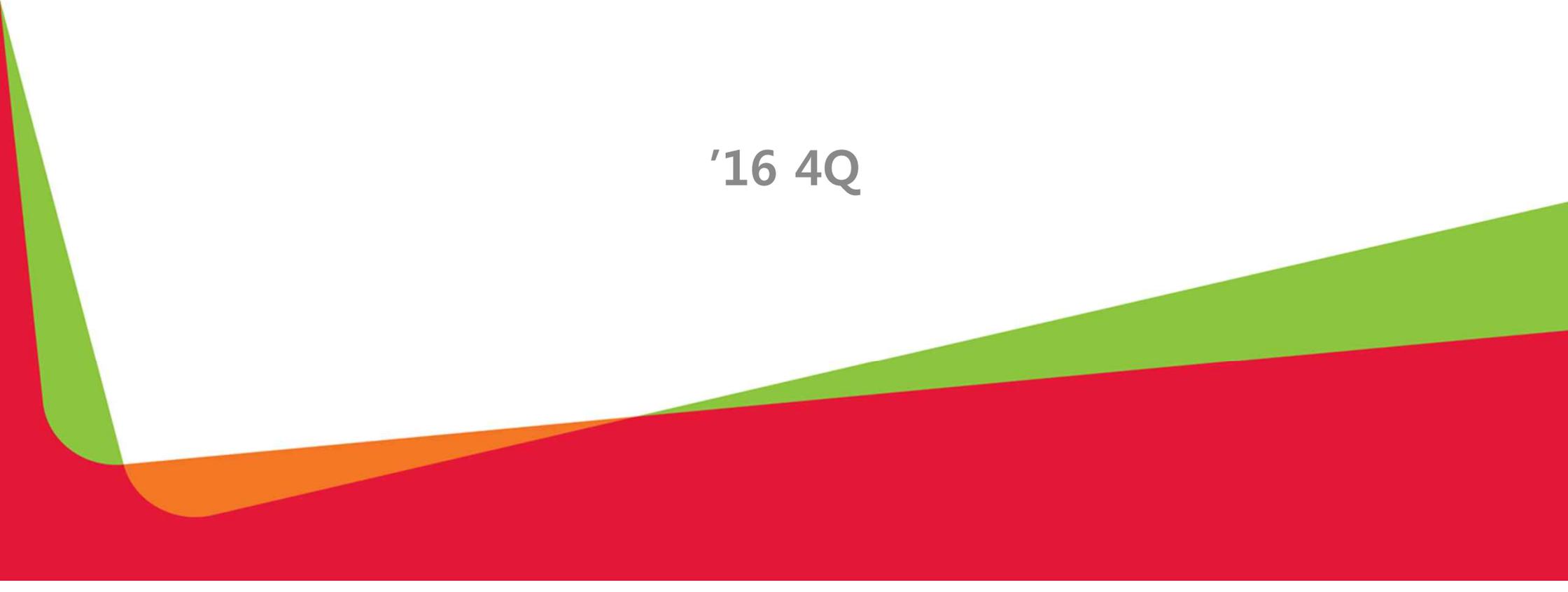


SK Chemicals Investor Relations

'16 4Q

A decorative graphic at the bottom of the slide consists of overlapping, rounded shapes in red, orange, and green. The red shape is the largest and forms the base, with an orange shape overlapping its top edge on the left side, and a green shape overlapping the top edge of the orange shape on the left side. The shapes extend from the left edge towards the right, with the green shape being the most prominent on the right side.

Contents

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- Performance Review
- Green Chemicals Biz.
- Life Science Biz.

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IV. Mission & Vision

V. Summary

Disclaimer:

The business results are subject to the K-IFRS(Korea International Financial Reporting Standards) and reported on a consolidated basis.

The forecasts contained herein are based on the Company's current business environment and strategy; and the actual results may differ from those in the forecasts as a result of certain uncertainties, such as changes in the Company's business environment and strategy in the future.

