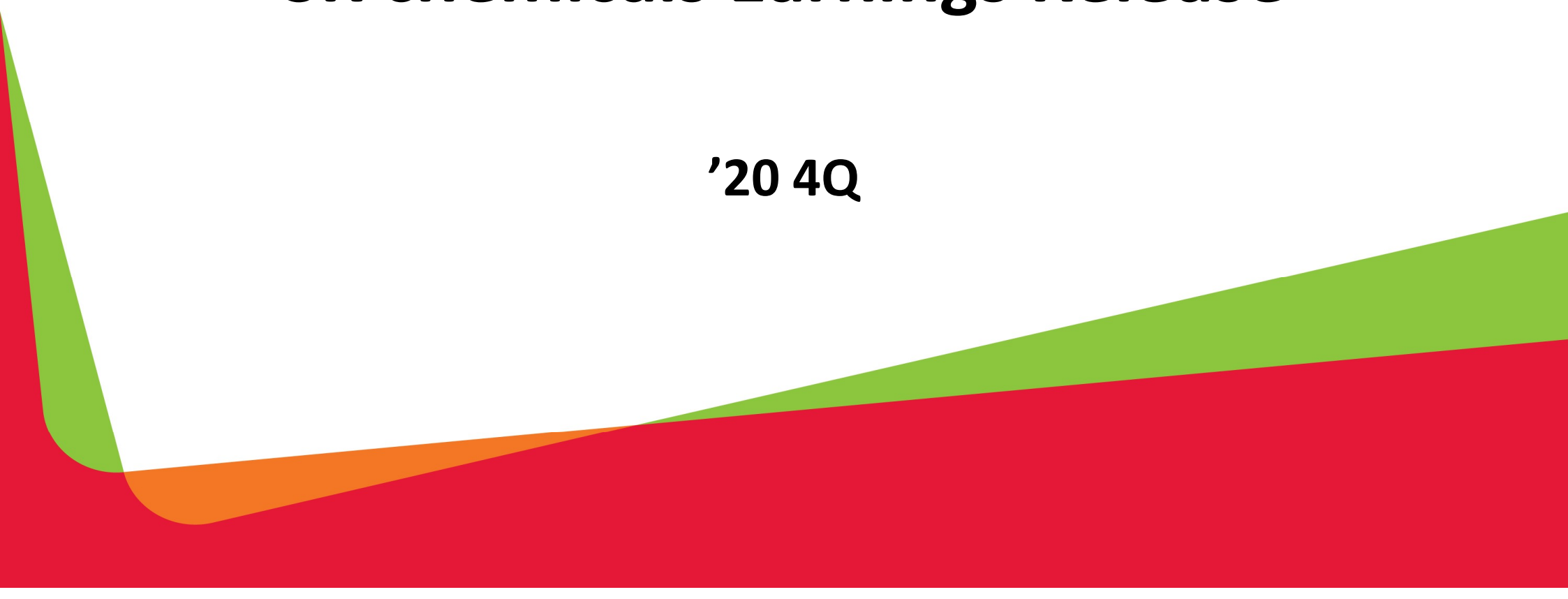


SK chemicals Earnings Release

'20 4Q



Disclaimer

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

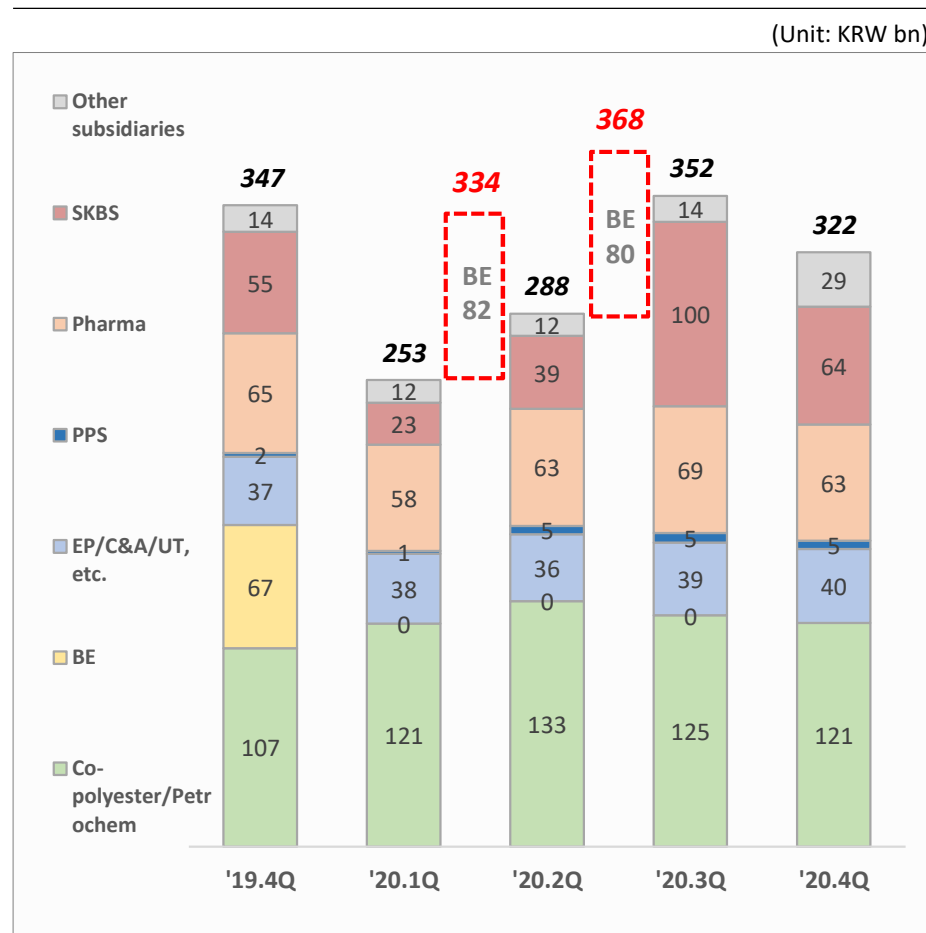
The forecasts contained herein are based on the Company's current business environment and strategy; and the actual results may differ from those in the forecasts as a result of certain uncertainties, such as changes in the Company's business environment and strategy in the future.



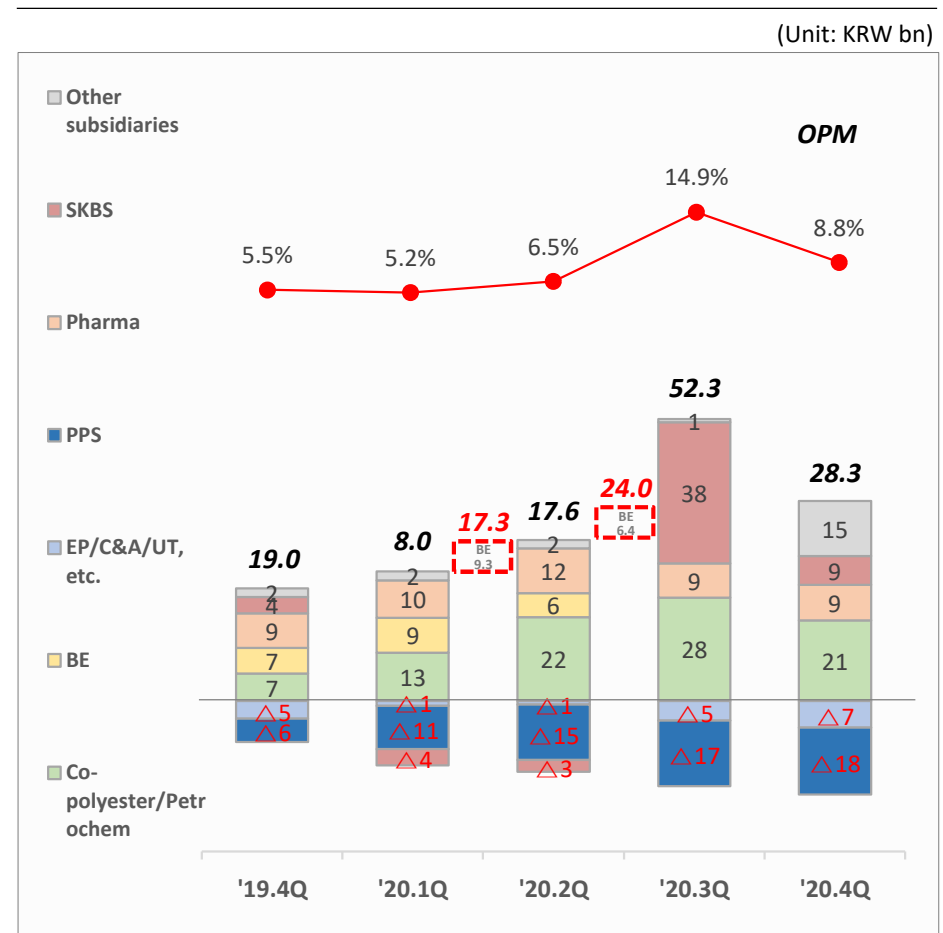
I. Performance Review (Consolidated)

- Total sales decreased $\triangle 7\%$ and operating profit increased $+48\%$ YoY.
- Given that exclusion of Bio Energy Biz* played major part in decreased sales, good numbers were achieved.
- Income before tax went into deficit due to assets impairment of PPS business.

