

SK chemicals
2023 3Q Earnings Release



We care for the future.
Healthcare, Earthcare

Disclaimer

The financial information in this document are consolidated earnings results based on K-IFRS. (Korea International Financial Reporting Standards)

Forecasts and projections contained herein are based on current business environment and management strategies.

Please note it may differ from actual results, due to uncertainties including changes in the future business environment and unaccounted variables.

1

Earnings Release



3Q23 Highlight



Performance

Revenue 581bn KRW
(+34.4% YoY, +56.6% QoQ)

OP 83bn KRW
(+67.6% YoY, Turned to Profit QoQ)



Green Chemical Business

Strengthening Biz. Model
- laying the foundation for
Closed-Loop



Pharma Business

Achieved historical-high revenue by product sales hike



Vaccine (SK bioscience)

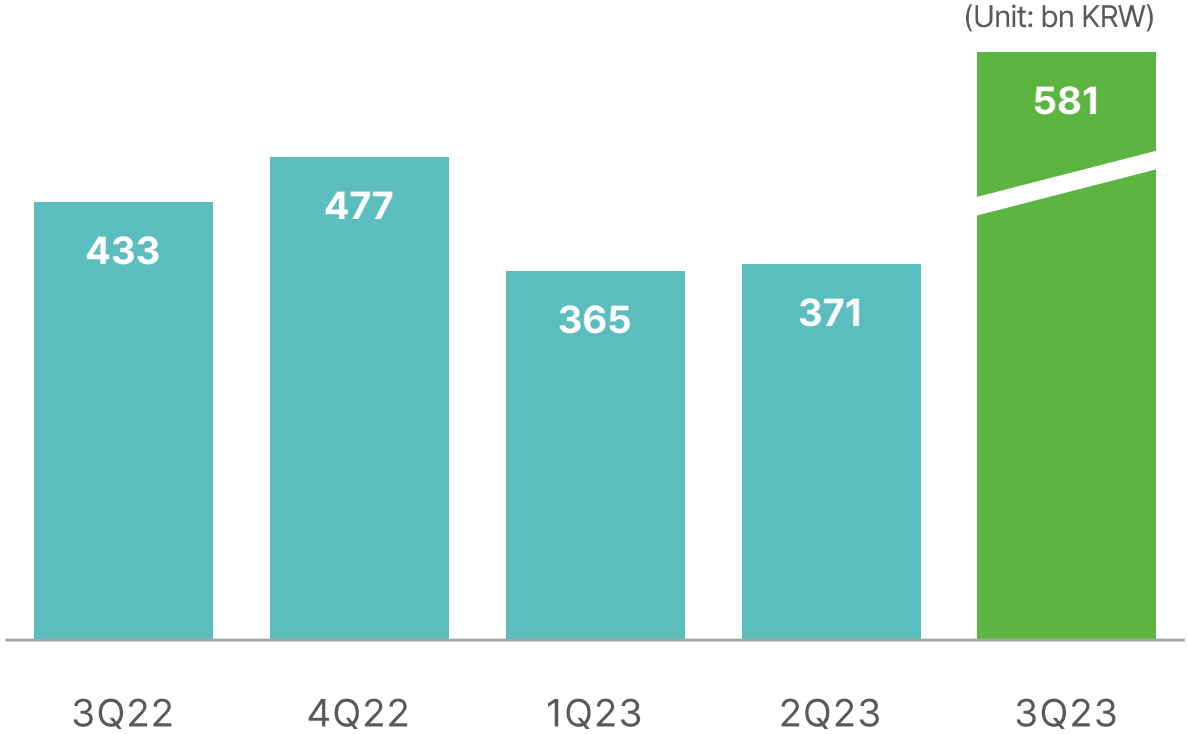
Novavax settlement inflow and flu vaccine production restarted

3Q23 Performance Review (Consolidated)

Revenue

581bn KRW
 (+34.4% YoY, +56.6% QoQ)

