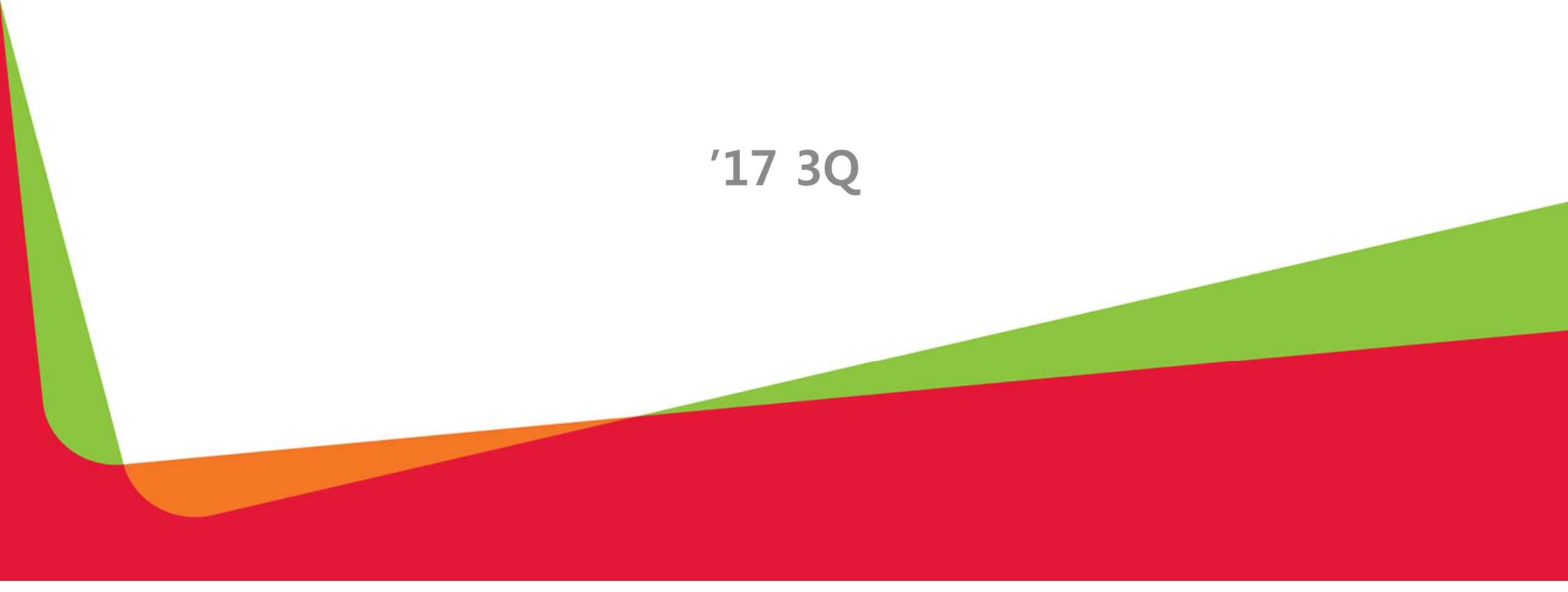


SK Chemicals Investor Relations

'17 3Q

A decorative graphic at the bottom of the slide consists of overlapping, semi-transparent shapes in red, orange, and green. The red shape is the largest and forms the base, with an orange shape on top of it in the lower-left area, and a green shape on top of the orange one, extending towards the right.

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.

Contents

I. Overview

II. Business Divisions

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

III. Subsidiaries

IV. Mission & Vision

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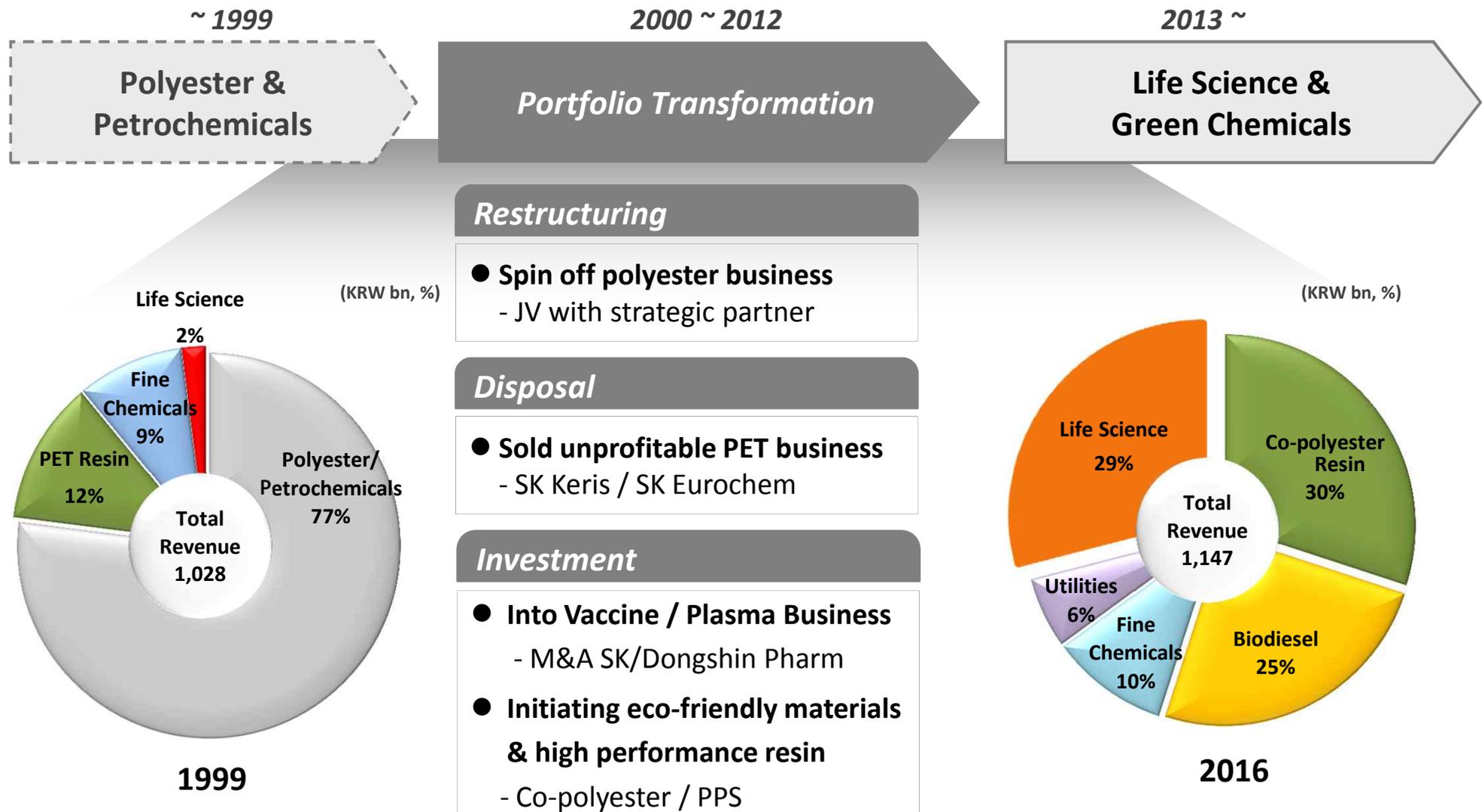
I. Overview