Sales



Operating Profit

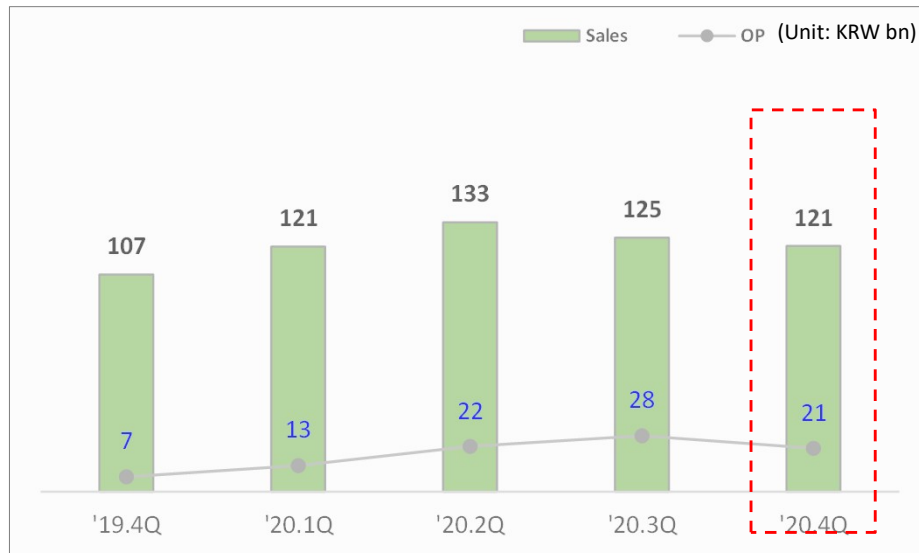


* Note: SK chemicals sold off Bio Energy division in May, 2020.

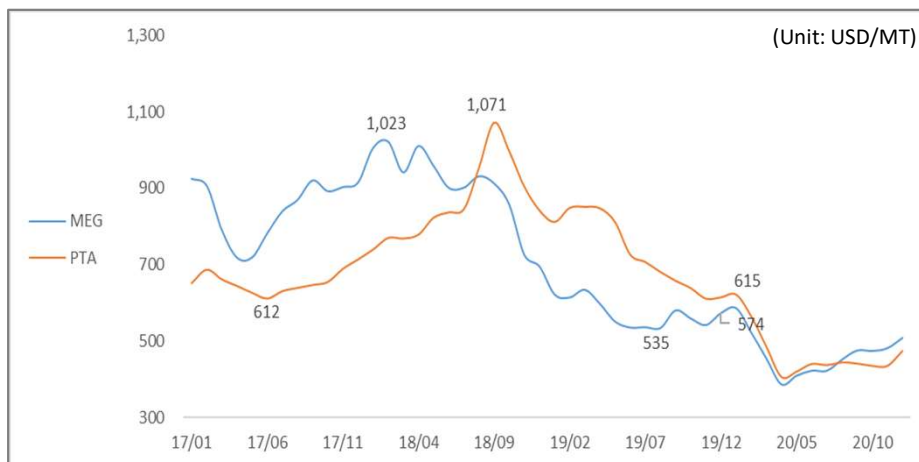
Total amount of deal was 385 KRW bn and the profit from disposal recognized in 2Q20 was 334 KRW bn.

Performance

Quarterly Review



PTA/MEG Price Trend



Review / Guidance

'20.4Q Performance Review

- Sales : + 13% YoY

- ① Sales volume increased year-on-year due to continuous development of new applications and expansion of customer base.

- OP : + 194% YoY

- ① Achieved significant profit growth year-on-year thanks to downward stabilization of raw material prices and the effect of operating leverage by increased volume.

'21. Outlook

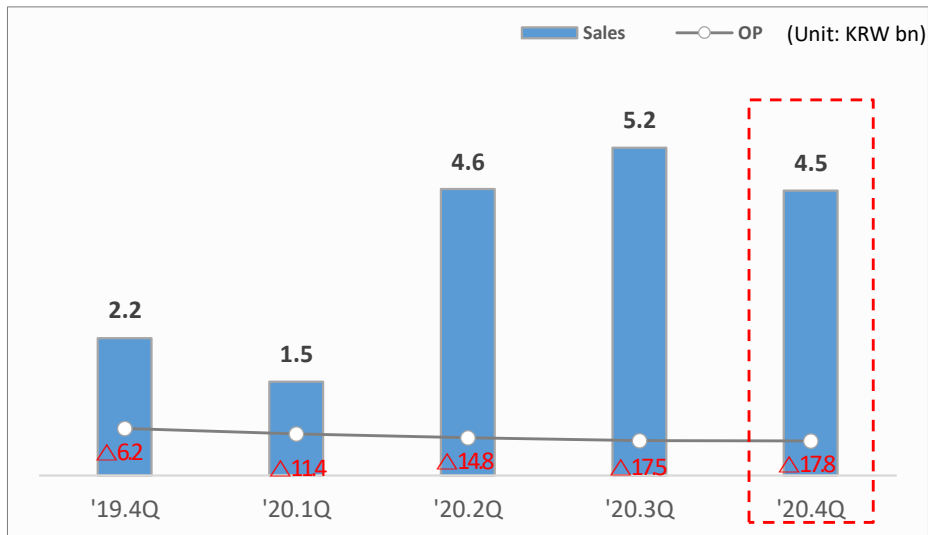
- Strong demand growth + capacity addition in 3Q21
- Increases in raw materials prices and shipping costs

※ Main application of Co-polyester

- Clear Sheet & Film, Food & Cosmetic Container, Electronic Devices, etc.

Performance

Quarterly Review



PPS: Physical properties & Main applications

- Excellent in thermal and chemical resistance
- Good electrical insulating properties
- Applications: Electricity, Automotive, Film etc.

DC- Converter



Inverter



Motor



Capacitor



Review / Guidance

'20.4Q Performance Review

- Sales : + 107% YoY

- ① Sales volume increased year-on-year thanks to new customers and increased order from existing customers.

- OP : deficit increased

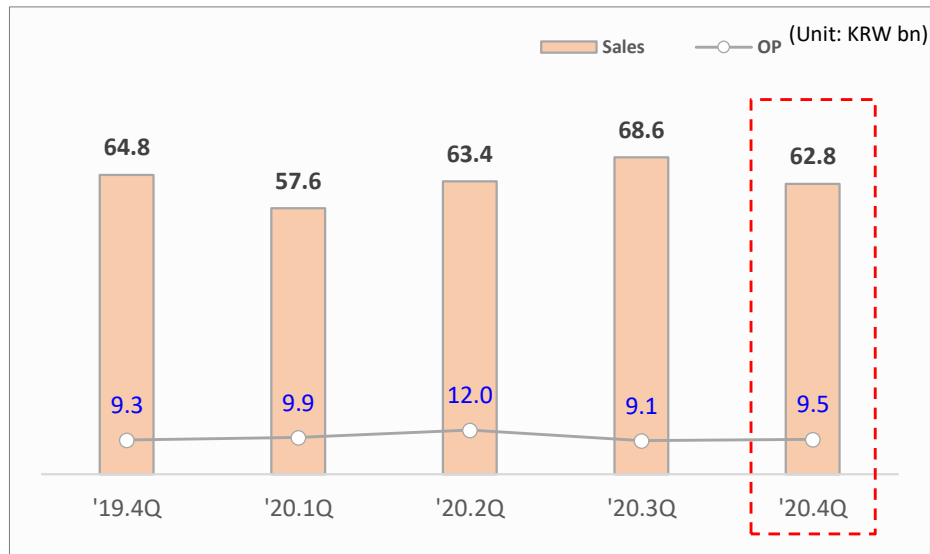
- ① Deficit widened due to poor sales of fibers and sales of off-grade products.

'21. Outlook

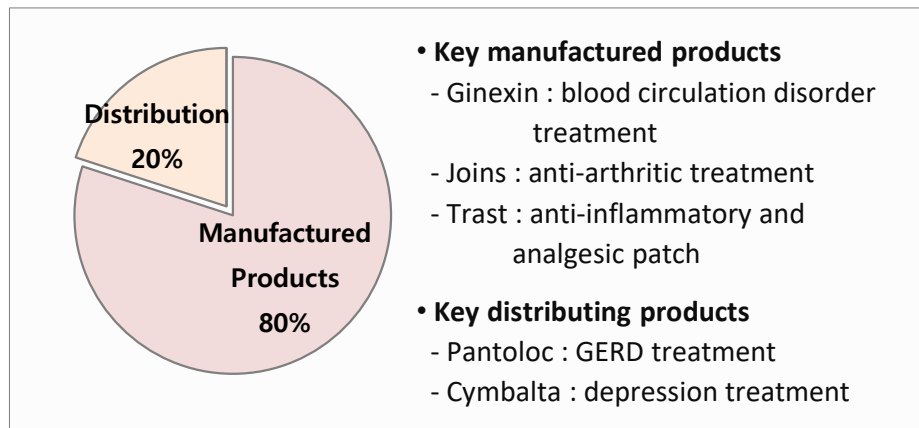
- Improved sales and profitability through expansion of customer base and reduction of off-grade inventories

Performance

Quarterly Review



Sales composition (as of 2020)



Review / Guidance

• '20.4Q Performance Review

- Sales : Δ 3% YoY

- ① Steady sales of existing product line.
- ② Most of the major product lines recorded solid sales.

- OP : + 2% yoy

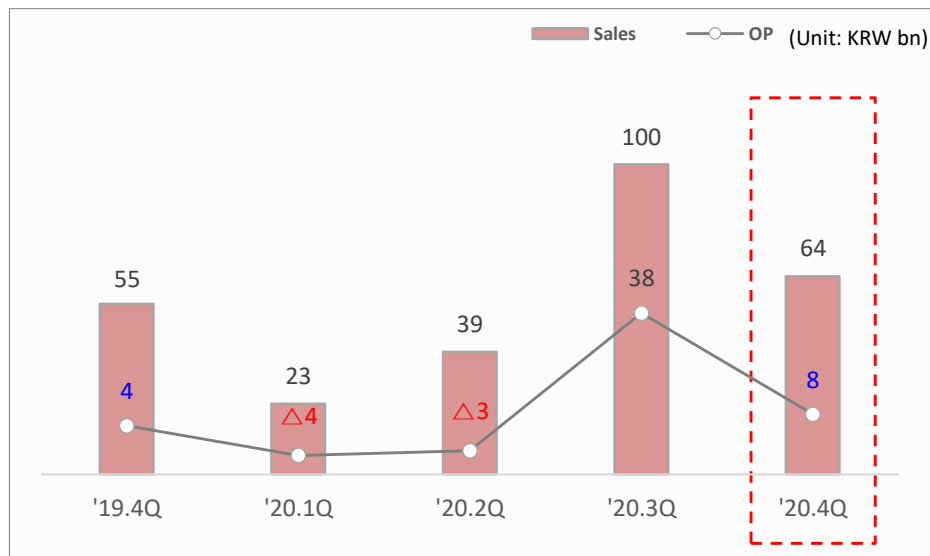
- ① OP increased thanks to reduced marketing costs and expenses efficiency.

