focusing on businesses in NH₃, HBr, N₂O, and Cl₂

Expanding operation sites in South Korea, Taiwan and China

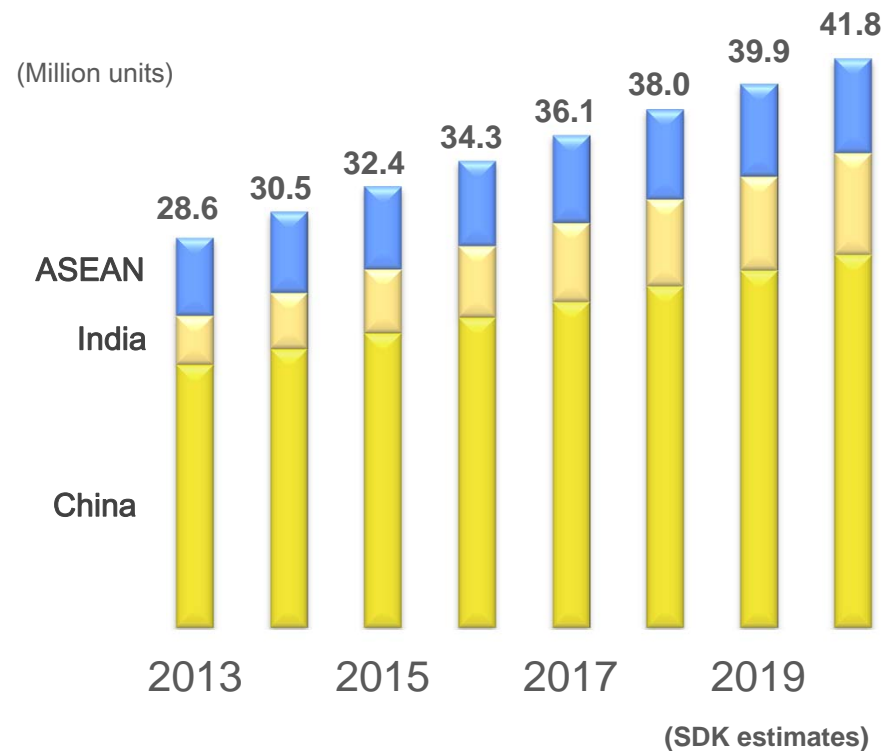
5. Phase II Strategies for major businesses

Growth

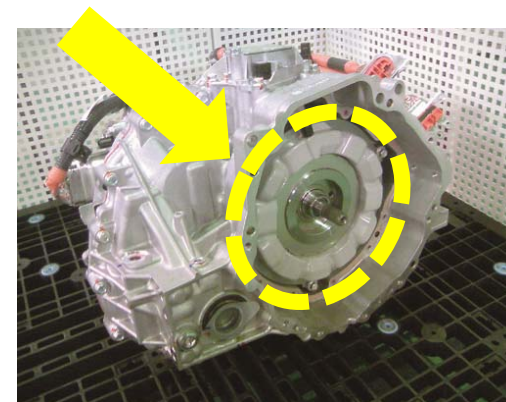
Functional chemicals: Expand the scale of business

- Markets in China and ASEAN: Expand businesses related to cars and housing
(BMC, vinyl ester, emulsion)
- New products for electronic materials (emulsion)

【Forecast of car demand in China, India & ASEAN】



【HV motor using BMC】



【Vinyl-ester-based tanks】



5. Phase II Strategies for major businesses

Base
(Stable)