I. Overview

1) Portfolio Transformation

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



I. Overview

2) Restructuring and Investment

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

Restructuring <small>(Unit: KRW bn)</small>		
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

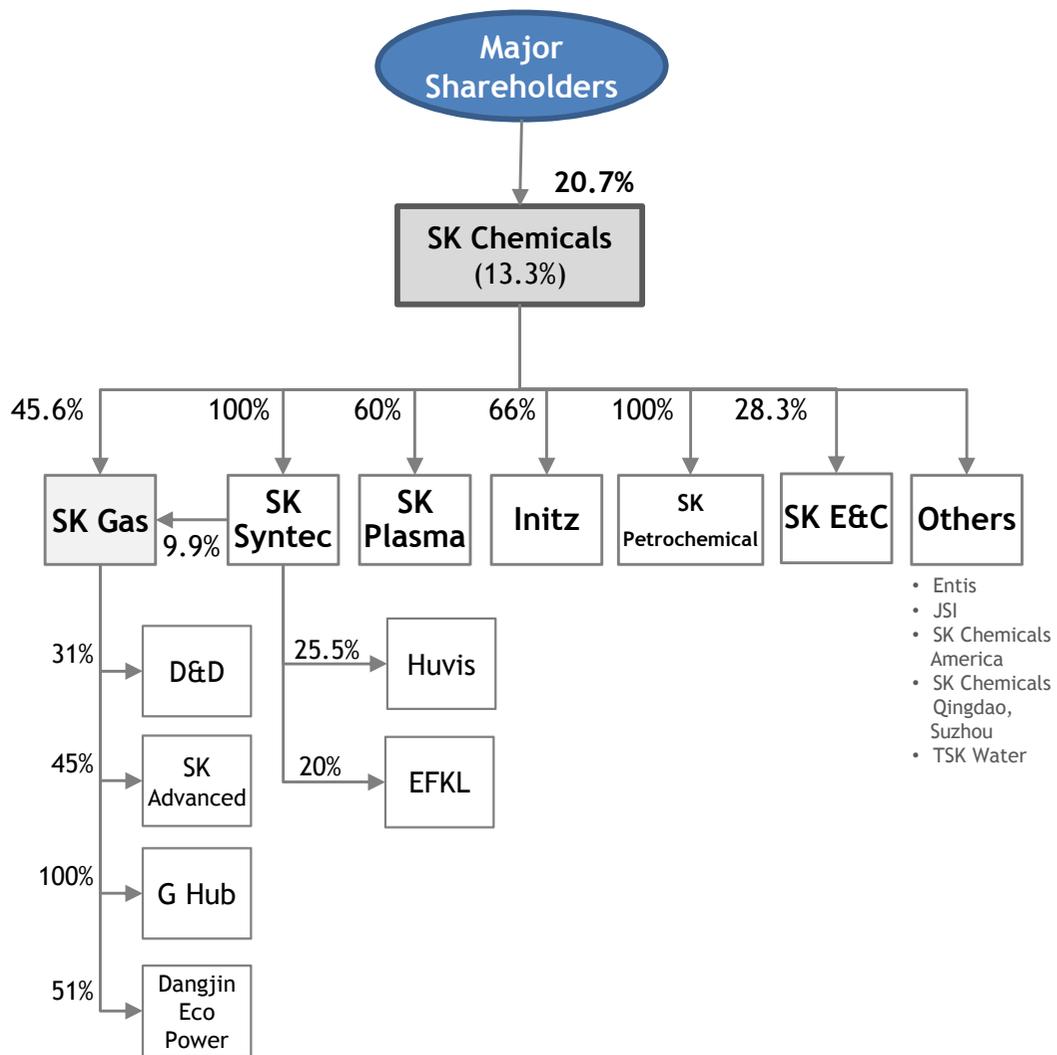
Investment <small>(Unit: KRW bn)</small>		
Biz.	Amount	Sales('16)
• Co-polyester	154 ¹⁾	279
- Expansion of Co-polyester		
• Initiate Bio diesel business	31	289
• Accelerate Pharma Business	400	332
- M&A SK / Dongshin Pharm.		
- In-house Vaccine development		
• Initiate PPS business	69 ²⁾	-
Total Amount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