• '21. Outlook

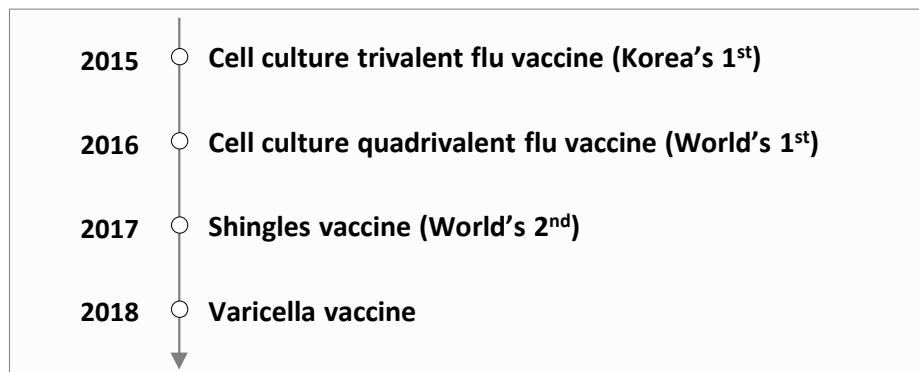
- Steady sales growth through strong sales of existing product line and increase in the number of new products.

Performance

Quarterly Review



Key product release



Review / Guidance

'20.4Q Performance Review

- Sales : + 16% YoY

- ① Increase in flu vaccine sales + revenues from CMO/CDMO-related business.
- ② Decrease in product sales supplied to government + reduced one-off milestone revenue

- OP : + 78% yoy

- ① Operation leverage by increased in sales of major products
- ② Reduced milestone revenue (SKYPAC phase 1 ended in 4Q19)

'21. Outlook

- Strong performance expected due to COVID-19 related revenues.

SK chemicals Company Introduction

'20 4Q



Contents

I. Overview

II. Business Divisions

- Green Chemicals Biz.
- Life Science Biz.