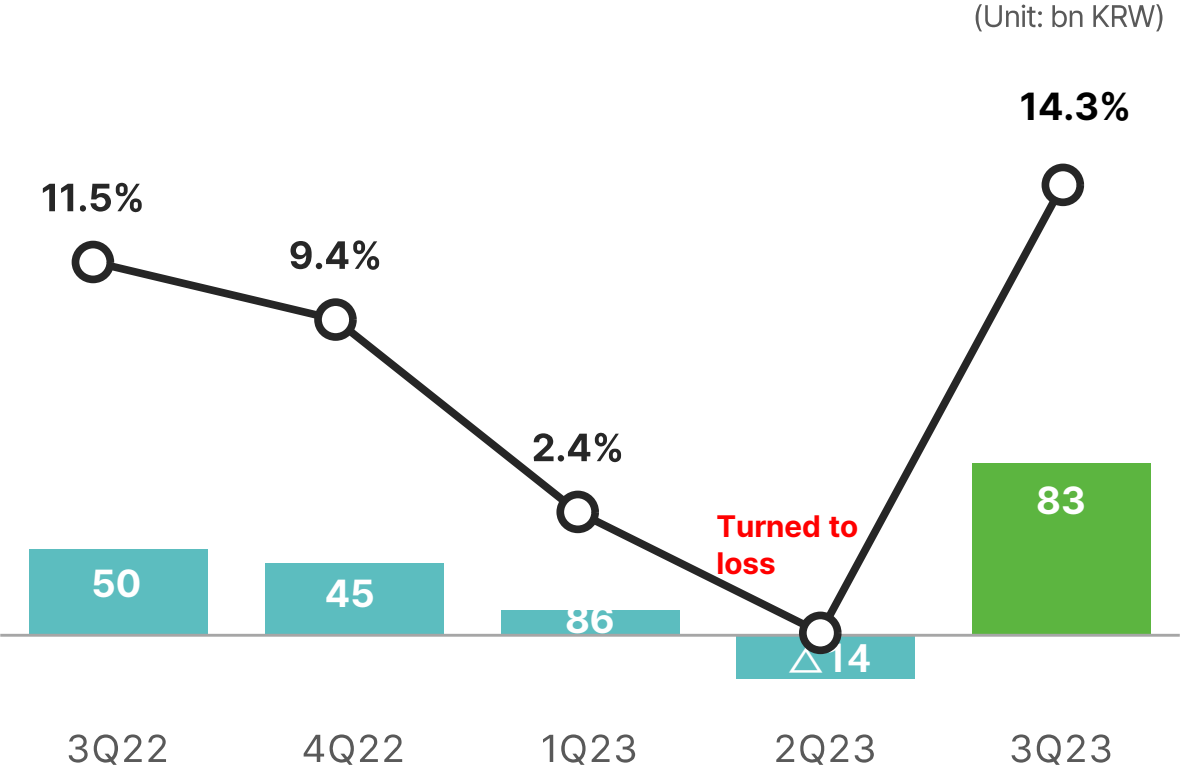
Despite the revenue decrease of own business, consolidated revenue increased due to the impact of consolidated subsidiary's revenue hike



Operating profit & margin

83bn KRW
 (+67.6% YoY, Turned to profit QoQ)

Profit and profitability increased due to the impact of consolidated subsidiary's performance



3Q23 Performance Review (Separate)