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

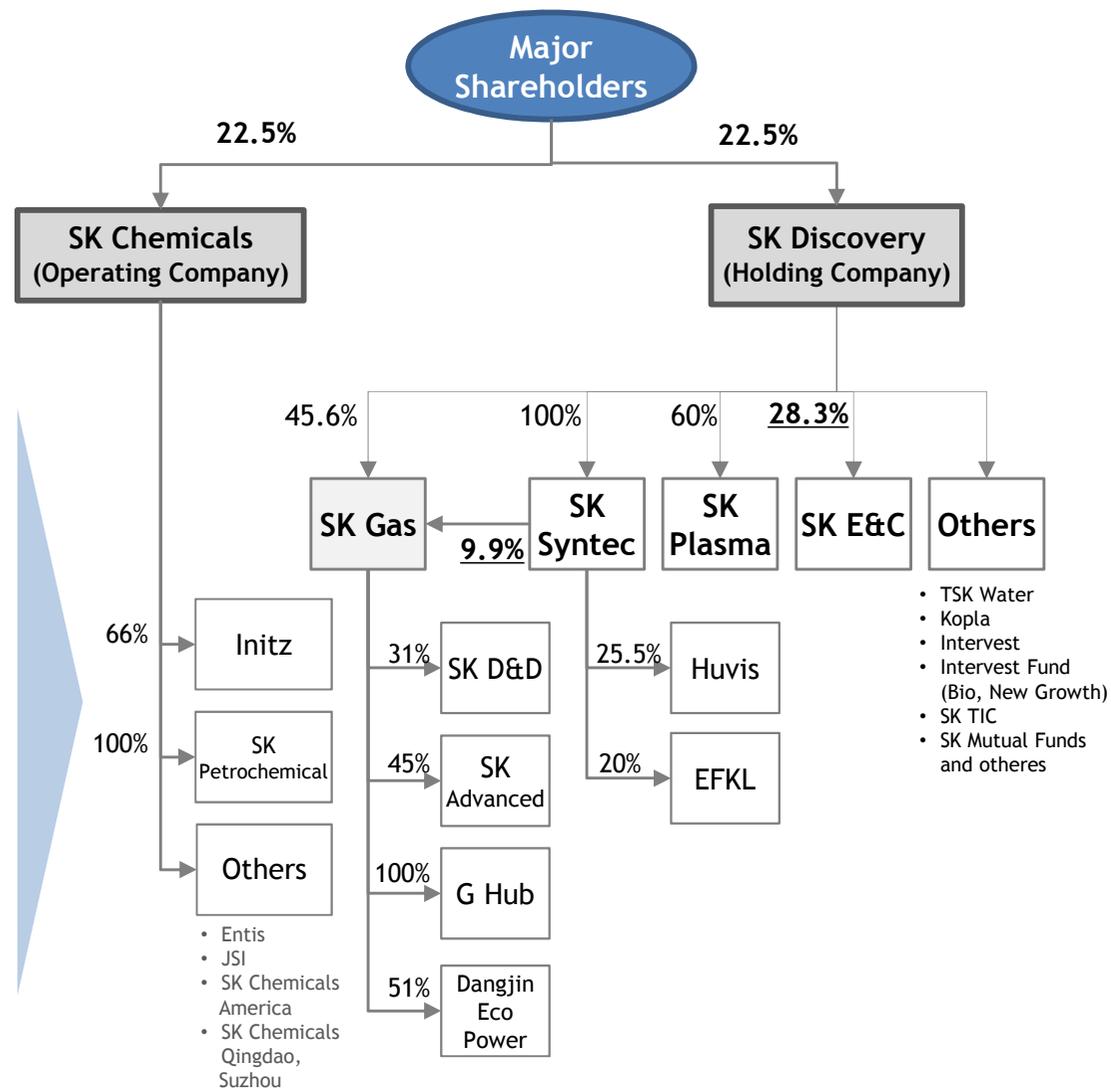
Since the establishment of Sunkyung Textiles in 1969, SK Chemicals has grown through continuous change and innovation into a chemical and life sciences enterprise representing South Korea.



Before spin-off



After spin-off



※ Based on financial results for '17. 1Q

II. Business Divisions

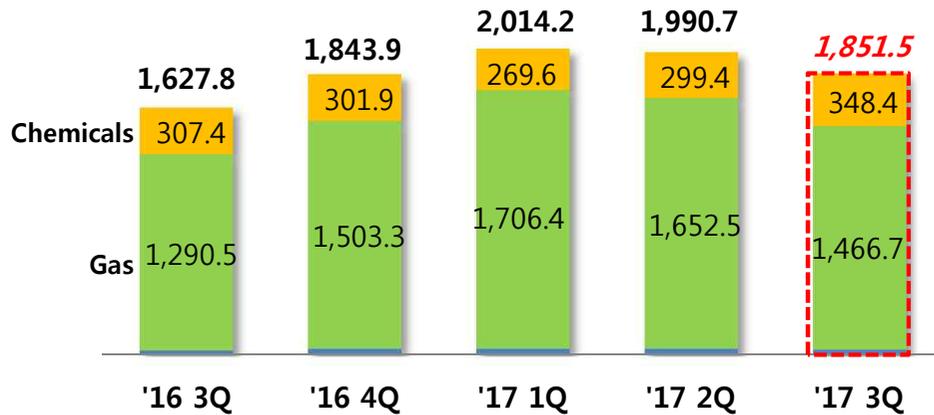


II. Business Divisions

1) Performance Review (Consolidated)

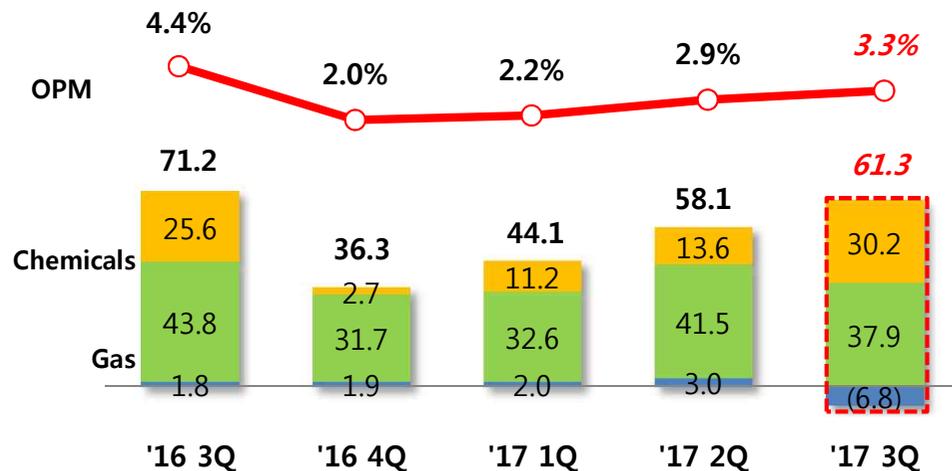
Sales

(Unit: KRW bn)



Operating Profit

(Unit: KRW bn)