Petrochemicals: Increase the competitiveness of complex



【Naphtha cracker】



SHORAYAL[®]
ショウレイアル

【Olefins】

Accelerate the development of a new butadiene production process

Step up the diversification of raw materials

Increase the value of cracker by-products

Strengthen the tie-up with oil refinery

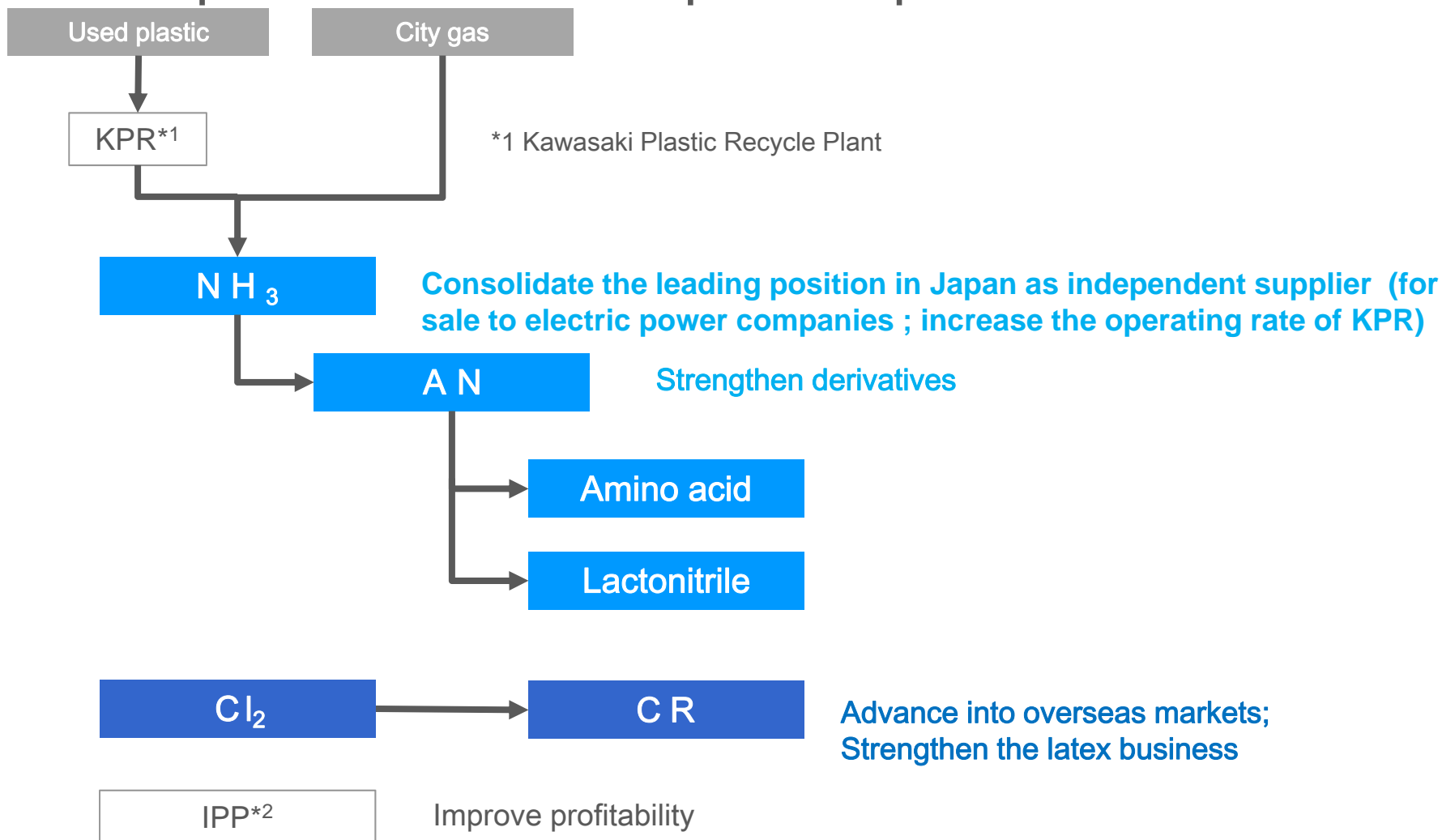
【Organic chemicals】

Improve the business structure for ethyl acetate by changing its production process

Accelerate the development of polymer/film businesses, including *SHORAYAL*[™].

5. Phase II Strategies for major businesses

Chemicals: Take measures to increase the competitiveness of respective product lines

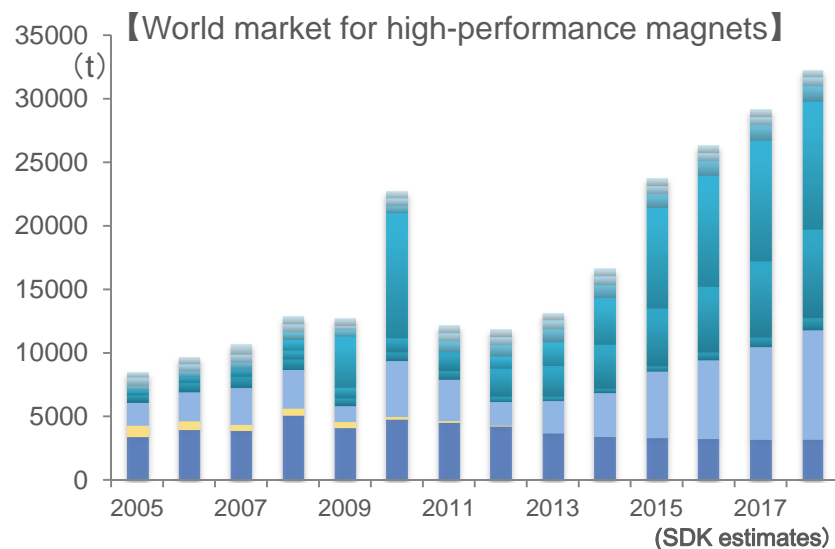


*2 Kawasaki Power Plant

5. Phase II Strategies for major businesses

Rare earths & Shotic:

Strengthen presence in China and ASEAN market



【Rare earths】

- Expand sales of alloys to Chinese magnet producers
- Increase the use of recycled materials
- Promote the marketing of Dy-free magnetic alloys

【Shotic】

- Start volume production at our casting plant in Malaysia
- Launch new products for automotive applications
- Improve competitiveness of domestic operation sites



【Shotic™】

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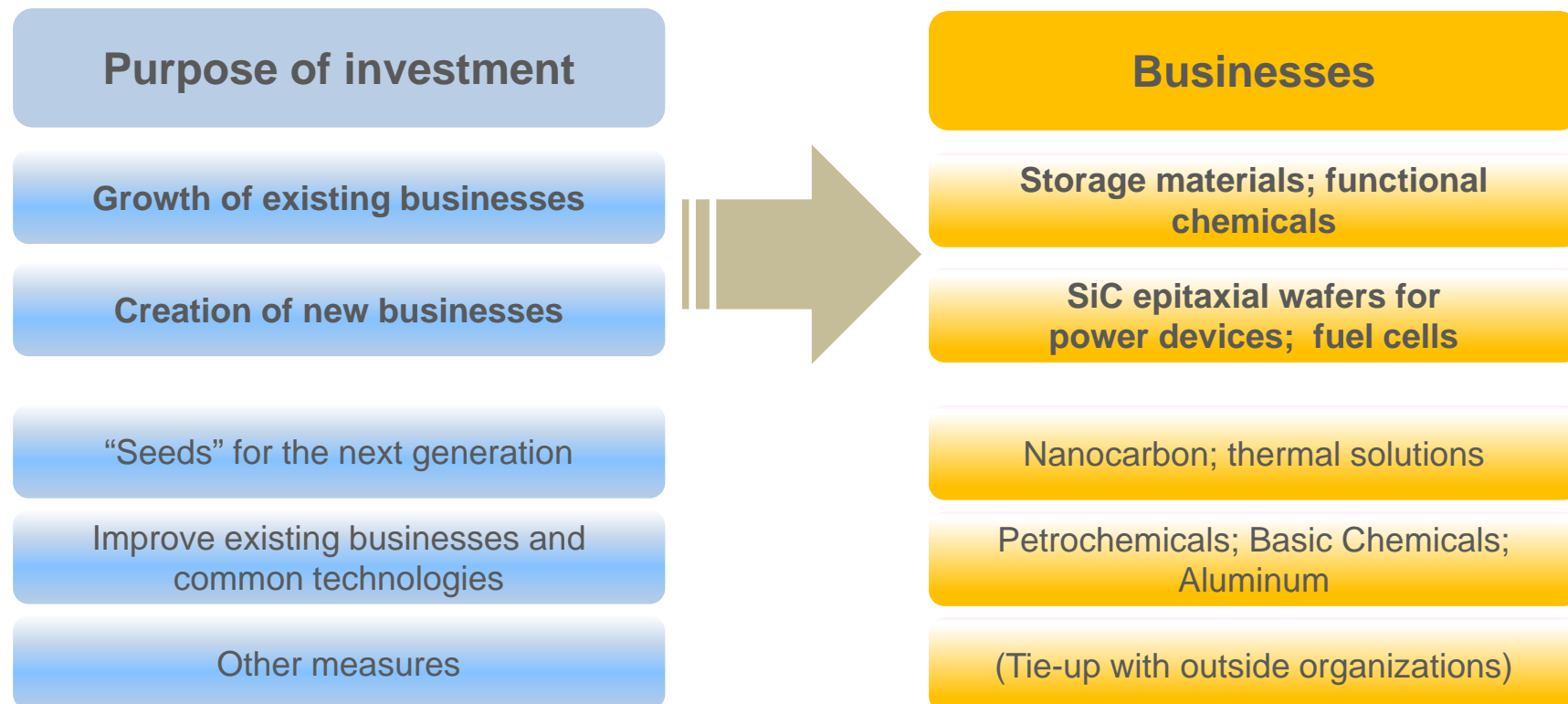
6. Phase II R&D strategy

Carefully select themes; and quickly launch new products

- Preferentially allocate resources in support of business expansions
: HD media, functional chemicals
- Carefully select medium-term R&D themes
: SiC epitaxial wafers for power devices; fuel cells, etc.