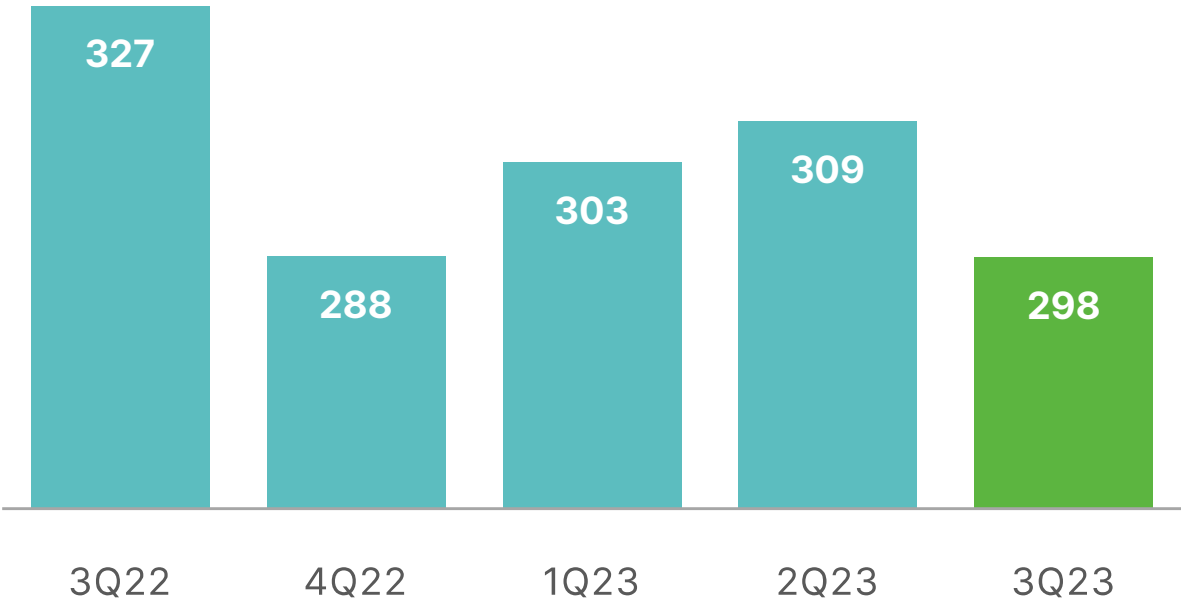
Revenue

298bn KRW

($\Delta 8.6\%$ YoY, $\Delta 3.5\%$ QoQ)

Revenue declined as weaker performance in the green chemicals business due to weak global demand more than offset strong performance in the pharma business

(Unit: bn KRW)



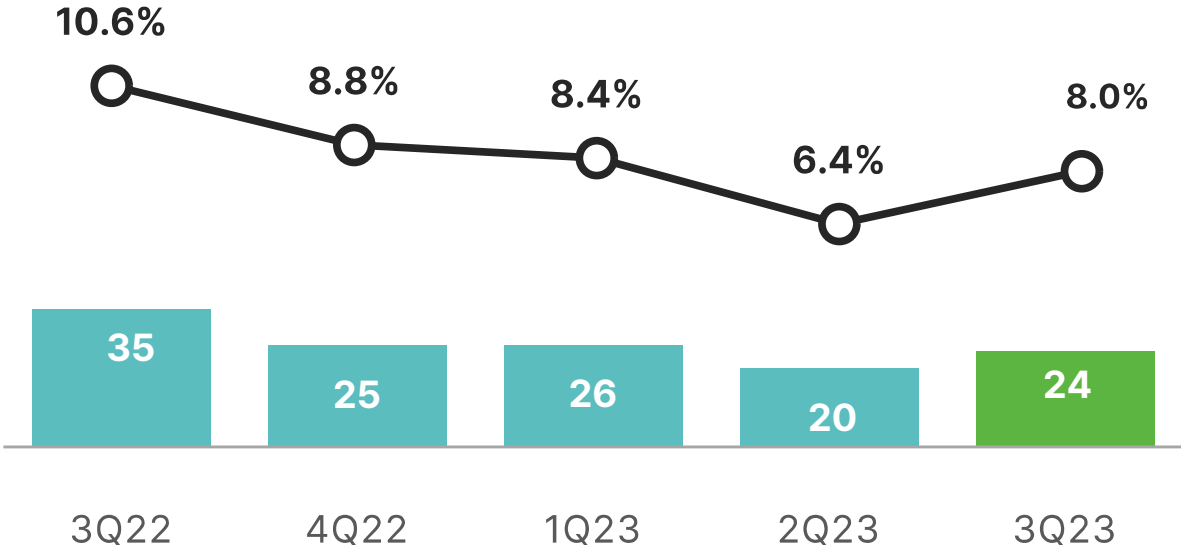
Operating profit & margin

24bn KRW

($\Delta 30.8\%$ YoY, $+21.3\%$ QoQ)