□ Sales

- SK Chemical : Sales growth YoY, led by strong demand & operation of new co-polyester line
- SK Gas : Sales growth YoY, from increase in contract prices (CP)
→ **Consolidated sales increased by 14% YoY**

□ Operating Profit

- SK Chemical : Operating profit increased by 18% YoY, driven by solid sales of co-polyester, cost saving efforts in LS Biz.
- SK Gas : Operating Profit decreased YoY, due to sluggish LPG trading earnings
→ **Consolidated operating profit decreased by 14% YoY**

□ Earnings Before Taxes/Net Profit

- EBT increased by 11% YoY, supported by rise in equity method gains

(Unit: KRW bn, %)	'16 3Q	'17 2Q	'17 3Q	YoY	QoQ
Sales	1,627.8	1,990.7	1,851.5	+13.7%	△7.0%
OP	71.2	58.2	61.3	△13.9%	+5.4%
OPM	4.4%	2.9%	3.3%	△1.1%p	+0.4%
EBT	74.5	142.3	82.7	+11.1%	△41.9%
NP	56.8	76.9	58.7	+3.4%	△23.7%

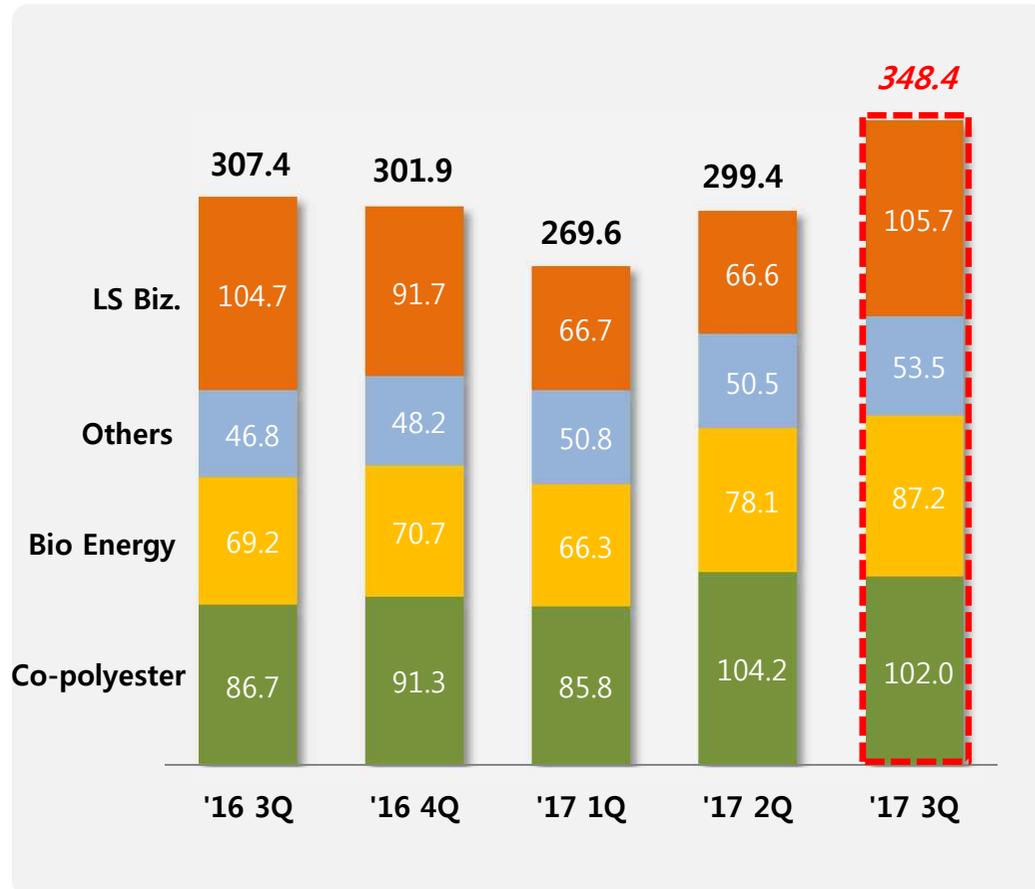
II. Business Divisions

2) Performance Review (Non-consolidated)

- Sales totaled KRW 348.4 billion, an increase of 13% YoY, led by sales growth across all business divisions including growth from the new co-polyester line and flu vaccine sales
- Despite of negative earnings growth of bio energy, operating profit totaled KRW 30.2 billion, an increase of 18% YoY, driven by higher sales of co-polyester products and flu vaccine