III. Summary

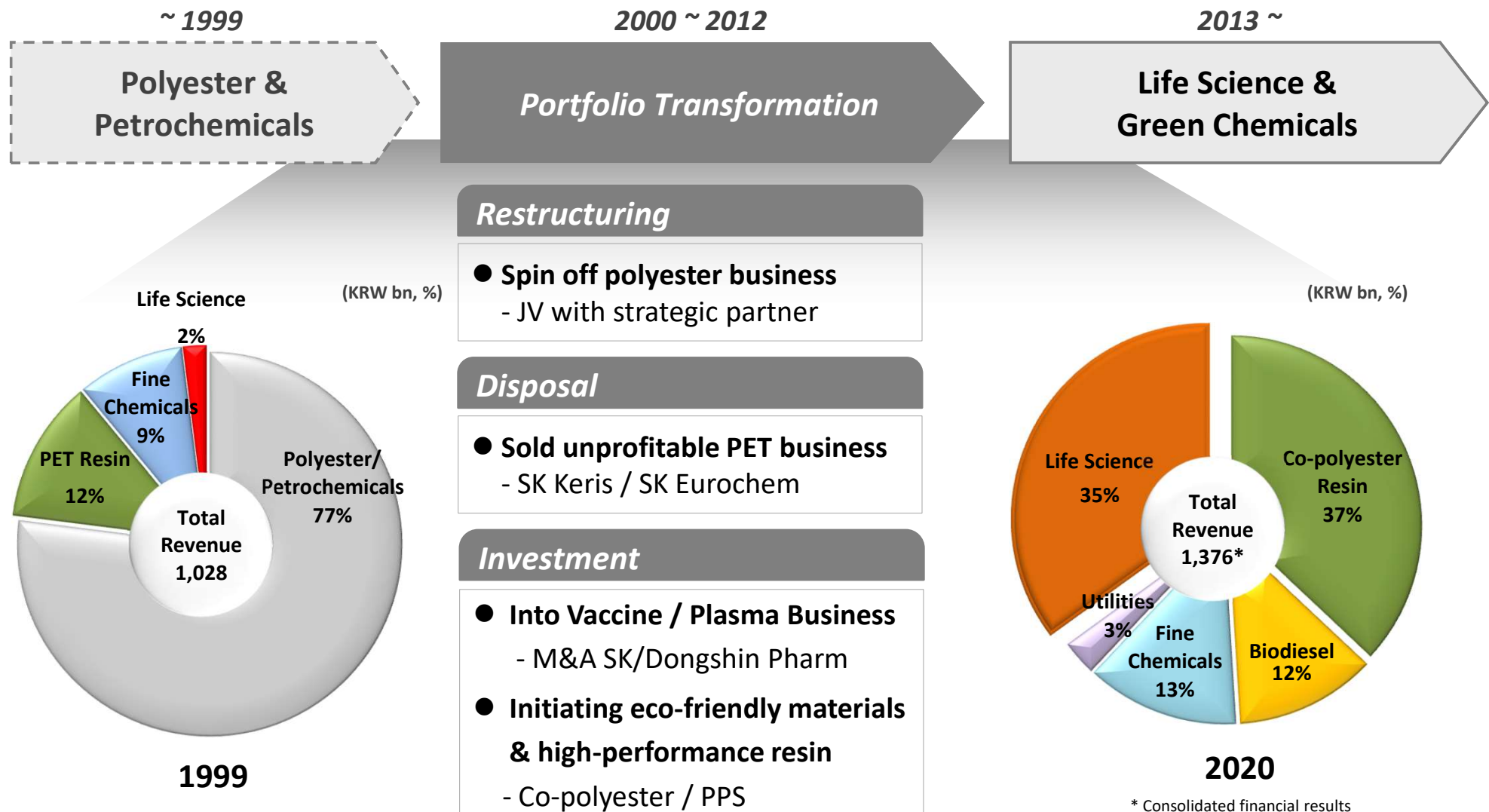
IV. Shareholder return

V. Appendix

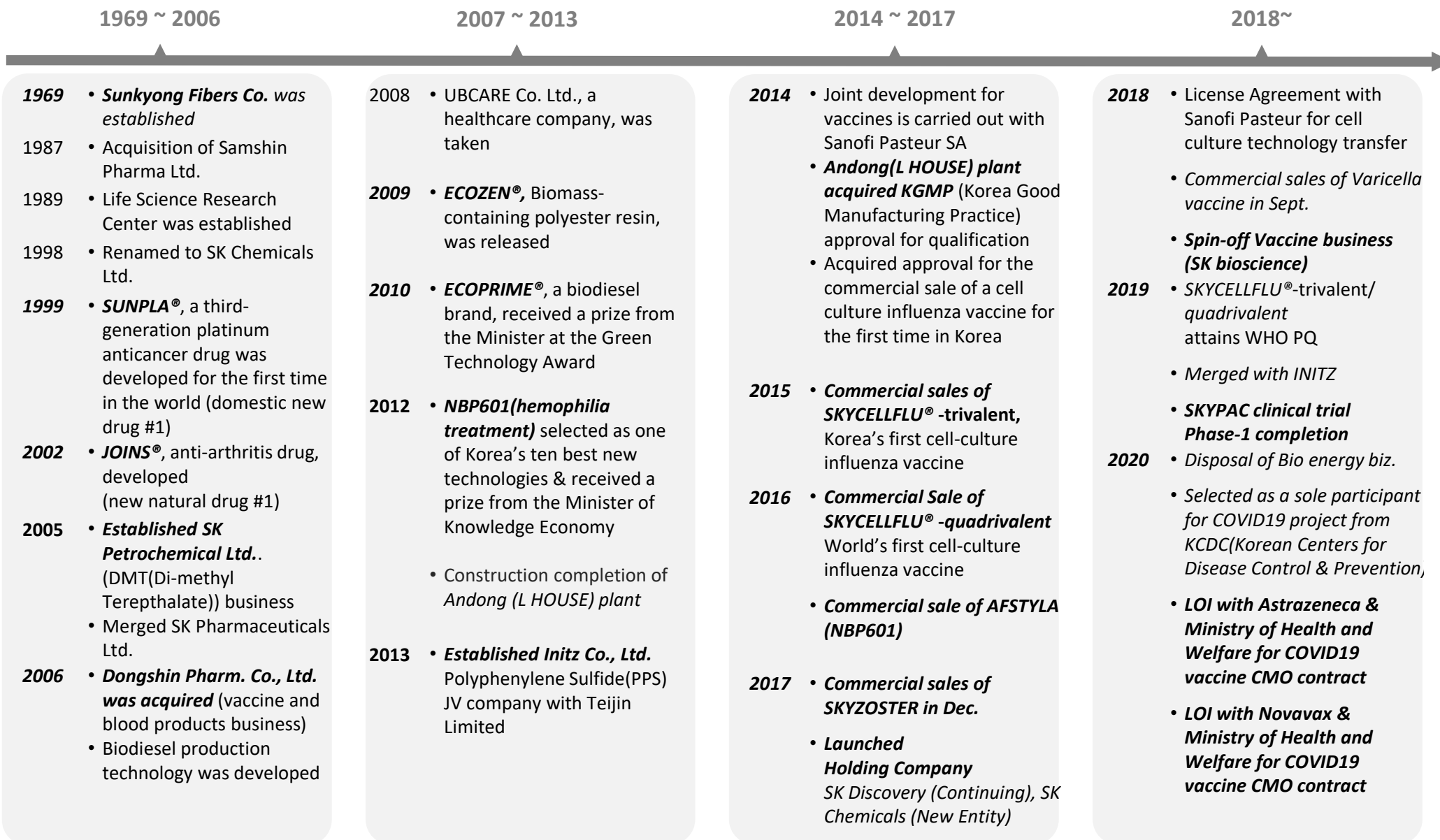
I. Overview



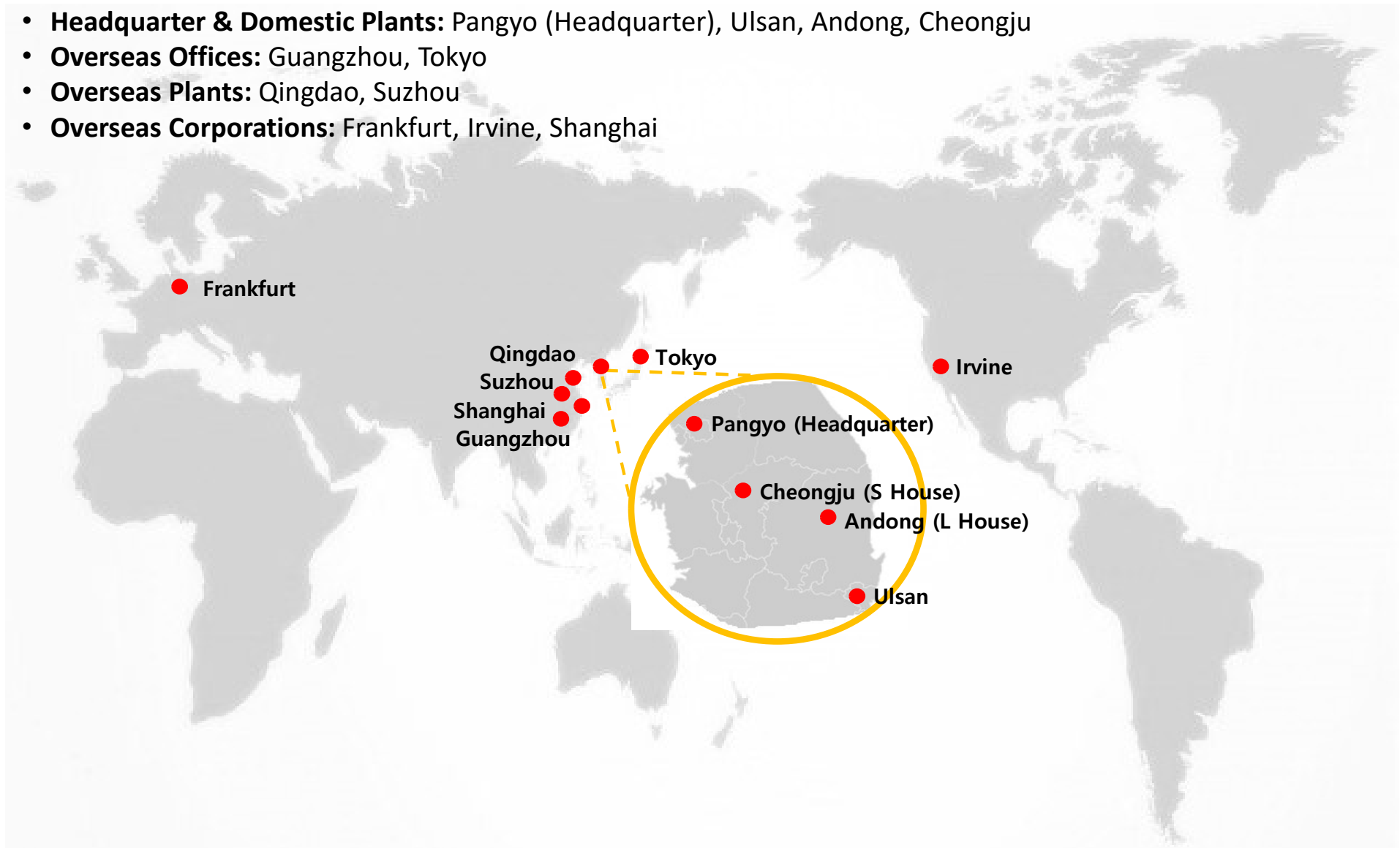
Through continuous change and innovation, SK Chemicals has grown into a Life Science and Green Chemicals company with higher and stable profitability.

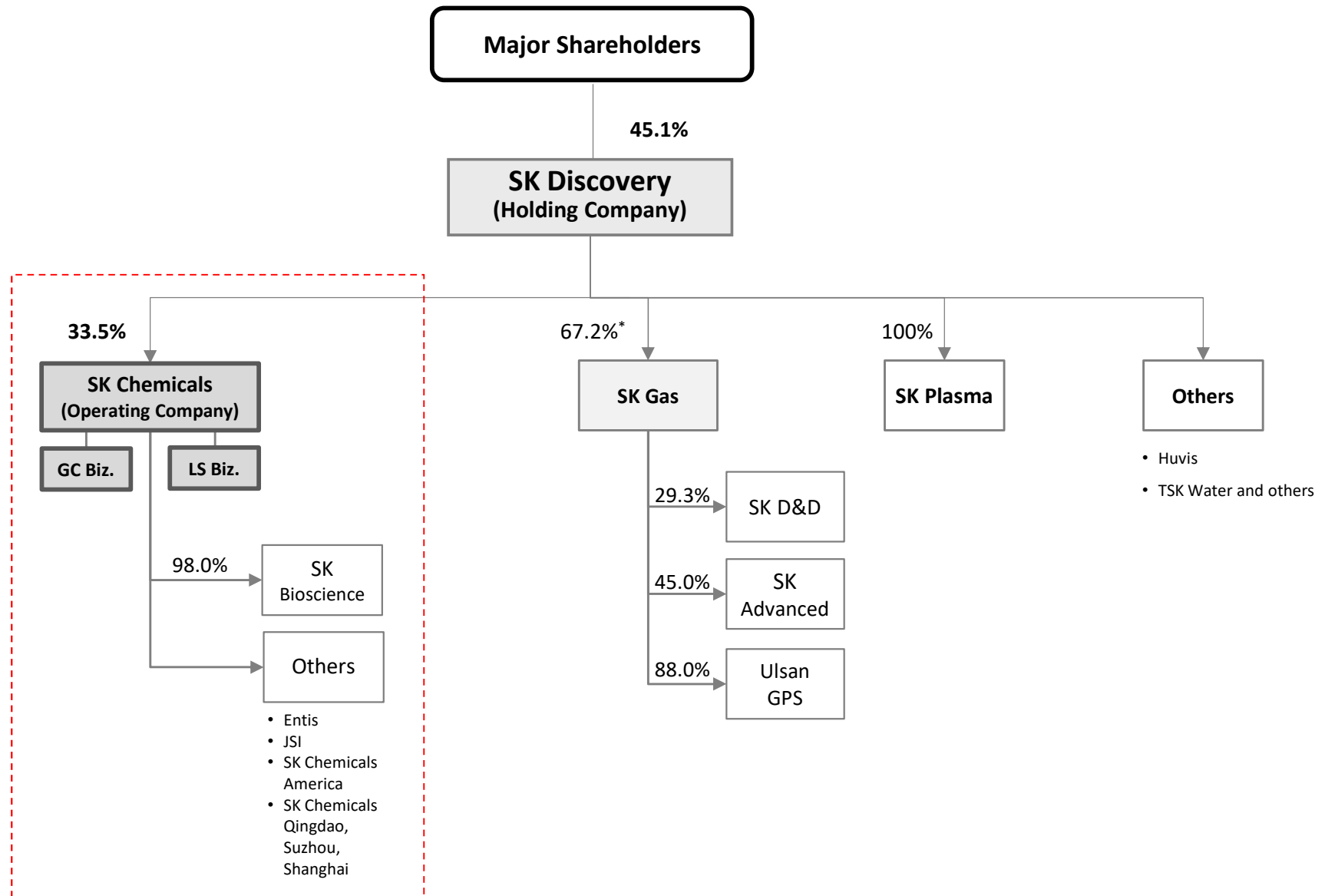


Since the establishment of Sunkyung Textiles in 1969, SK Chemicals has grown through continuous change and innovation into a chemical and life sciences enterprise representing South Korea.



- **Headquarter & Domestic Plants:** Pangyo (Headquarter), Ulsan, Andong, Cheongju
- **Overseas Offices:** Guangzhou, Tokyo
- **Overseas Plants:** Qingdao, Suzhou
- **Overseas Corporations:** Frankfurt, Irvine, Shanghai





The above share rate is based on common stock in Q4.

Note: * % of holdings for common stocks (As of July 16, 2020) / Share of SK Gas is as of SK Discovery's completion of OTC trading

II. Business Divisions



II. Business Divisions_Green Chemical(GC) Biz.

☐ Co-polyester

- High-performance eco-friendly material that competes with PC, PVC (petroleum-based materials)
- Only two global co-polyester manufacturers

☐ Features

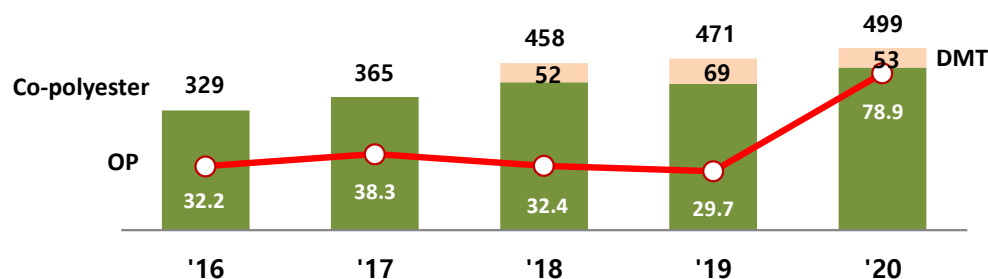
- BPA free material
- High chemical & heat resistance
- Transparent, a glass-like appearance

☐ Applications

- Food / Cosmetic container, Special / Shrink film, Electronics & Home Appliance, Building & Construction and others