Profit decreased due to lower sales in Copolyester business and cost increases

(Unit: bn KRW)



Performance Review by Division

Green Materials – Copolyester & Petrochem

Performance and Outlook

'23.3Q Performance

Revenue **199bn KRW** (Δ4.0% YoY, Δ6.0% QoQ)
 Revenue declined due to the lower volume followed by slowdown in the improvement of global consumer sentiment

Operating profit **17bn KRW** (Δ32.1% YoY, Δ43.5% QoQ)
 Profit decreased due to lower sales volume and cost increase

'23.4Q Outlook

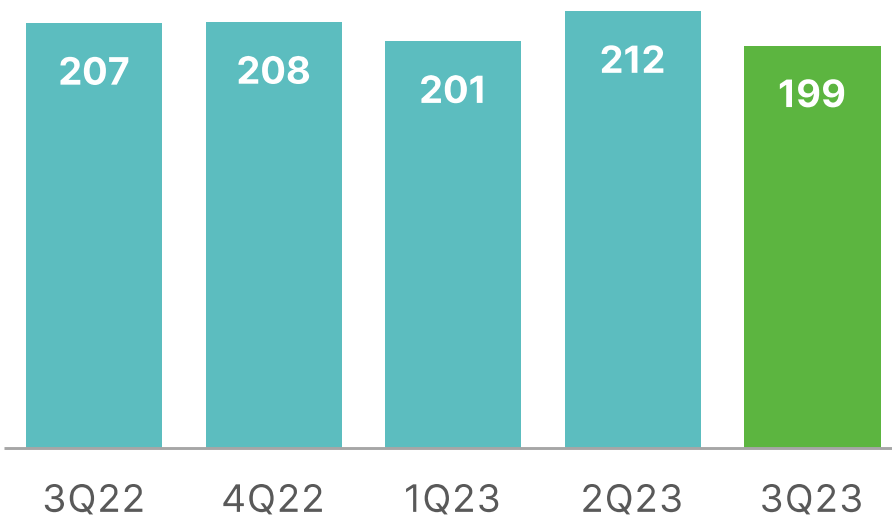
Strengthening high-profitability portfolio

vs.

Continuous weak global consumer sentiment

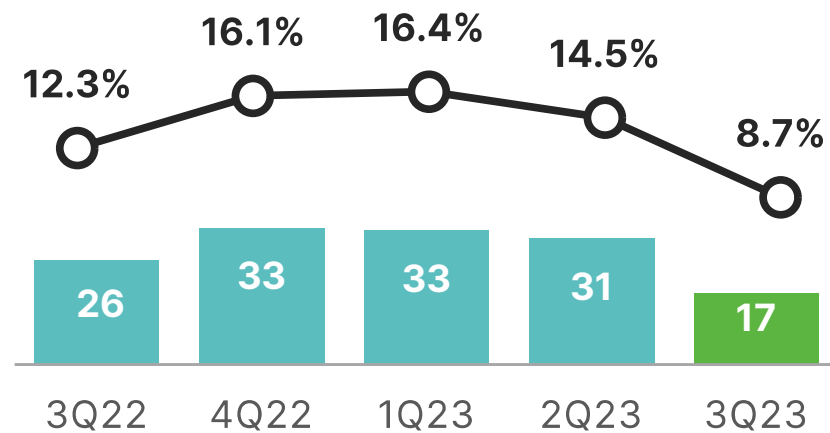
Revenue

(Unit: bn KRW)



OP & OPM

(Unit: bn KRW)