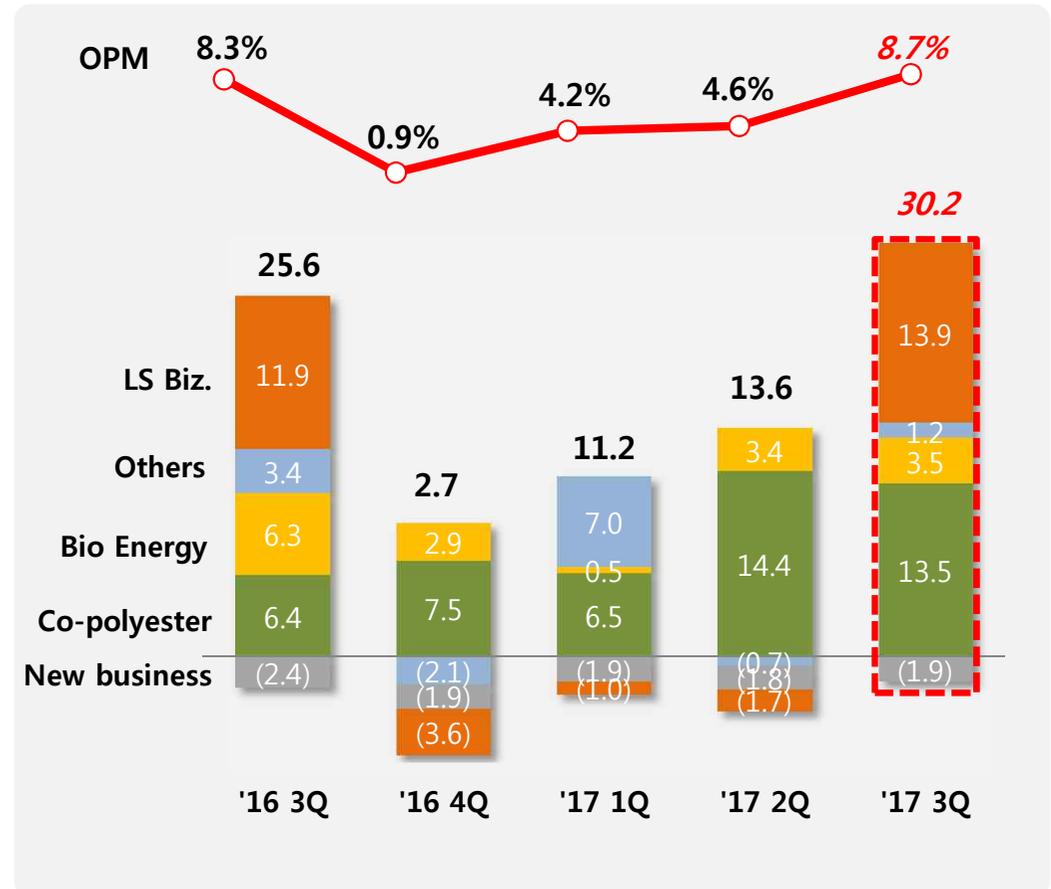
□ Sales

(Unit: KRW bn)

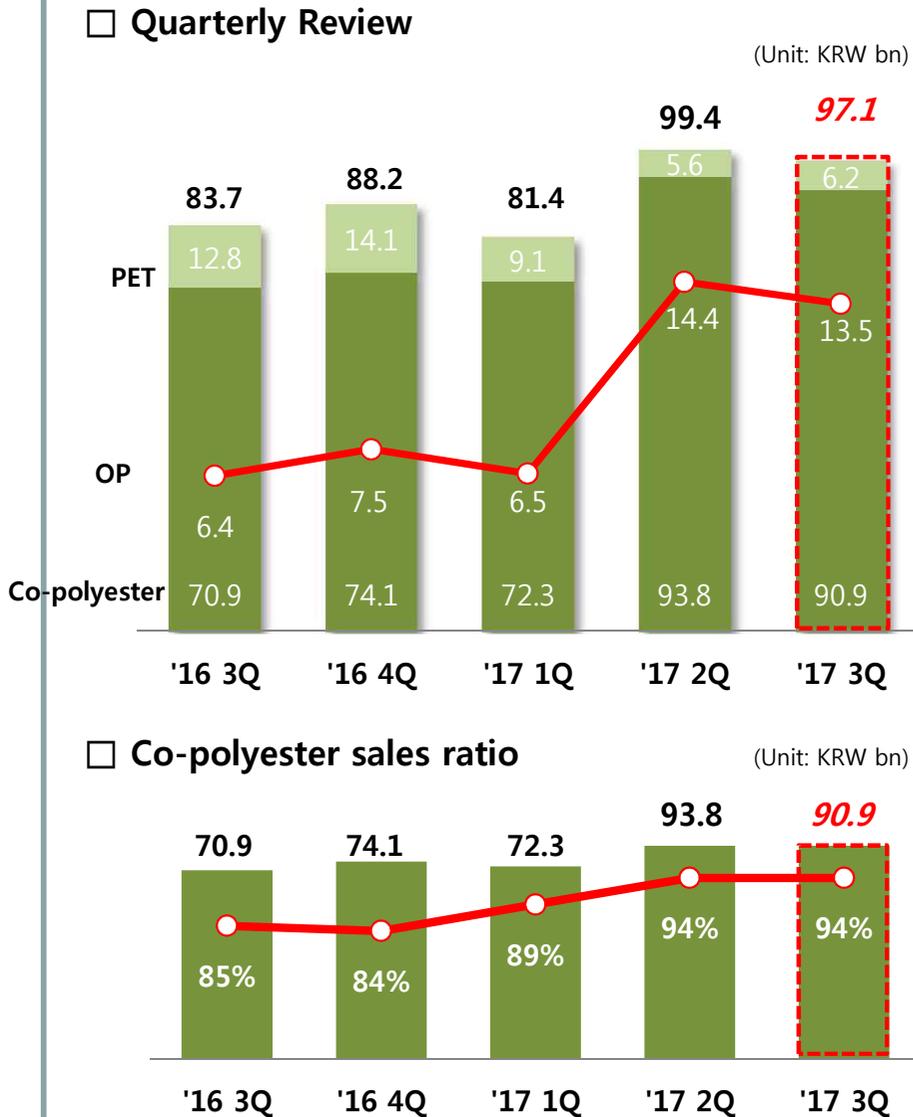


□ Operating Profit

(Unit: KRW bn)