【Total R&D budget】

¥44 billion for the 2014-2015 period



6. Phase II R&D strategy

LIB packaging materials

- Establish a leading position in the world
 - Realize thin and small LIBs with high heat dissipation
- Expand production capacity step by step based on a new process technology



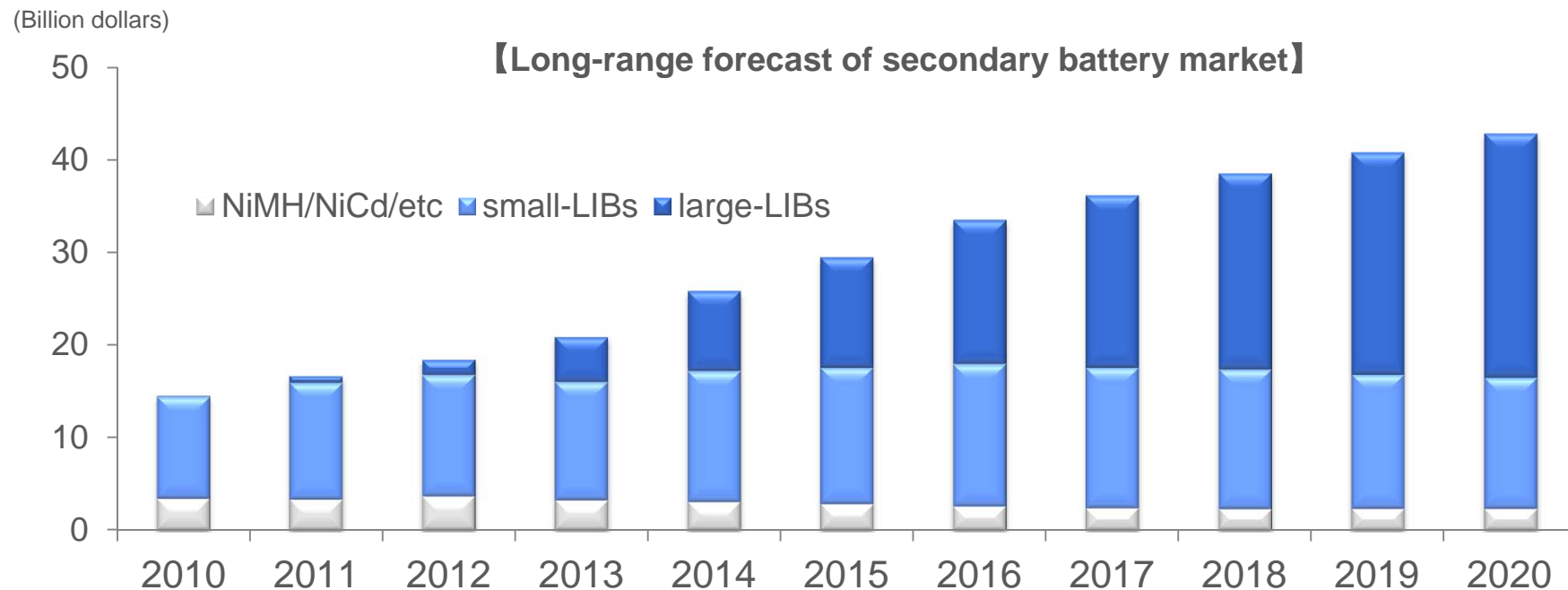
【LIB packaging material
production process】



【For use in smartphones and tablet PCs】

LIB anode material: Rapid growth for use in electric vehicles

- *SCMG*TM:
 - Long life; high capacity; high density; high input/output characteristics
 - Launch new competitive grades
 - Start volume production of grades for stationary storage batteries
- Develop high-capacity Si/graphite composite anode material