☐ Performance Review



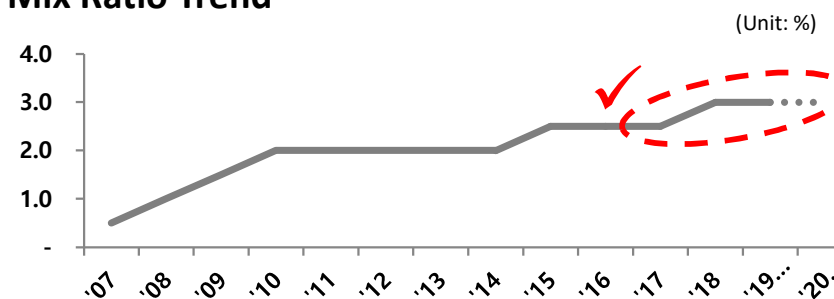
☐ Bio Diesel

- Alternative energy manufactured by animal and vegetable oils(fats)
- Government policies(mixing ratio) to blend biodiesel with diesel fuel
- Sales of business units reflect on company's performance up to 2Q20

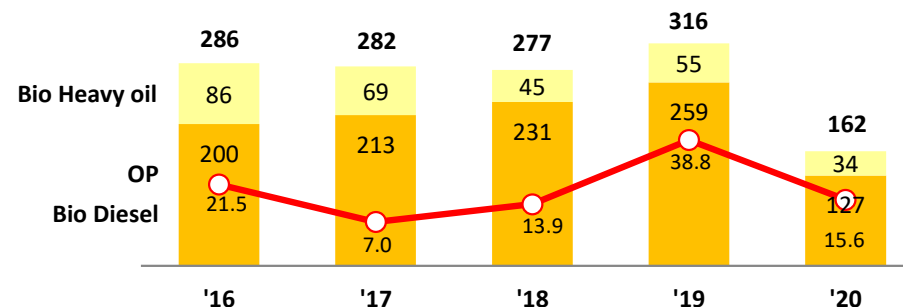
☐ Strength of our Bio Diesel

- **Cost competitiveness**
 - Derived from palm oil sources
 - Splitting plant
- **Stable supply**
 - SK Innovation, S-Oil (Domestic refiners)

☐ Mix Ratio Trend



☐ Performance Review



II. Business Divisions_Green Chemical(GC) Biz.

☐ PPS(Polyphenylene Sulfide) businesses

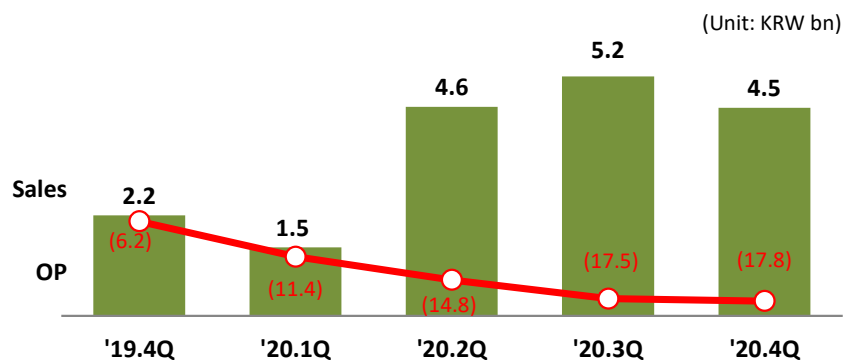
- World's first chlorine-free eco-friendly PPS manufacturer
- Continuous polymerization process without using polar solvent

☐ Key features and application

- Excellent in thermal and chemical resistance
- Good electrical insulating properties

Electricity	• CD/DVD Pick up, Bobbin, Connectors
Automotive	• Pump impeller, Generator parts, etc
	• Weight lightening trend in automotive industry
Film	• Bag filter, High-performance fiber

☐ Performance Review



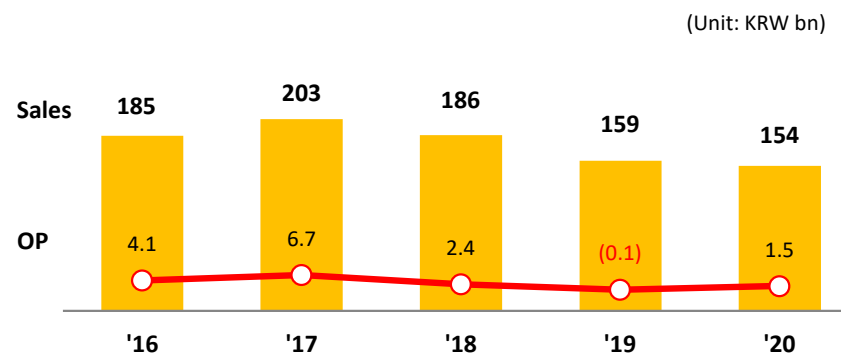
☐ Other businesses

- SKYBON: thermal resin used in binders and adhesives
- Prepreg: intermediate material in sheet forms of specially formulated resin matrix with reinforcing fiber such as carbon fiber, glass fiber etc.
- EP: manufactures variety of Engineering Plastic
- Utility: provider of steam, electricity etc. to companies in the Ulsan plant

☐ Overseas subsidiaries/sales posts

- SK Chemicals Suzhou: manufactures SKYBON products
- SK Chemicals Qingdao: manufactures Prepreg products
- SK Chemicals Shanghai: Copolyester sales office
- SK Chemicals America: Copolyester sales office
- ST Green Energy: sourcing office for biodiesel raw materials

☐ Performance Review(excl. oversea subsidiaries)



II. Business Divisions_Life Science(LS) Biz.

1) LS Overview

☐ Pharmaceuticals

- Manufacturing & distributing chemical drugs
- Focus areas: Cardio-vascular system, Musculoskeletal system, Urinary system, Nervous system

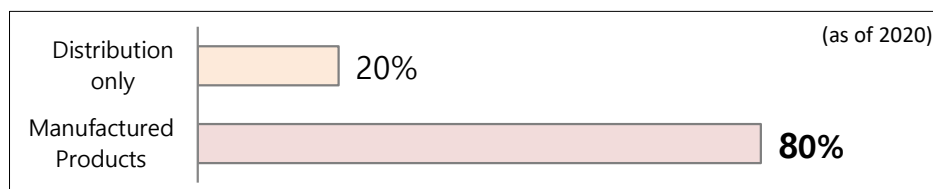
☐ Key Products

JOINS : Korea's first herbal medicinal product for arthritis,
GINEXIN : No.1 drug in domestic market for improving blood circulation
TRAST : The first patch formulation in the world for the treatment of arthritis

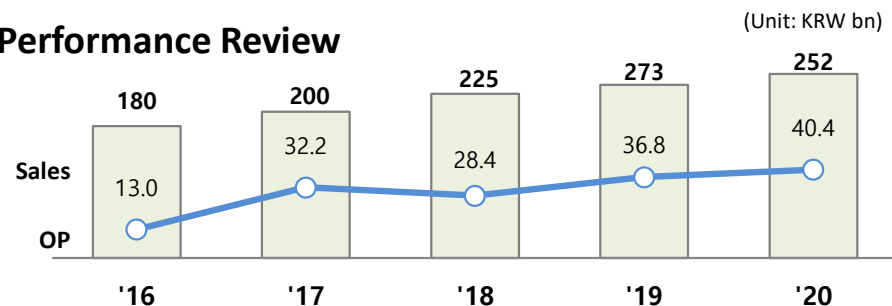
☐ Main Distribution Products

- **Pantoloc** : Treatment for GERD* **Cymbalta** : treatment for depressive disorder

☐ Proportion of Manufacturing and Distribution



☐ Performance Review



* GRED : Gastroesophageal reflux disease

☐ SK bioscience

- In house R&D from 2006, leading premium vaccine market
- Enhancing corporate value to advance to the global VAX market leader
- Spin-off Vaccine business on July, 2018 → SK bioscience

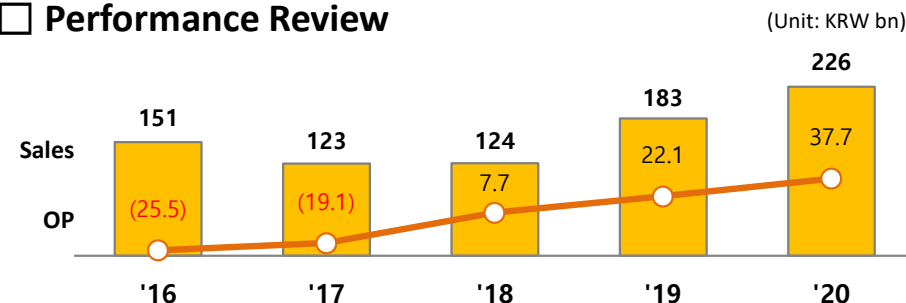
☐ Key Products

SKY Cellflu trivalent/quadrivalent, SKY Zoster, SKY Varicella

☐ Primary Achievements

- 2014 : Entered a joint development of a next-gen pneumococcal vaccine(SKYPAC) w/ Sanofi Pasteur
- 2015 : Korea's first cell-culture trivalent influenza vaccine released
- 2016 : Released world's first quadrivalent cell culture-derived influenza vaccine
- 2017 : Released world's second herpes zoster vaccine
- 2018 : Licensed out the technology of manufacturing cell-culture based influenza vaccine production to Sanofi Pasteur
- 2019 : Completed global clinical trial phase 1 on SKYPAC
- 2020 : Signed CMO(w/ AstraZeneca) and CDMO(w/Novavax) Contracts on COVID19 Vaccines

☐ Performance Review



II. Business Divisions_Life Science(LS) Biz.

2) Main Vaccine Products

Cell-culture influenza vaccine

□ Features

- High yield 3-Dimensional Suspension Cell-culture & high purity process
- No fertilized eggs → stable supply, reduce maintenance costs
- Shorter production period → Faster response to influenza pandemics

□ Influenza vaccine market

- **Domestic market** : Trivalent → quadrivalent market shift, Increasing NIP vaccination

NIP market	Current	Future(e)
Product	Trivalent	Quadrivalent
Age	'17: ~ 59 Months, '18: ~ Elementary	After '20: Middle/High school students(e)
Pregnant women	-	To be introduced(e)
Aging population (age 65↑)	7.08 mil. people	In '30: 1.296 mil. people

• Potential global market

- Market shift to quadrivalent in developed countries
- Rise in demand for influenza vaccines in developing countries



Shifting to quadrivalent influenza vaccines → 'broader protection against circulating flu viruses'

□ SK Chemical's influenza vaccine

- ✓ **'15 Released 'SKYCELLFLU® -trivalent', Korea's first cell-culture influenza vaccine**
- ✓ **'16 Released 'SKYCELLFLU® -quadrivalent', World's first cell-culture influenza vaccine**
- ✓ **'19 'SKYCELLFLU®-trivalent'/quadrivalent' attains WHO PQ**

Zoster Vaccine(SKYZOSTER)

□ 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. 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.