Performance



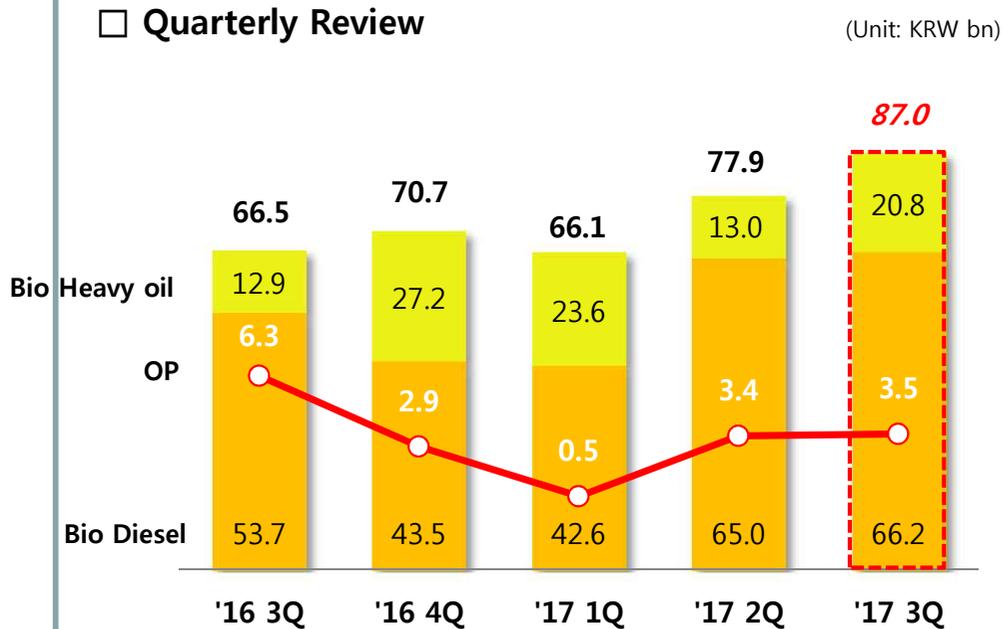
Review/Guidance

- '17 3Q
 - Co-polyester sales increased by 28% YoY
 - Operating profit increased by 111% YoY, due to operating leverage seen from the new co-polyester production line and low base effect.
 - Sales and operating profit decreased slightly QoQ, due to reduced number of operating days and inventory build-up.
 - Solid demand from China (Cosmetic containers) and Europe (Special film)
 - *Operating leverage from higher sales of co-polyester continues*
- '17 4Q Outlook
 - Seasonal factors (inventory adjustments of customers and others) for year-end sales
 - Continued restructuring on PET business (annual sales: KRW 20~30 bil.)

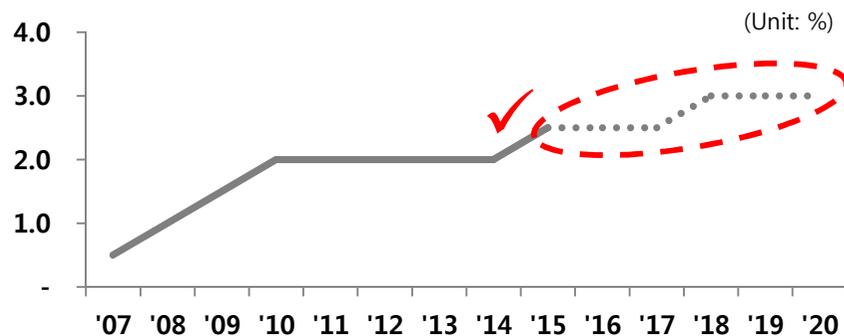
※ Application

- Food / Cosmetic Container, Electronic devices, etc.

Performance



Mixing Ratio Trend



Review/Guidance

- '17 3Q
 - Biodiesel sales increased by 23% YoY
 - Operating profit decreased YoY, primarily as a result of poor spread margin between product and raw materials
 - Spread has improved slightly since the low point of 2Q
- '17 4Q Outlook
 - Entering off season(winter)
 - Continuous efforts to improve cost competitiveness by developing low cost raw materials

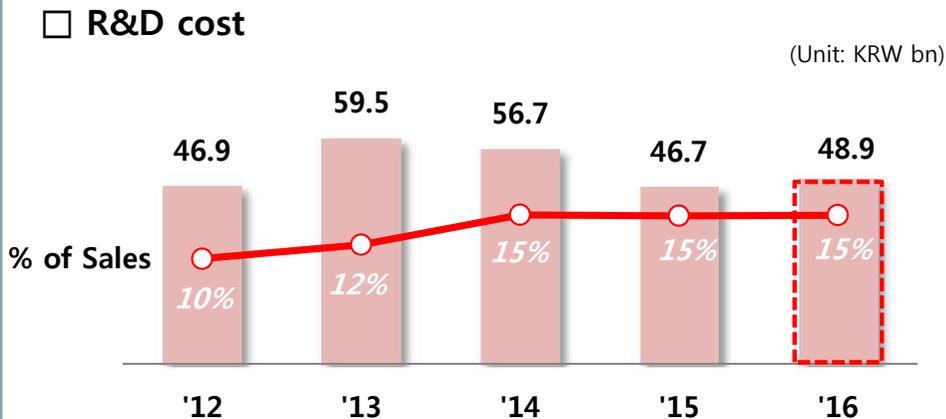
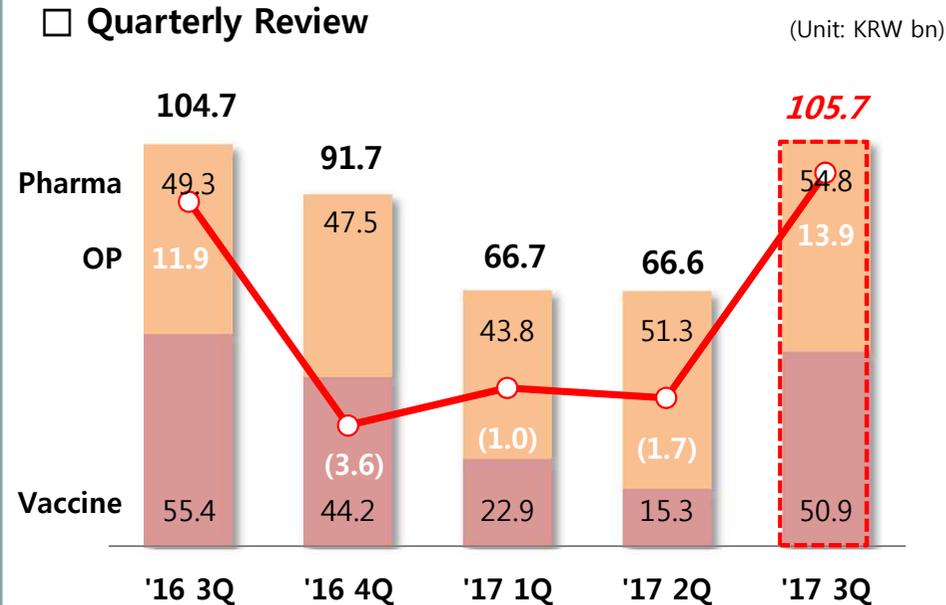
※ The mix ratio is set to increase from 2018

- Current 2.5% → 3.0%

II. Business Divisions_LS Biz.

1) Pharma / Vaccine

Performance



Review/Guidance

- **'17 3Q**
 - Improved sales of Pharma and flu vaccine offset negative impact from termination of Gardasil distribution contract.
 - Operating profit increased, supported by cost savings, production efficiency, and increased Pharma sales
 - On September 29th 2017, obtained the Korean Marketing Authorization of Zoster Vaccine 'SKYZOSTER'
- **'17 4Q Outlook**
 - 'SKYZOSTER' is expected to be commercialized in December 2017
 - A gradual increase in running royalty payments from CSL for the sales of AFSTYLA(NBP601)
 - Continuous cost saving efforts
 - R&D expenses will remain around our target level (15% of sales)

II. Business Divisions_LS Biz.

2) Herpes Zoster Vaccine (SKYZOSTER)

□ About Herpes Zoster (Shingles)

• What is Herpes Zoster (Shingles)?