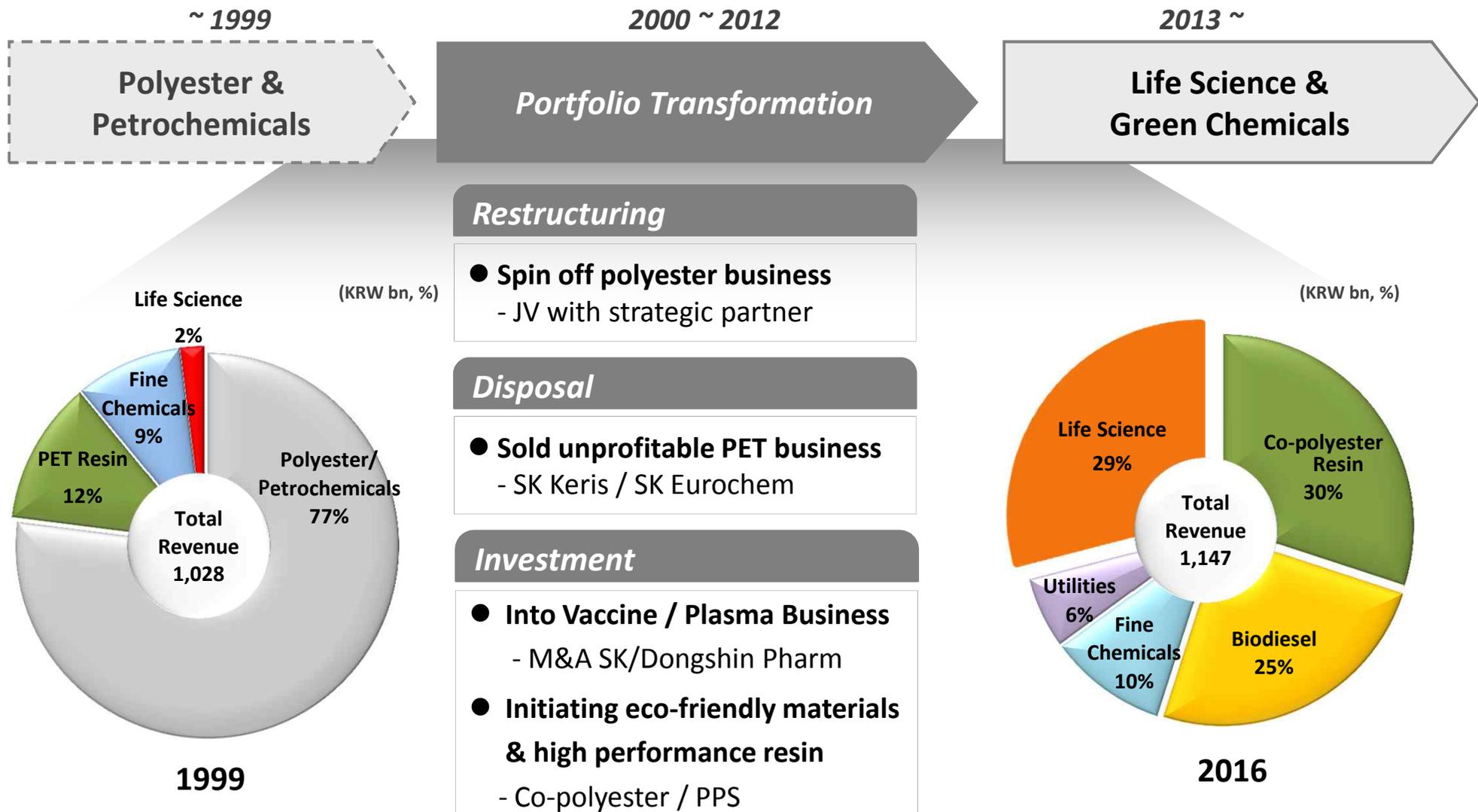
I. Overview



I. Overview

1) Portfolio Transformation

Through continuous change and innovation, SK Chemicals has grown into a Life Science and Green Chemicals company.



I. Overview

2) Restructuring and Investment

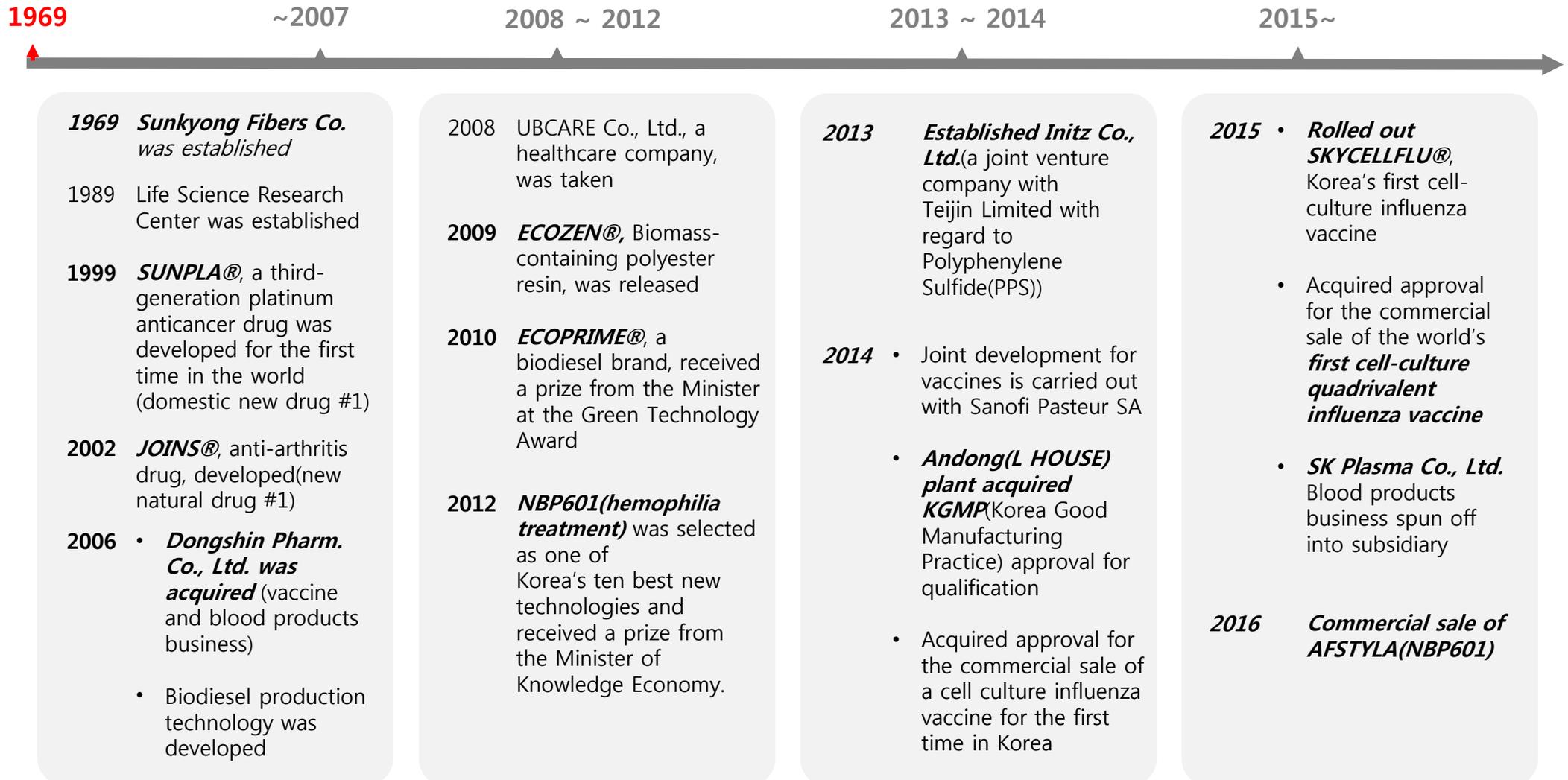
Since 2000, SK Chemicals has restructured its business portfolio by selling/spinning off businesses with total of 1.7 billion KRW sales revenue, and developing new ones with higher growth potential.