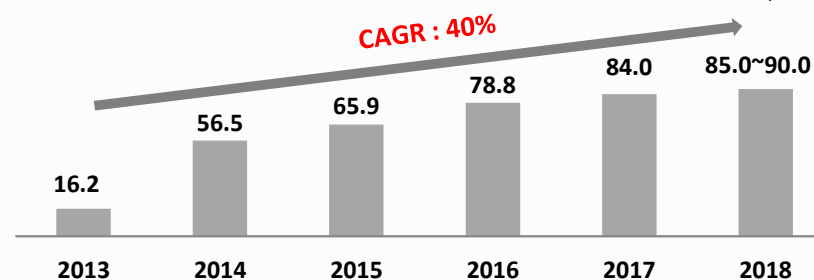
* Picture: The blistering Shingles rash on face, body

□ Global Market : Global Sales \$783M in 2017¹⁾

- preventive vaccine : SKYZOSTER, ZOSTAVAX(Merck), Shingrix(GSK)
- No. of domestic patients in 2016: 691,339²⁾

※ Domestic market size for Zoster Vaccine

(Unit : KRW bn)



□ SK Chemicals' SKYZOSTER

- Dosage: Given as a single dose by injection under the skin
- **Developed the world's second, Korea's first Zoster vaccine**
- **Successful commercialization of our premium vaccine in 2018**

II. Business Divisions_Life Science(LS) Biz.

3) Global Project w. Sanofi

The cell-culture based manufacturing technology for Universal Influenza Vaccine

☐ Background

- SK Chem. has developed world best cell culture technology
 - Commercially proven, the most advanced technology
- Sanofi adapts SK's cell culture technology to manufacture next generation influenza vaccine development

☐ Main contents

- Upfront Fee: USD 15 mil (upon signing)
- Completion of tech. transfer: USD 20mil
- Milestone at each level: USD 120mil
- Contract Region: Global market (Exclusivity rights in US/Europe)
- Royalty : % of product sales
 - 15 years after commercialization or patent expiry (whichever is longer)

☐ Implication & Significance

- Another monumental event following '14 SKYPAC contract
- Demonstration of global competitiveness of our cell-culture technology
- Royalty potential
 - (SP global influenza vaccine sales: about 2 trillion KRW)

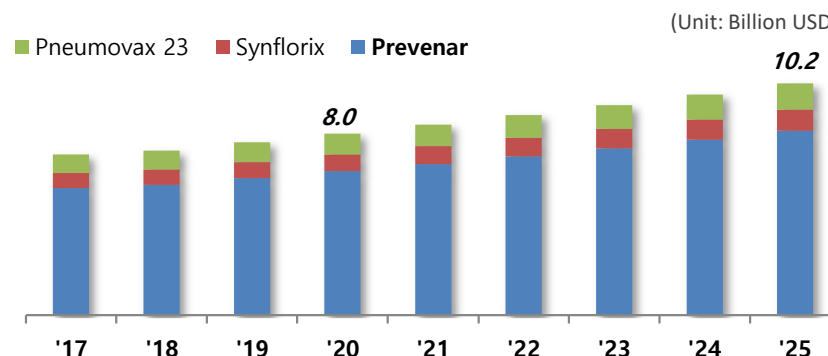
Co-development of PCV



- 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

☐ PCV Market

- Market demand is boosted by aging population and expected to grow to \$10.2B by 2025
- Considering Prevenar case, we expect meaningful market share after launching SKYPAC



(Source : Allied Market Research "Global Pneumonia Vaccine Market Opportunity Analysis and Industry Forecast 2018~2025, Primary & Secondary Research and AMR Analysis)

Considering the high uncertainty of successful development of COVID19 vaccine, SK bioscience is managing two track strategy to increase the chances of success.

Track ① Vaccine Development

1-1

Project A
(In-house
research)

● Recombinant protein

- Pre-clinical completed
- IND for phase 1 submitted(6th Oct.)
Expect to enter phase 1 in late Nov.
- Proceed in phase 3 in the 2nd quarter, 2021

1-2

Project B
(w/ BMGF)

● Recombinant protein

- Funded by Bill & Melinda Gates Foundation
- Preclinical stage is on process with provided pipeline drugs
- Expected to enter clinical stage within year.

Track ② C(D)MO of Global Pharma's vaccines

2-1

AstraZeneca

● Viral vector

- DS/DP consignment contract
- Signed the LOI for Cooperation between the Ministry of Health and Welfare, AstraZeneca and SK Bioscience (21st, Jul)

2-2

NOVAVAX
Creating Tomorrow's Vaccines Today

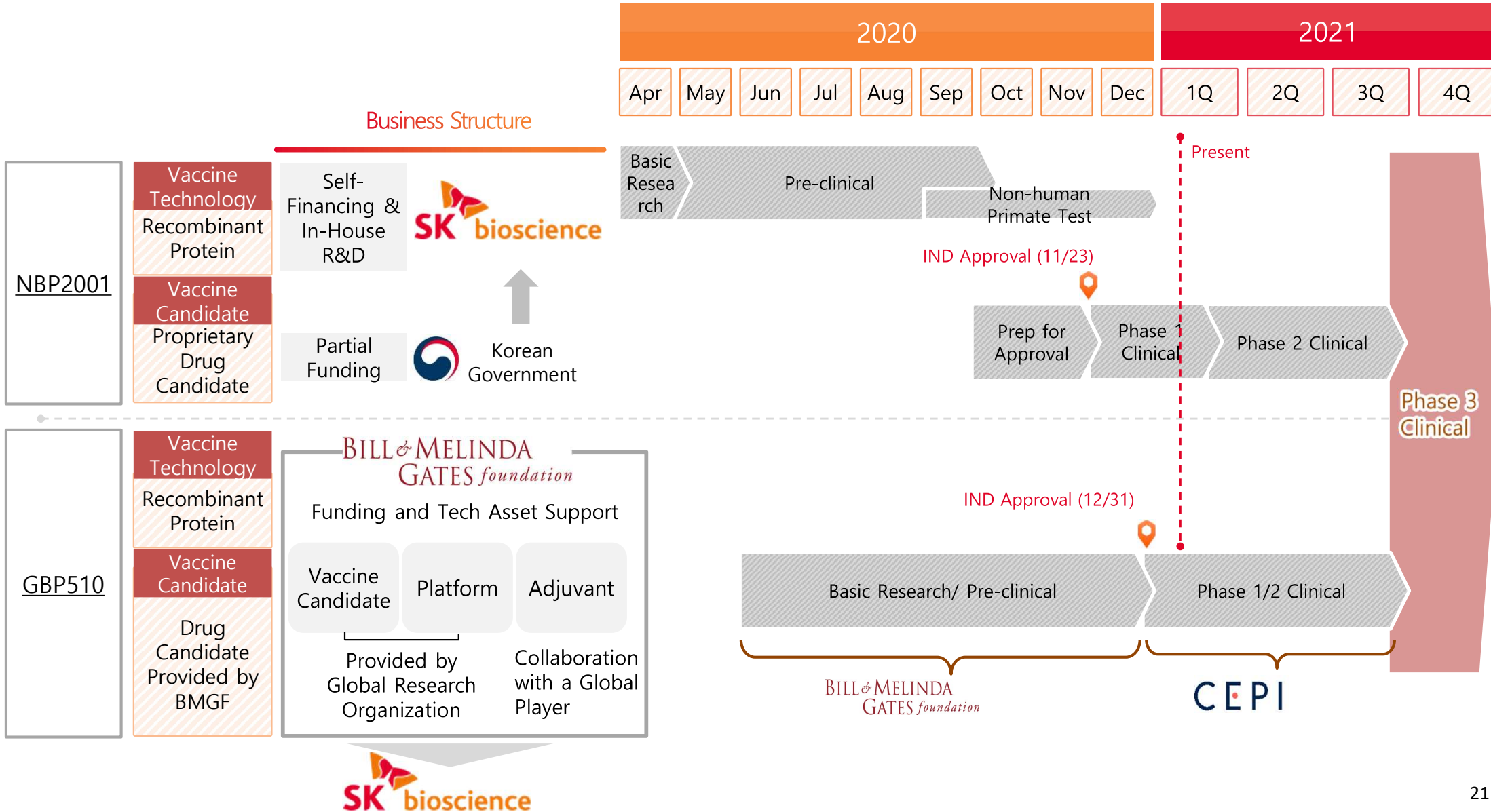
● Recombinant protein

- Process development/DS consignment contract
- Signed the LOI for Cooperation between the Ministry of Health and Welfare, Novavax and SK Bioscience (13th, Aug)