- Herpes Zoster is a viral disease due to a reactivation of varicella zoster virus (VZV) within a person's body.^[1] Chickenpox is caused by the initial infection with the same varicella zoster virus, but once chickenpox has resolved, the virus may remain inactive in nerve cells.^[1]
- The number of new cases per year ranges from 1.2–3.4 per 1,000 person-years among healthy individuals to 3.9–11.8 per 1,000 person-years among those older than 65 years of age of the US population^[2]

[1] Hamborsky J (2015). *Epidemiology and Prevention of Vaccine-Preventable Diseases* (13 ed.). Washington D.C. Public Health Foundation. pp. 353–74. Archived from the original on 2017-01-20.

[2] Dworkin RH, Johnson RW, Breuer J, et al. (2007). "Recommendations for the management of herpes zoster". *Clin. Infect. Dis.* 44 Suppl 1: S1–26.

• Global Market

- Global Sales \$685M in 2016¹⁾
- Zoster Vaccine: 'ZOSTAVAX' developed by Merck in 2006 is the only zoster vaccine currently approved for human use
- No. of domestic patients in 2016: 691,339 ²⁾

1) Datamonitor

2) Health Insurance Review & Assessment Service



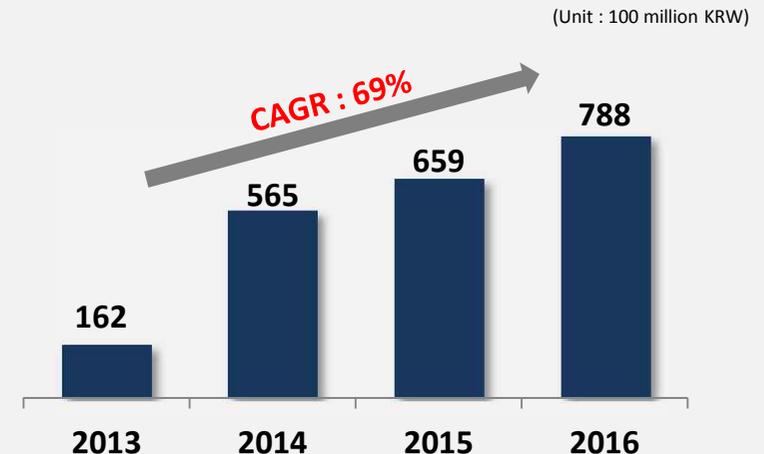
* Picture: The blistering Shingles rash on face, body

□ SK Chemicals' Zoster Vaccine

- Indications: Indicated for prevention of zoster (shingles) in individuals 50 years of age and older
- Dosage: Given as a single dose by injection under the skin
- Dosage Forms: Single dose vial (reconstituted to a suspension)

- ✓ **Developed the world's second, Korea's first Zoster vaccine**
- ✓ **Successful commercialization of our premium vaccine within this year**
- ✓ **Act as a catalyst that can accelerate Vaccine business earnings turnaround**

※ Domestic market size for Zoster Vaccine



ref. IMS Health Korea

II. Business Divisions_LS Biz.

3) Hemophilia Therapy(NBP601)

☐ NBP601

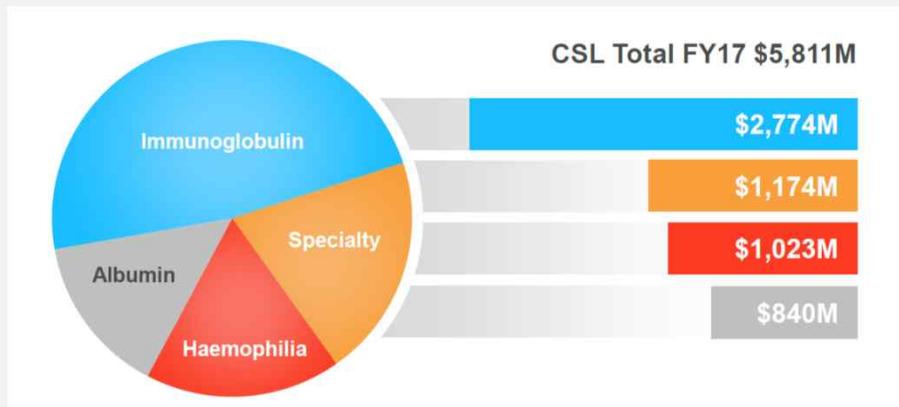
• Overview

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

• License Out

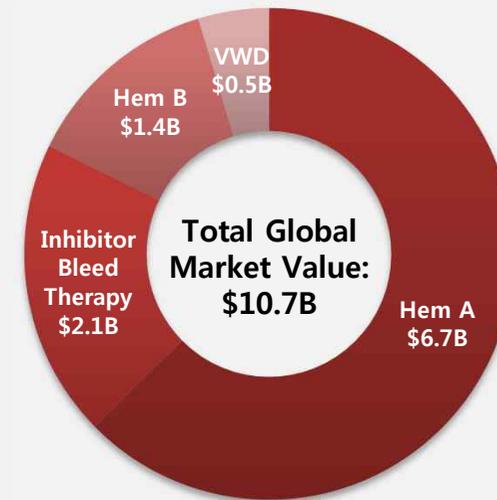
- Licensed out to CSL in 2009 at preclinical stage and accomplished global clinical test
- Adult and pediatric indications approved in the US in May 2016, approved by the EU EMA in Jan. 2017, being reviewed by regulatory agencies in other markets around the world, including Switzerland and Australia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

• About CSL



(Ref : CSL Presentation)