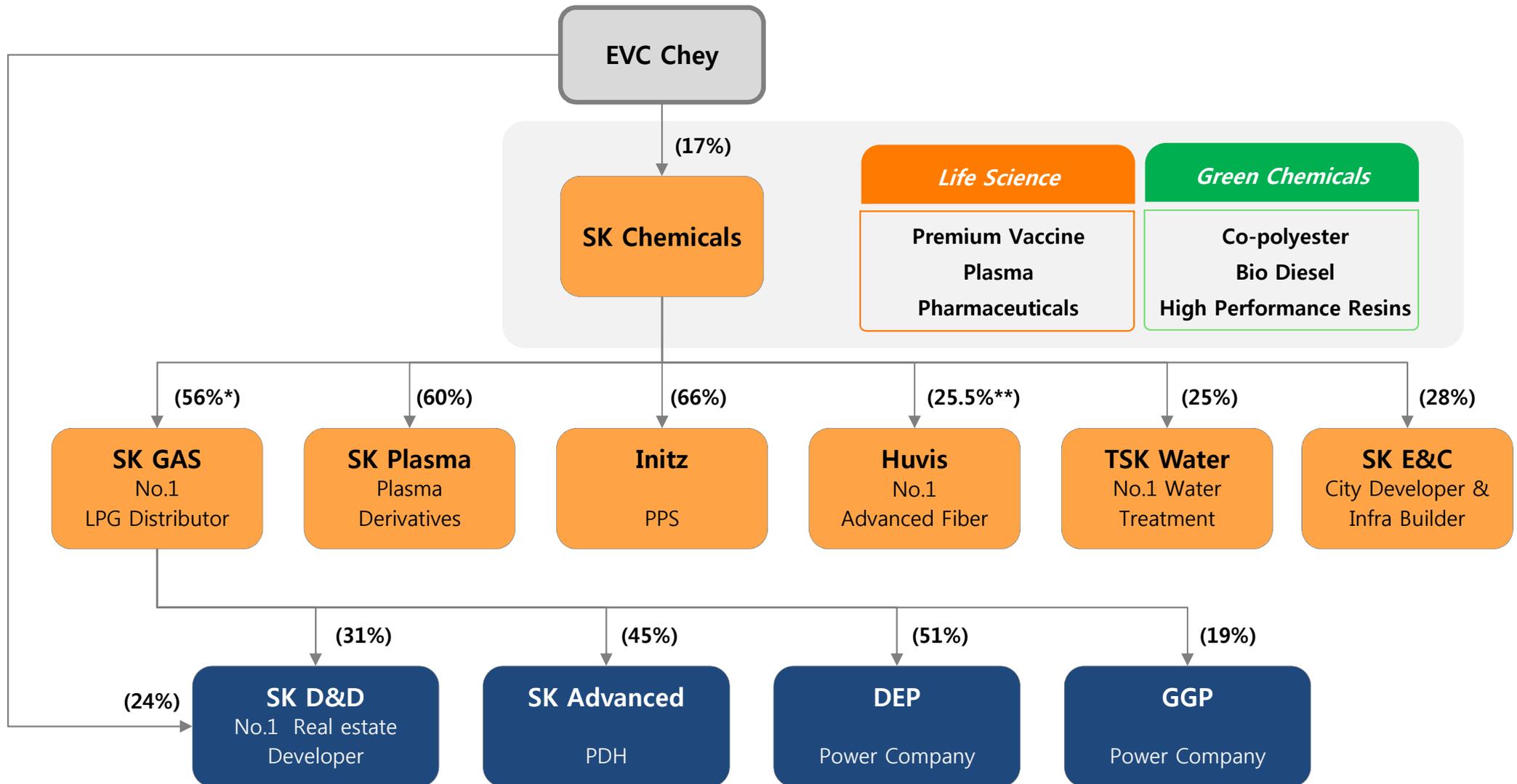
Restructuring		
(Unit: KRW bn)		
Biz.	Product	Sales
• Yarn/Cotton('00)	-	337
• Textile('03)	-	62
• Fiber('07)	IDY	16
• Petrochemicals('08)	PTA/DMT	528
• Acetate ('09)	Tow, PU	164
• Keris / Eurochem('10)	PET chip	601
• Utis('10)	Polyurethane	15
Total Sales		1,722

Investment		
(Unit: KRW bn)		
Biz.	Amount	Sales('16)
• PETG/CHDM	154 ¹⁾	279
- Expansion of Co-polyester		
• Initiate Bio diesel business	31	289
• Accelerate Pharma Business	400	332
- M&A SK / Dongshin Pharm.		
- In-house Vaccine development		
• Initiate PPS business	69 ²⁾	-
Total Amount		654
		900

1) Total amount including latest expansion
 2) SK Chemicals' share (Total investment ; KRW 230 bn)

Since the establishment of Sunkyung Textiles in 1969, SK Chemicals has grown through continuous change and innovation into a chemical and life sciences enterprise representing South Korea.





* Including SK Syntec's share (10%)

** SK Syntec's share

II. Business Divisions



II. Business Divisions

1) Performance Review (Consolidated)