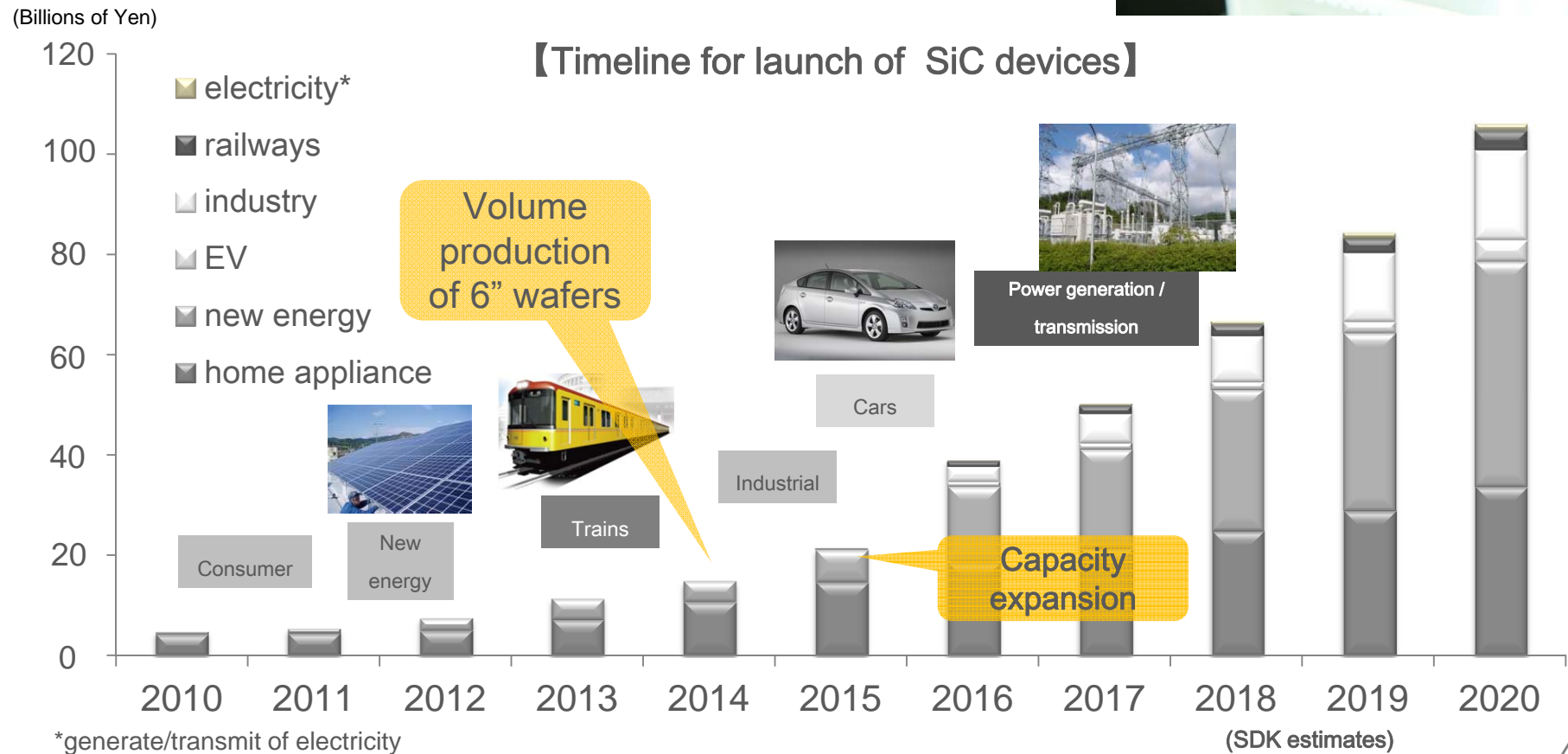
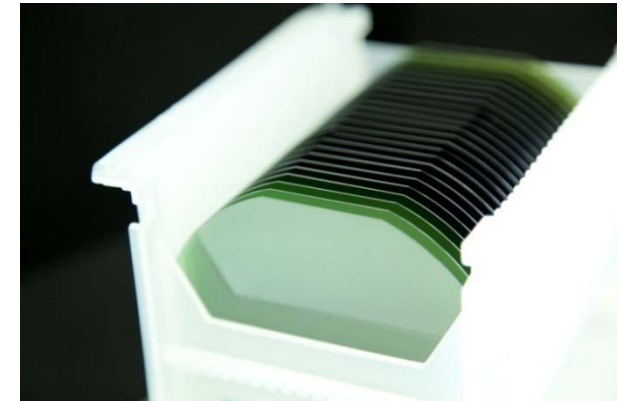
(Source: B3 Corporation)

6. Phase II R&D strategy

New
Growth

SiC epitaxial wafers for power devices

- Expand production capacity step by step
- Improvement in quality of 4" wafers;
Volume production of 6" wafers
- Develop new grades with higher reliability and
resistance to ultrahigh voltage



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Improve profitability of HD/GE businesses in preparation for the Post-PEGASUS period

Rapid advance in Growth businesses

Improve profitability of Base (Growth) businesses



**Ideas, hopes and dreams
for your happily ever after.**