☐ Hemophilia Global Market



(Ref : CSL Presentation)

※ 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

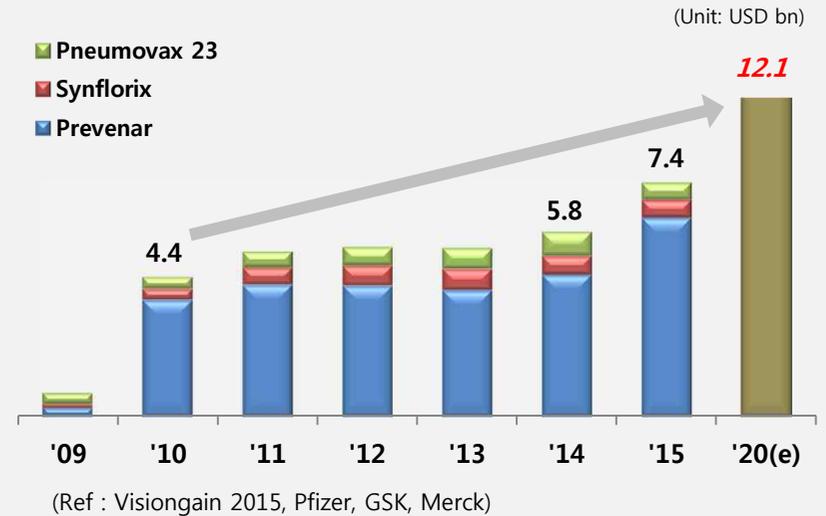
□ Collaboration with Sanofi Pasteur



- Strategic business alliance for co-development of "Best in Class" 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



□ A constantly growing market

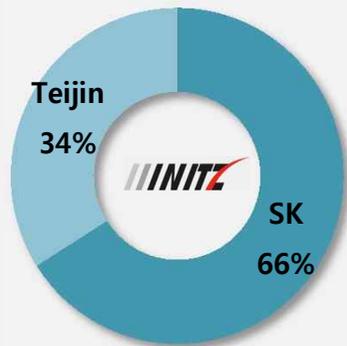
- Market demand is boosted by aging population and expected to grow to \$12.1B by 2020
- Considering the Prevenar case, we expect meaningful market share after launching SKYPAC

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
- Commercial production started in 1Q17.

□ Polyphenylene Sulfide (PPS)

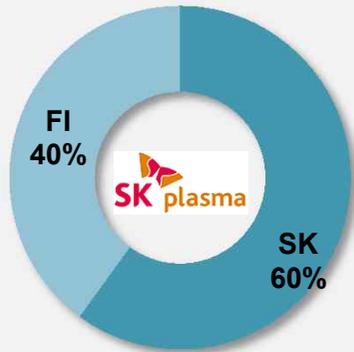
- Excellence in thermal and chemical resistance
- Good electrical insulating properties
- Dimensional stability to 260°C
- Automotive lightweight materials
- Competitiveness cost + Eco-friendly process
 - **Cost 25% ↓, Non-Chlorine process**
- Securing stable sales market through "Pre-marketing"

□ 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. Summary



IV. 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 ~

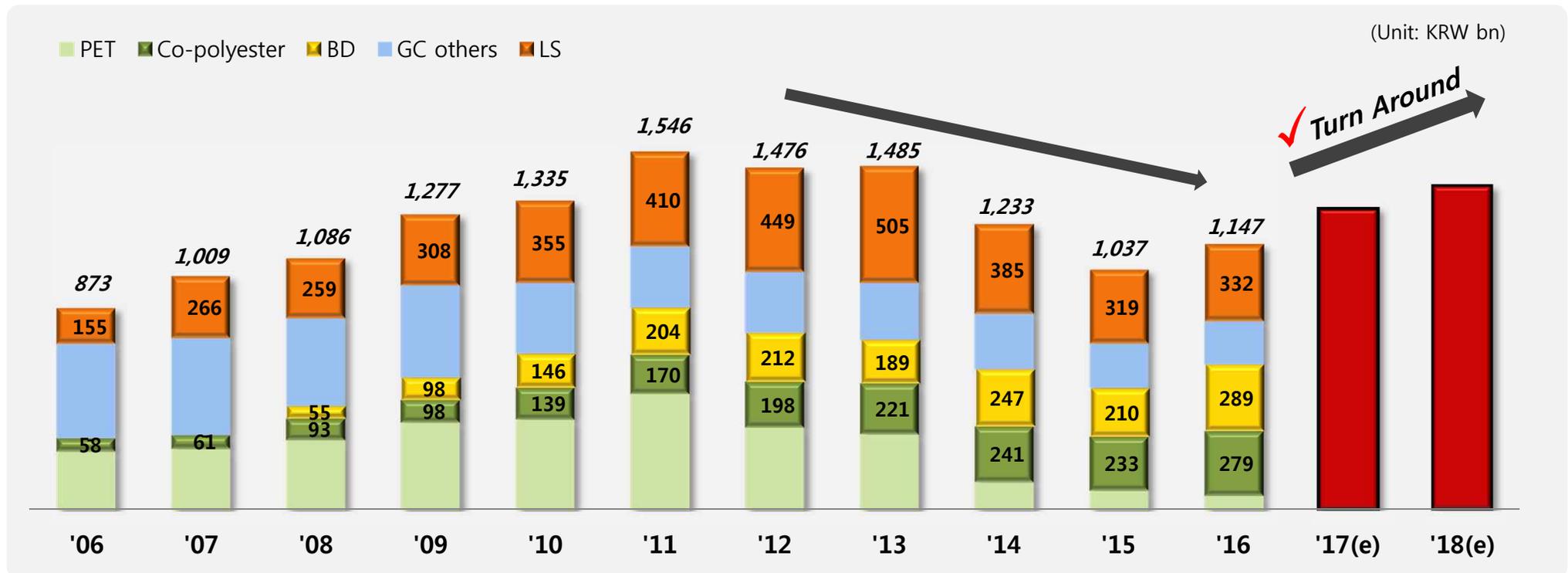
Accelerating Investment

- '08 : Initiating Vaccine development/
Bio diesel business
- '09 : NBP601 L/O (to CSL)
- '12 : Co-polyester 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



End of Documents