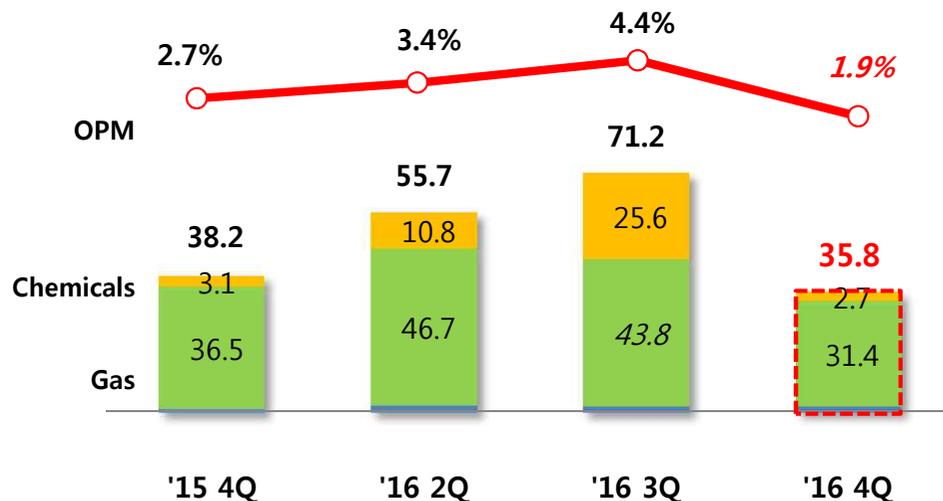
Sales

(Unit: KRW bn)



Operating Profit

(Unit: KRW bn)



□ Sales

- Consolidated revenues increased by 31% YoY, mainly due to increase in LPG sales
- SK Gas : Strong revenue growth YoY, due to increase in trading volumes and sales of SK Advanced

□ Operating Profit

- Operating profit decreased slightly YoY, due to one-off costs(labor costs, Carbon emission cost) and an unfavorable basis of comparison ('15.4Q benefited from KRW 5.9 bn NBP601 milestone payments)
- SK Gas : Operating profit decreased due to KRW 13bn of one-off cost as a result of the change in accounting principle (accounting for risk aversion)

(Unit: KRW bn, %)	'15 4Q	'16 3Q	'16 4Q	YoY	QoQ
Sales	1,404.3	1,627.8	1,843.9	+31.3%	+13.3%
OP	38.2	71.2	35.8	△6.3%	△49.7%
OPM	2.7%	4.4%	1.9%	△29.6%	△56.8%
NP	47.0	56.8	17.6	△62.6%	△69.0%

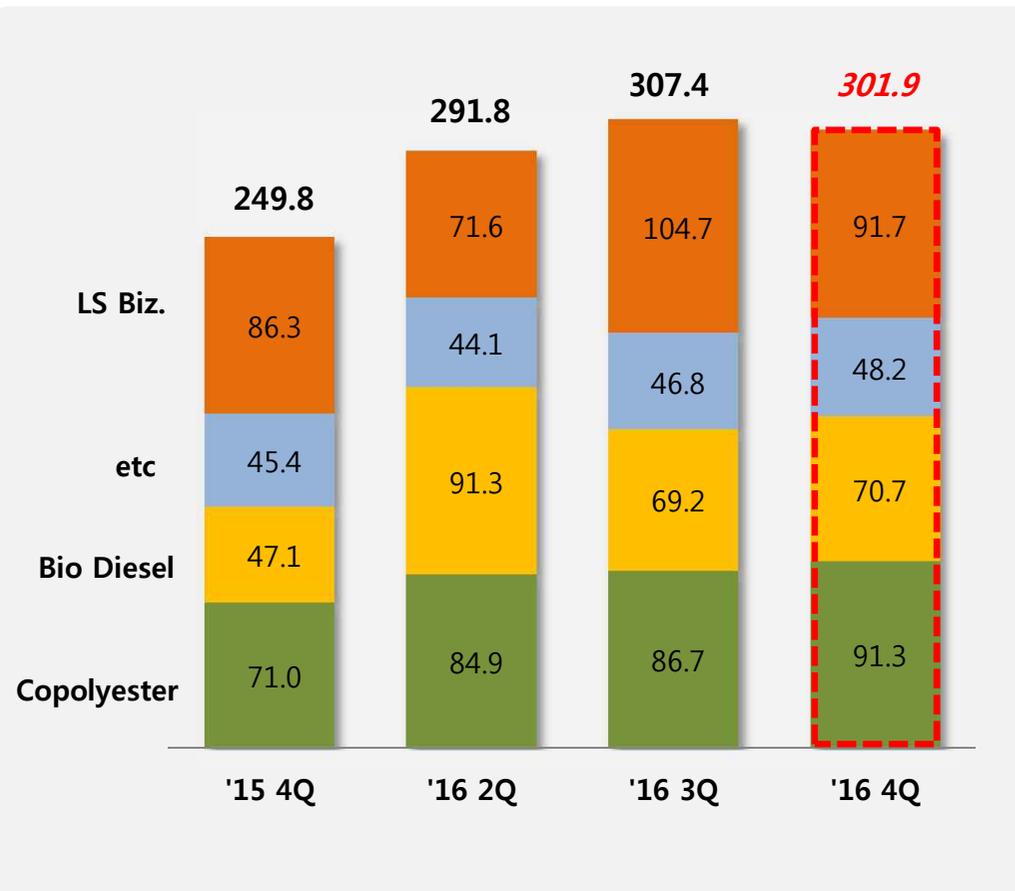
II. Business Divisions

2) Performance Review (Non-consolidated)

- Sales increased by 21% YoY due to increased sales of PETG and Bioenergy products
 - Operating profit decreased by 13% YoY due to an increase in costs (labor costs: KRW 1.5 bn, Carbon emission cost: KRW 3 bn) and an unfavorable basis of comparison('15.4Q benefited from NBP601 milestone payments)
- Excluding these costs, Operating profit was over KRW 7 bn for the 4Q