II. Business Divisions_Life Science(LS) Biz.

5) COVID-19 Vaccine Projects

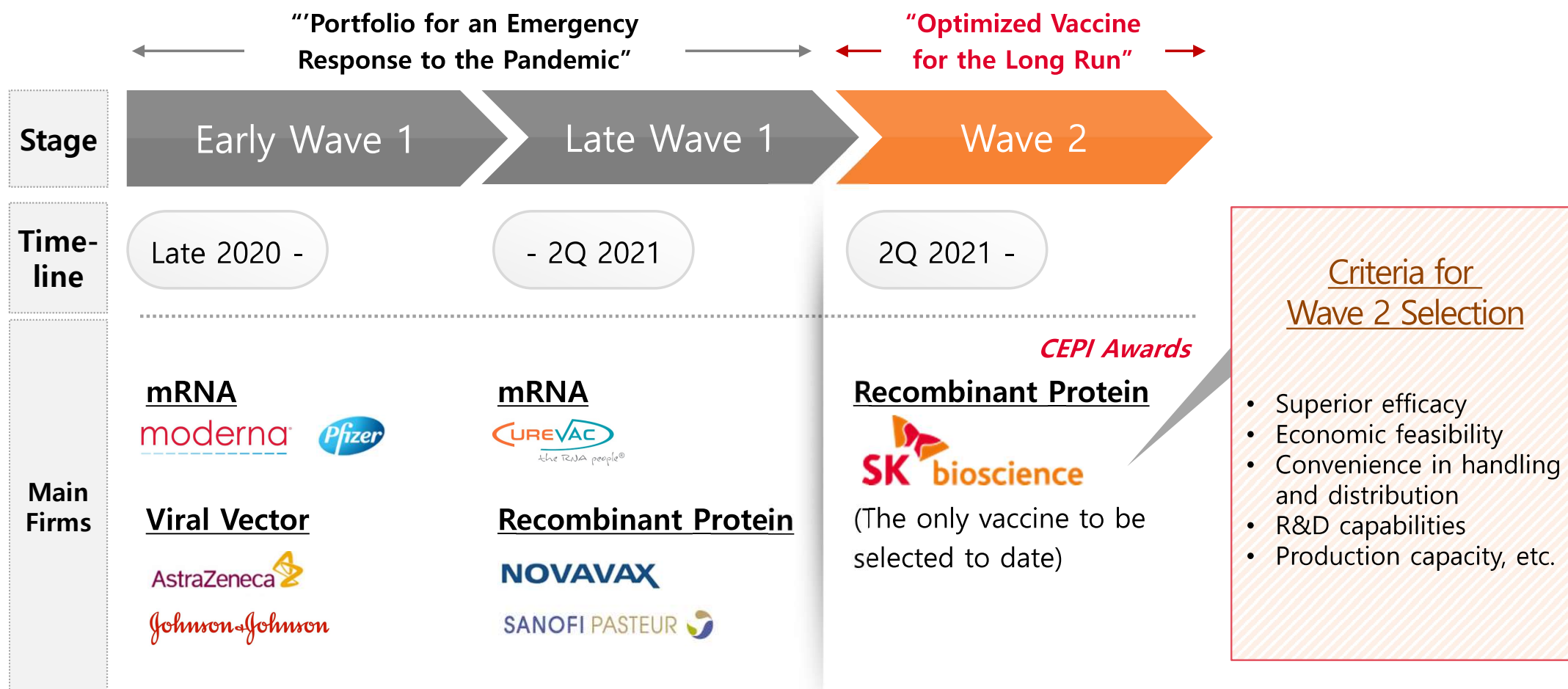
SK Bioscience is undertaking 2 projects based on recombinant protein technology. The projects have entered Phase1 and Phase 1/2, targeting to enter Phase 3 Is within '21 in collaboration with global partners.



The GBP510 has proven its competitiveness by being selected as CEPI's the first "Wave 2" COVID-19 vaccine candidate.

"I'm pleased to expand our partnership with SK Bioscience's vaccine candidate GBP510, which marks CEPI's first investment in "Wave 2" vaccines... these cutting-edge "Wave 2" vaccines will enable the use of vaccines in a wider range of settings, ... providing the world additional options to control this deadly disease."

- Richard Hatchett, CEO, CEPI

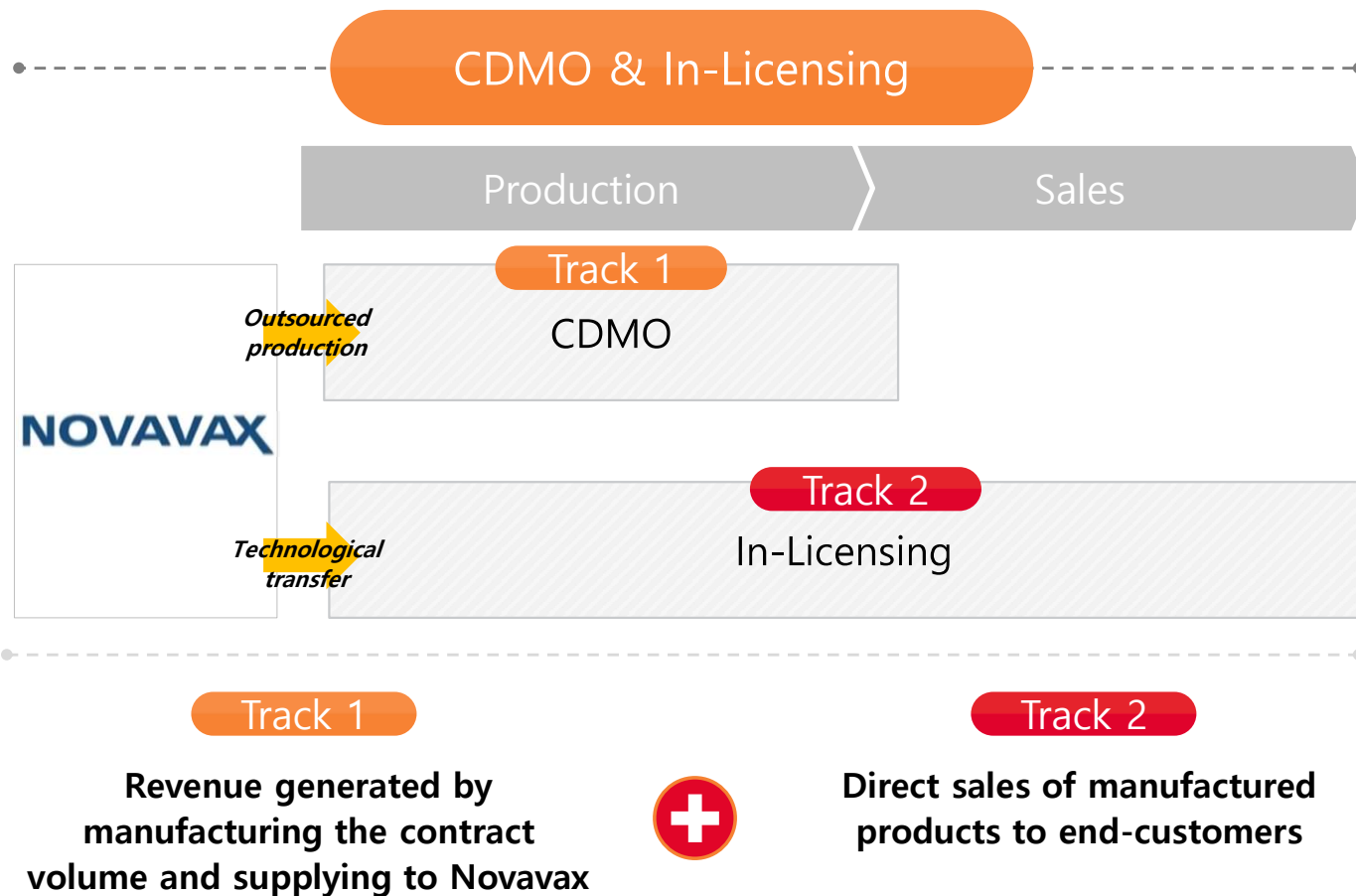


II. Business Divisions_Life Science(LS) Biz.

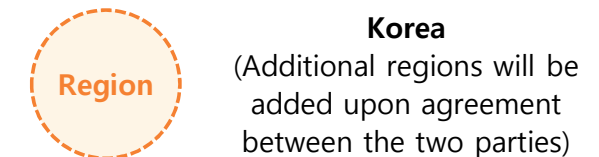
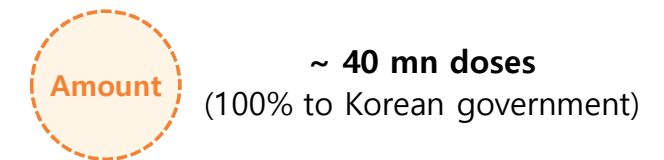
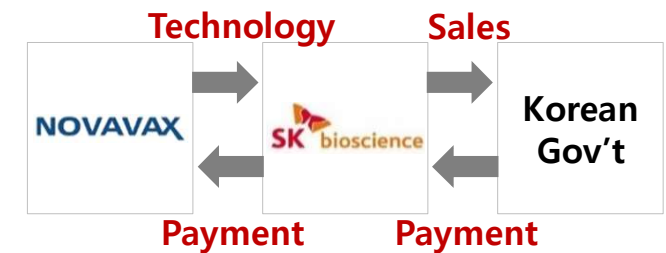
5) COVID-19 Vaccine Projects

The in-licensing agreement with Novavax allows SK Bioscience to produce and distribute Novavax's COVID-19 vaccines in Korea, driving additional top-line growth on top of the existing CDMO contract.