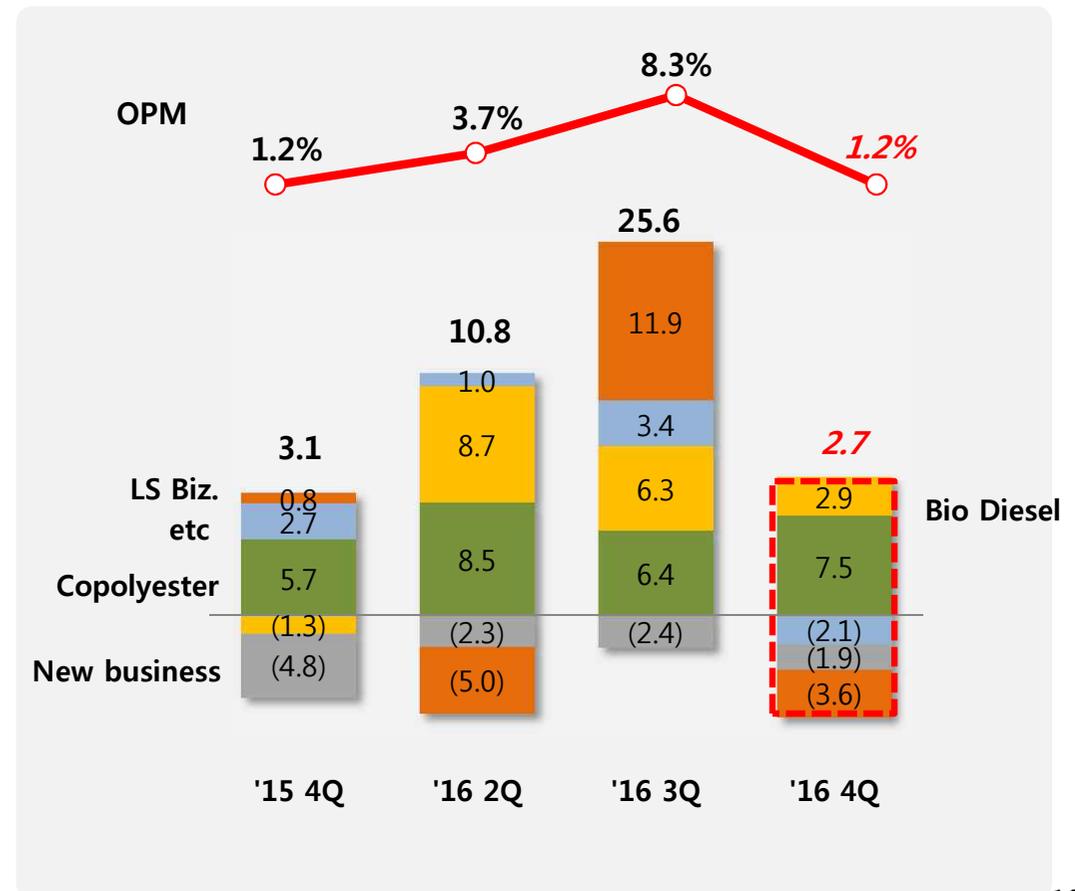
□ Sales

(Unit: KRW bn)



□ Operating Profit

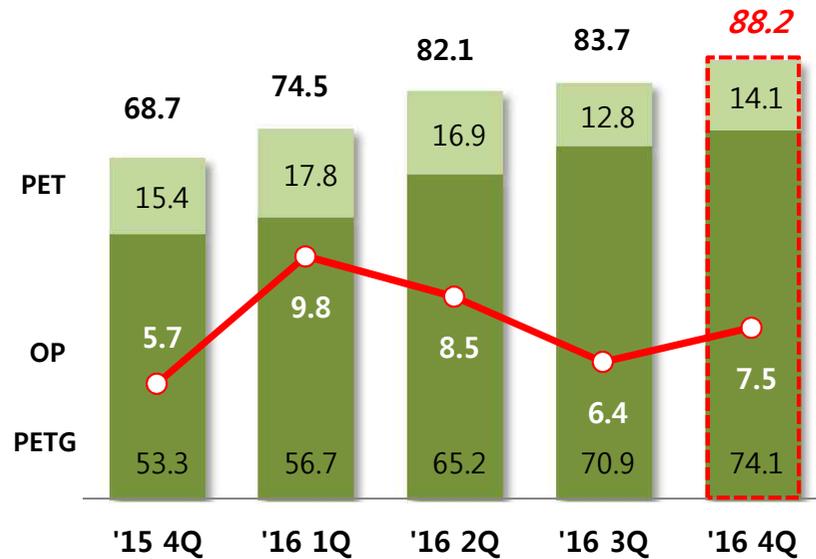
(Unit: KRW bn)



Performance

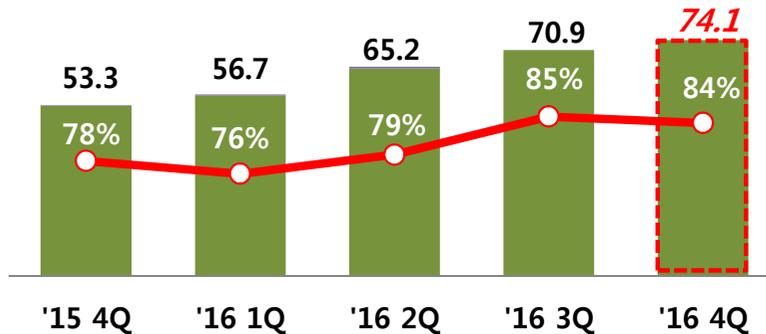
Quarterly Review

(Unit: KRW bn)



PETG sales ratio

(Unit: KRW bn)



Review/Guidance

• '16 4Q

- PETG sales increased by 39% YoY (P: Δ 3%, Q: +44%)
- Continued to run at full capacity (over 10k ton/month)
- Solid demand from China(Cosmetic containers) and Europe(Special film)
- OP increased due to higher sales volume, was partially offset by increased raw material prices (selling off low-margin inventories, increase in fixed costs)

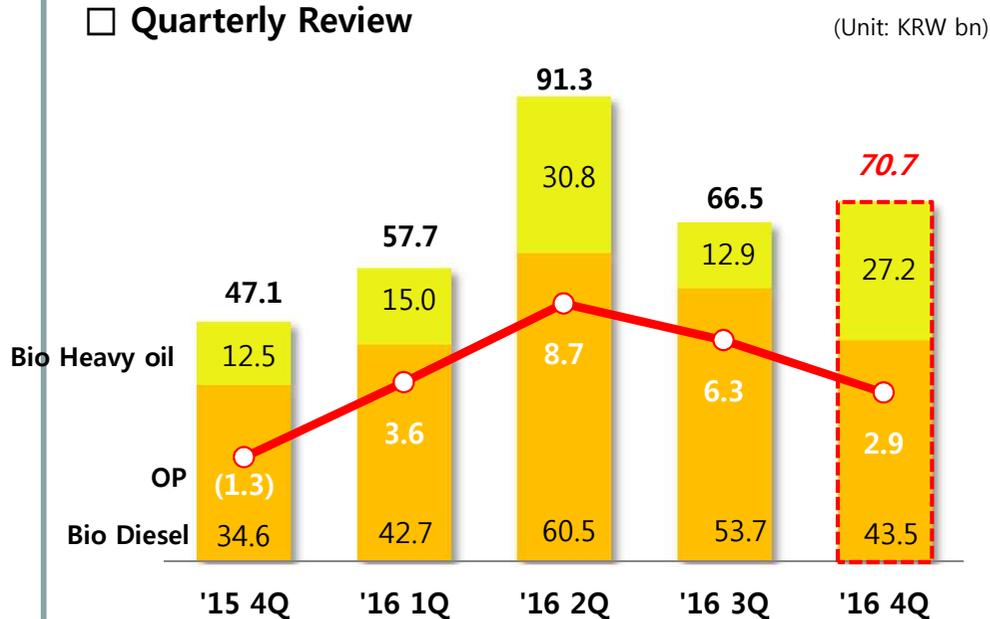
• '17 1Q Outlook

- Solid market demand
- Continued restructuring on PET business
- Passing on increased raw material costs in process

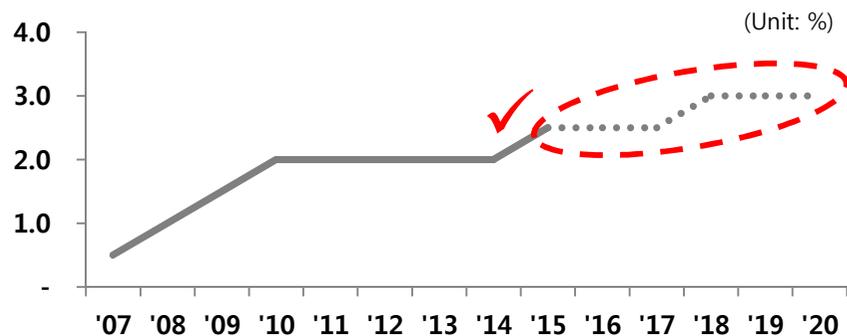
※ Application

- Food / Cosmetic Container, Electronic devices, etc.

Performance



Mixing Ratio Trend



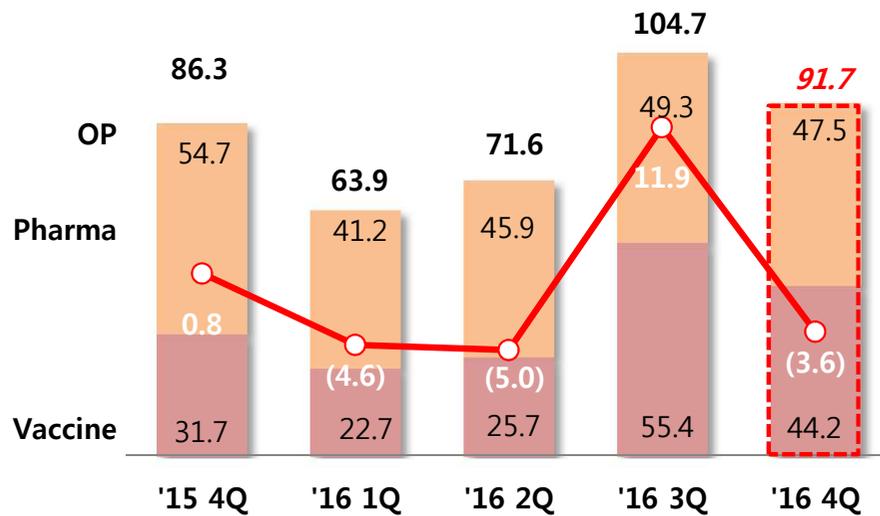
Review/Guidance

- '16 4Q
 - Decrease in biodiesel sales due to changes in the annual mix ratio regulation (month -> year)
 - Higher raw material prices due to winter seasonality
 - Sales fluctuation in Bio Heavy oil sales due to power plant supply bids
- '17 1Q Outlook
 - Expect solid market demand (mix ratio 2.5%)
 - Continuous effort to improve cost competitiveness by developing lower raw materials

Performance

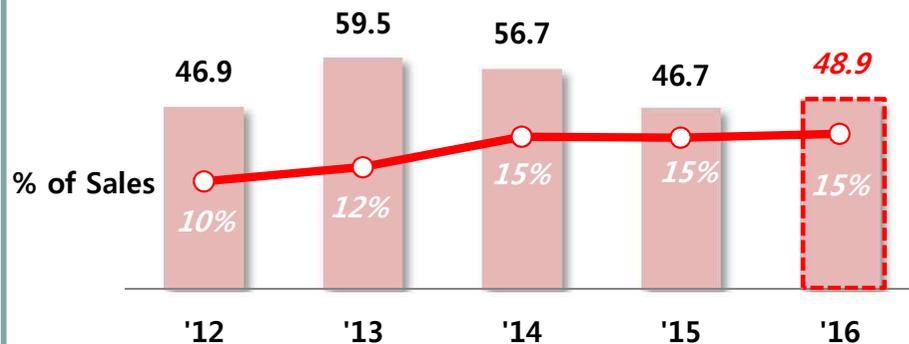
Quarterly Review

(Unit: KRW bn)



R&D cost

(Unit: KRW bn)



Review/Guidance

• '16 4Q

- Operating Profit decreased YoY, caused by an unfavorable basis of comparison('15.4Q benefited from KRW 5.9 bn of NBP601 milestone payments)
- Sales and Operating Profit increased YoY without the one-off benefit in '15.4Q
- Operating Profit turned into a deficit QoQ, due to fixed costs of L House and Vaccine R&D expenses