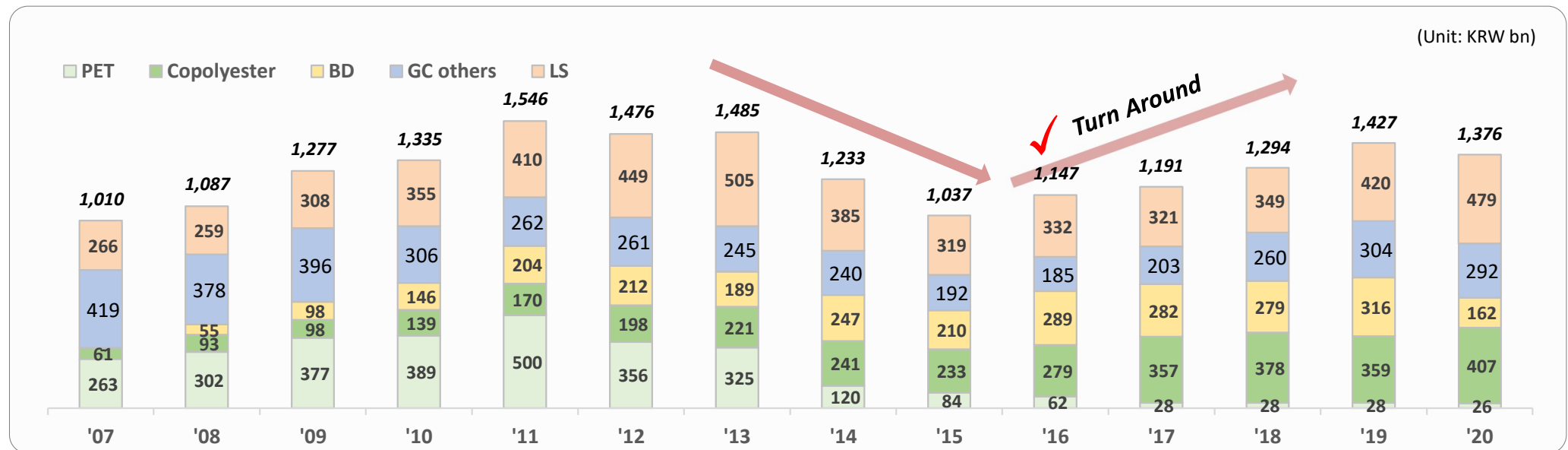
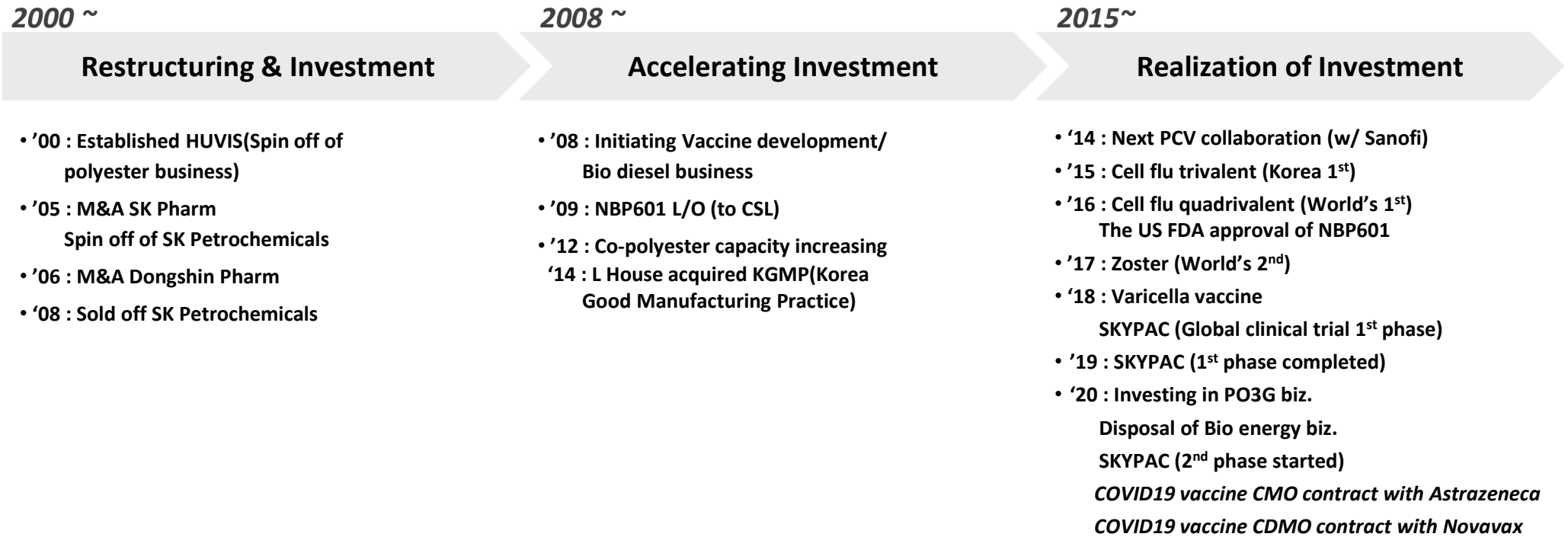
Two-Track Partnership



In-License Overview



III. Summary



IV. Shareholder return

SK chemicals has been gradually expanding dividends since its split-up in 2017 and will race to return profits from corporate growth to shareholders based on its improved profitability in a long term.

Dividend history for past 3 years

(Unit: KRW bn)

구분		'18	'19	'20
Operating Profit		55.7	91.6	48.4
Net Profit		16.6	27.1	215.7
EPS (unit: KRW)	common stock	400	450	2,000
	preferred stock	450	500	2,050
No. of stocks for dividends (unit : 1,000 stocks)	common stock	11,568	11,730	11,729
	preferred stock	1,457	1,457	1,314
Total amount of cash dividends		5.3	6.01	26.2
Dividend propensity		31.83%	22.18%	12.13%
Dividend yield		0.56%	0.73%	0.53%

Dividend Policy for shareholders

- ❖ SK chemical has been expanding dividends following the increase of net profit in 2018 and 2019 and aims to pay dividends above the market average rate of return in the long term.
- ❖ The basic policy of shareholder return of SK chemicals is to expand dividends in line with the increase in corporate profits and share the fruits of growth with shareholders.

V. Appendix

1) Consolidated Financial Statements

Balance Sheet

(Unit: KRW Mil.)

	'19Y	'20Y
Current assets	792,023	923,286
Cash and cash equivalents	183,976	86,764
Short-term financial instruments	88,674	339,928
Trade and other receivables	171,327	233,193
Inventories	330,606	252,930
Other current assets	17,440	10,471
Non-current assets	1,339,686	1,196,681
Property, plant and equipment	1,165,065	1,070,000
Intangible assets	37,429	36,956
Investments in associates and joint ventures	8,776	9,104
Other non-current assets	128,416	80,621
Total assets	2,131,709	2,119,967
Current liabilities	718,865	645,679
Trade and other payables	231,782	232,022
Short-term borrowings	198,756	107,637
Current long term liabilities	241,572	96,947
Other current liabilities	46,756	209,073
Non-current liabilities	694,137	515,355
Bond	558,680	460,481
Long-term borrowings	72,909	31,135
Other non-current liabilities	62,548	23,739
Total liabilities	1,413,003	1,161,034
Equity attributable to the parent company	715,629	952,878
Capital stock	66,000	66,000
Capital surplus	264,315	264,315
Other components of equity	△9,890	△18,118
Accumulated other comprehensive Income(loss)	△2,594	△2,624
Earned surplus	397,797	643,305
Non-controlling interest	3,078	6,055
Total equity	718,706	958,933
Total liabilities and equity	2,131,709	2,119,967

Income Statement

(Unit: KRW Mil.)

	'20.1Q	'20.2Q	'20.3Q	'20.4Q	'20Y
Sales	252,548	288,409	352,133	321,620	1,214,709
Cost of sales	194,181	214,157	232,565	223,493	864,397
Gross profit	58,366	74,251	119,568	98,127	350,313
Selling, general and administrative expenses	50,349	56,603	67,259	69,818	244,030
Operating profit	8,017	17,649	52,309	28,309	106,283
Other non-operating income	1,092	1,142	4,321	6,153	12,708
Other non-operating expense	3,591	7,300	6,410	63,161	80,463
Financial income	18,346	3,571	6,174	16,044	44,135
Financial expense	20,640	10,584	11,363	22,854	65,442
Share of profit of associates and joint ventures	645	598	620	△105	1,757
Earnings before interest and taxes	3,868	5,075	45,650	△35,616	18,978
Income tax expense	△2,500	5,325	9,782	△2,604	10,003
Net profit (loss) for the continuing operating quarter	6,368	△250	35,868	△33,012	8,975
Net income for discontinued operating quarter	6,635	239,552	0	0	246,186
Consolidated quarterly net income	13,003	239,302	35,868	△33,012	255,161
Equity attributable to the parent company	13,048	239,346	35,261	△3,334	254,321
Non-controlling interest	△46	△44	607	323	840

V. Appendix

2) Financial Statements

Balance Sheet

(Unit: KRW Mil.)

	'19Y	'20Y
Current assets	583,836	542,387
Cash and cash equivalents	154,483	36,666
Short-term financial instruments	0	145,209
Trade and other receivables	160,588	201,600
Inventories	259,448	152,018
Other current assets	9,317	6,893
Non-current assets	1,318,635	1,202,198
Property, plant and equipment	969,586	878,396
Intangible assets	17,609	18,815
Investments in associates and joint ventures	229,371	253,297
Other non-current assets	102,069	51,690
Total assets	1,902,472	1,744,585
Current liabilities	654,993	461,441
Trade and other payables	195,547	190,846
Short-term borrowings	190,139	106,637
Current long term liabilities	241,572	85,953
Other current liabilities	27,735	78,004
Non-current liabilities	563,035	398,071
Bond	464,408	380,008
Long-term borrowings	49,753	9,375
Other non-current liabilities	48,874	8,688
Total liabilities	1,218,028	861,511
Capital stock	66,000	66,000
Capital surplus	188,347	188,347
Other components of equity	△889	△9,117
Earned surplus	430,985	639,843
Total equity	684,444	885,073
Total liabilities and equity	1,902,472	1,744,585

Income Statement

(Unit: KRW Mil.)

	'20.1Q	'20.2Q	'20.3Q	'20.4Q	'20Y
Sales	217,556	236,905	238,293	228,379	921,134
Cost of sales	171,939	179,181	177,346	178,201	706,667
Gross profit	45,617	57,723	60,947	50,179	214,467
Selling, general and administrative expenses	35,588	39,205	47,023	44,251	166,067
Operating profit	10,030	18,518	13,924	5,928	48,399
Other non-operating income	1,458	793	199	8,956	11,404
Other non-operating expense	2,552	7,724	2,225	61,378	73,879
Financial income	18,981	4,275	6,222	11,063	40,542
Financial expense	16,249	10,289	10,670	17,536	54,744
Earnings before interest and taxes	11,668	5,572	7,450	△52,968	△28,277
Income tax expense	△1,028	5,486	2,699	△4,990	2,166
Net profit (loss) for the continuing operating quarter	12,696	87	4,751	△47,978	△30,444
Net income for discontinued operating quarter	6,635	239,552	0	0	246,186
Quarterly net income	19,331	239,638	4,751	△47,978	215,743

End of Documents