• '17 1Q Outlook

- Expecting running royalty payments of AFSTYLA(NBP601) sales from CSL
- Approval of Zoster vaccine is currently in process. Expected to be commercialized in 2017.1H
- Continuous cost reduction efforts
- R&D expenses will remain around our target level (15% of sales)

II. Business Divisions_LS Biz.

2) Hemophilia Therapy(NBP601)

☐ NBP601

• Overview

- The First and Only Recombinant Factor VIII Single Chain Therapy for Hemophilia A
- Long-lasting protection (twice weekly prophylaxis)

• License Out

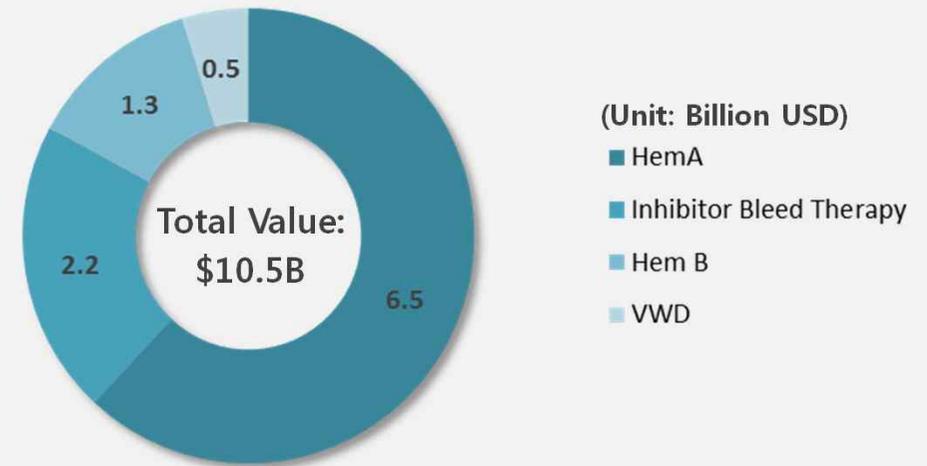
- Licensed out to CSL in 2009 at preclinical stage and accomplished global clinical test
- Adult and pediatric indications approved in the US in May 2016, approved by the EU EMA in Jan. 2017, being reviewed by regulatory agencies in other markets around the world, including Switzerland and Australia
- Running Royalty expected in 2017

• About CSL



(Ref : CSL Annual Report)

☐ Hemophilia Global Market



※ Market shifting to 4th generation product

Product name	Stage	Maker
AFSTYLA(NBP601)	Approved	CSL Behring
Eloctate	Approved	Biogen Idec
N8-GP	Clinical II/III	Novo Nordisk
BAX 855	Approved	Baxter
BAY 94-9027	Clinical I	Bayer

□ Collaboration with Sanofi Pasteur

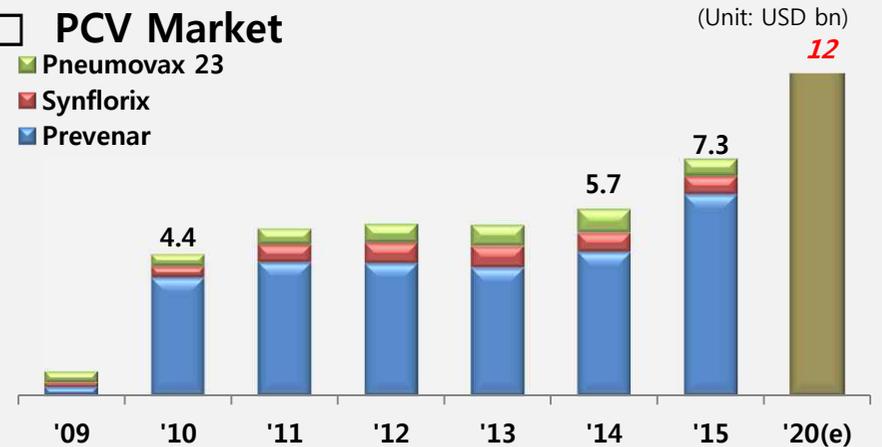


- **Strategic business alliance for co-development of next generation innovative pneumococcal vaccine**
- **Collaboration** on R&D, Clinical, Production, Commercialization
- **Production** in An-dong vaccine facility in Korea for global distribution

Monumental event which reflects the global competitiveness of the technology & Infrastructure of SK Chemicals

□ PCV Market

- Pneumovax 23
- Synflorix
- Prevenar



World pneumococcal vaccine market (bn USD), Source: Pfizer, Merck, GSK

□ Constantly growing market

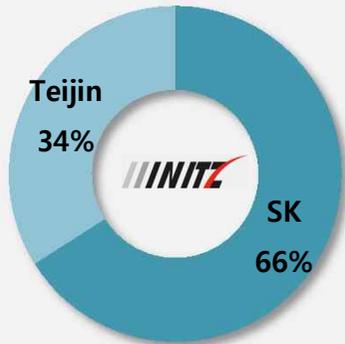
- Market demand is boosted by aging population and expected to grow to \$12.1B by 2020
- Considering the Prevenar case, we expect meaningful market share after launching SKYPAC

A Quantum jump & Opportunity to become a global vaccine company

III. Subsidiaries



□ Governance Structure



- JV for PPS production
- Capacity: 12,000 ton/year
- Stock Capitalization
 - SK : 62 bn KRW
 - Teijin : 45bn KRW

□ Polyphenylene Sulfide (PPS)

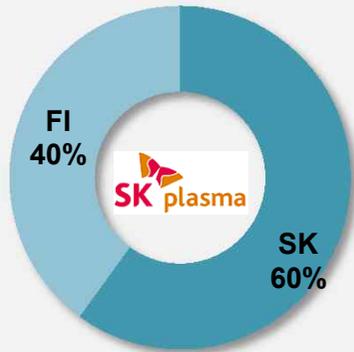
- Excellence in thermal and chemical resistance
- Good electrical insulating properties
- Dimensional stability to 260°C
- Automotive lightweight materials
- Competitiveness cost + Eco-friendly process
 - **Cost 25% ↓, Non-Chlorine process**
- Securing stable sales market through "Pre-marketing"

□ Applications

- Electricity**
 - CD/DVD Pick up, Bobbin, Connectors
- Automotive**
 - Pump impeller, Generator parts, etc
- Film**
 - Bag filter, High-performance fiber



□ Governance Structure



- Spin-off from SK Chemicals in '15 and attracted financial investment(KRW 100 bn)
- Plasma derived products
- SK 60% : FI 40%

□ Business Outline

- New plant is under construction (600kl/year)
 - Value engineering applied to maximize cost efficiency and bio-safety
 - Located in Andong city, Korea
 - Commercial operation from third quarter of 2018
- Strict government regulation (KFDA, GMP) as a high barrier to entry
- Duopoly market in Korea
- Emerging market is continuously growing

□ Guidance

- Expanding product line to construct solid product portfolio
- Focus and expand into overseas markets, especially emerging markets

□ Product Portfolio

Product	Ingredient	Indication
Albumin	Albumin	▪ Neutralize of poison
AT-III	AT-III	▪ Anti thrombosis
Liv-Gamma	IVIG	▪ Immunoglobulin
Tetabulin	TIG	▪ Tetanus Therapy
Factor VIII	Factor VIII	▪ Hemophilia A Therapy
Hep.B IG	Hep.B IG (HBIG)	▪ Hepatitis B Therapy

IV. Mission & Vision



IV. Mission & Vision

□ Mission

*"We care for the future
Healthcare, Earthcare"*

We enhance human health
and protect the environment

□ Vision

**"To become a global leader in the industry
of *eco-friendly materials*
and *total healthcare solutions*"**

Life Science

**"Global Total Healthcare
Solution Provider"**

- Premium Vaccines
- Plasma Derivatives
- Pharmaceuticals

Green Chemicals

**"Eco-friendly Material
Solution Provider"**

- Co-polyester
- Bio Fuel
- PPS Resins

V. Summary



V. Summary

1) Past Five Years

2000 ~

Restructuring & Investment

- '00 : Established HUVIS(Spin off of polyester business)
- '05 : M&A SK/Dongshin Pharm
Spin off of SK Petrochemicals
- '08 : Sold off SK Petrochemicals

2008 ~

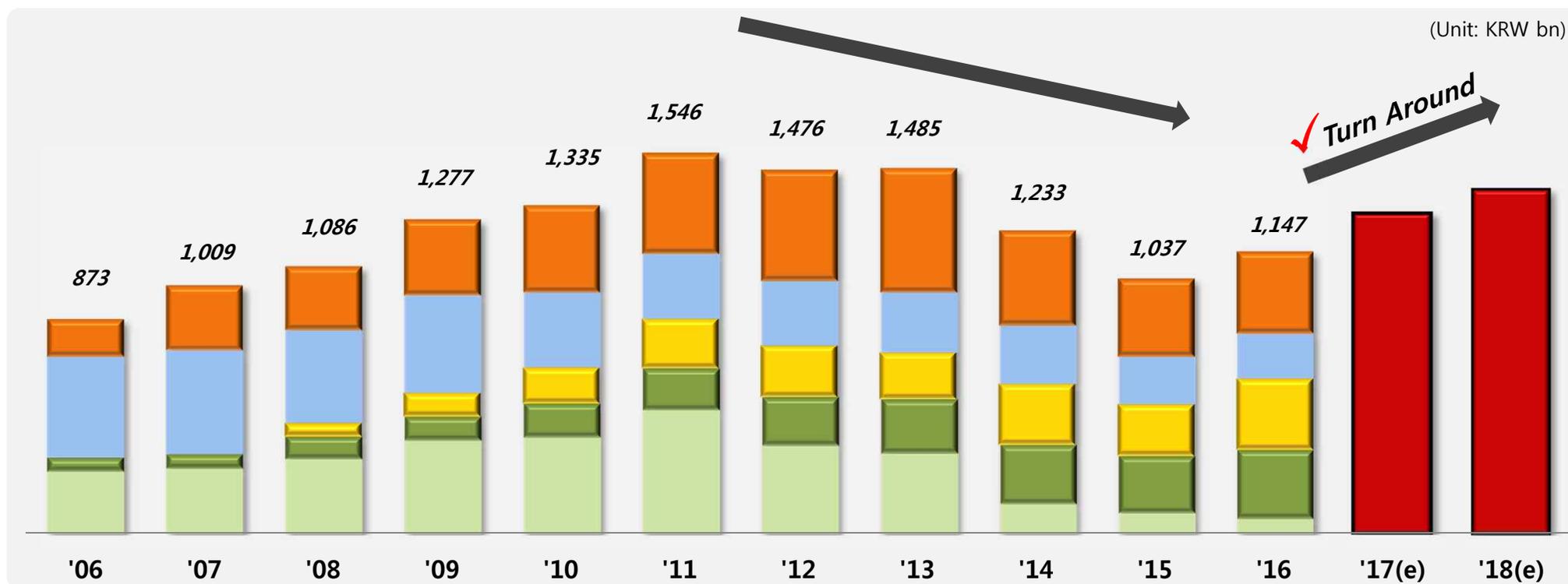
Accelerating Investment

- '08 : Initiating Vaccine development/
Bio diesel business
- '09 : NBP601 L/O (to CSL)
- '12 : PETG capacity increasing
- '14 : L House acquired KGMP(Korea
Good Manufacturing Practice)

2015~

Realization of Investment

- '14 : Next PCV collaboration (w/ Sanofi)
- '15 : Cell flu trivalent (Korea 1st)
- '16 : Cell flu quadrivalent (World's 1st)
The US FDA approval of NBP601
- '17 : EU EMA approval of NBP601



End of Documents