※ Including performance of America/Europe sales corporations

Main Product

Products

Applications



Performance Review by Division

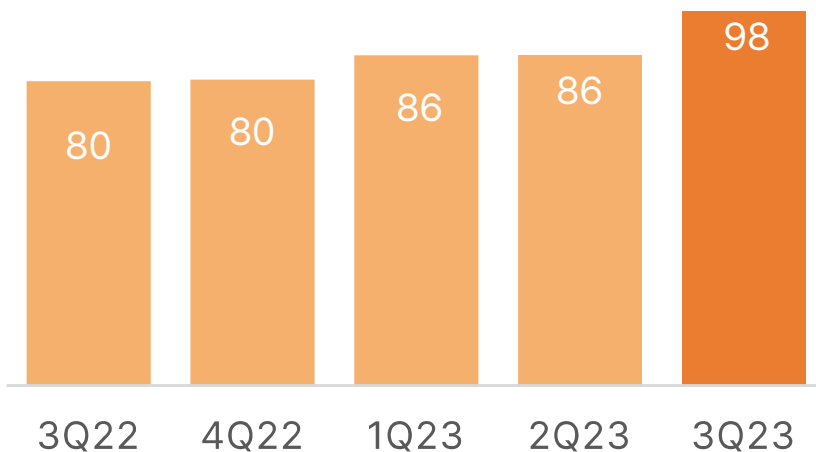
Life Science - Pharma

Performance and Outlook

'23.3Q Performance		'23.4Q Outlook	
Revenue	98bn KRW (+23.0% YoY, +13.3% QoQ) Achieved historical-high revenue by increased sales in main products and M/A products	Continuous robust sales	vs. Concerns in cost increase
Operating profit	12bn KRW (+14.0% YoY, +127.2% QoQ) Profit hike followed by revenue growth		

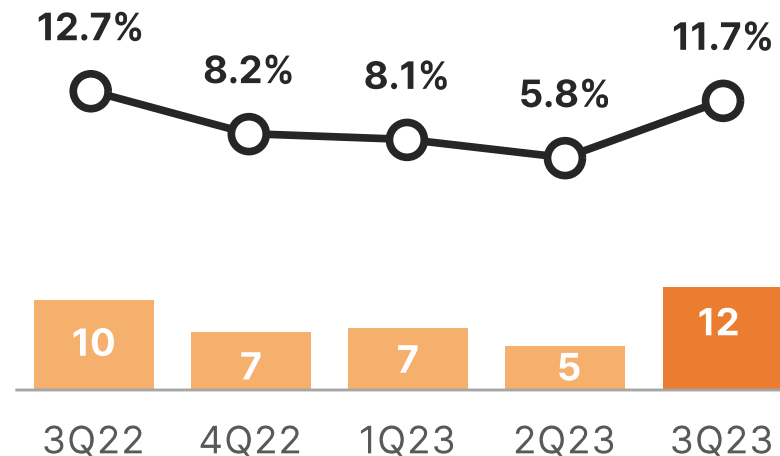
Revenue

(Unit: bn KRW)

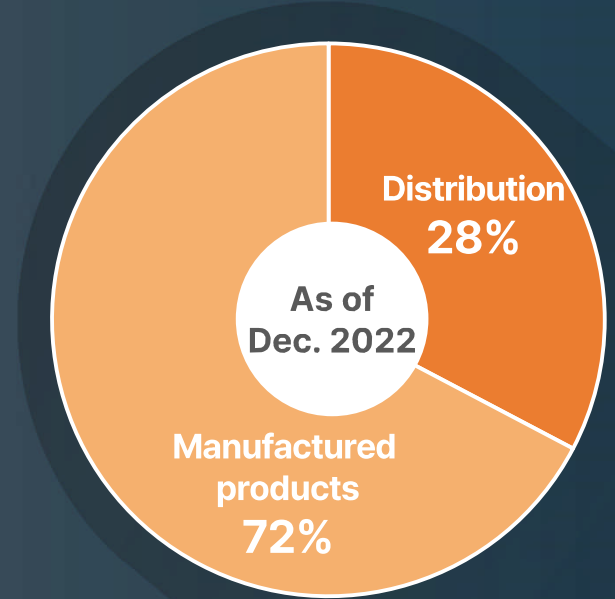


OP & OPM

(Unit: bn KRW)



Sales Composition



Main Products



Joins

Natural product based anti-arthritic treatment



Ginexin

blood circulation disorder treatment & Cognitive enhancer



Rivastigmine patch

Anti-dementia treatment patch



Performance Review by Division

Life Science - SK bioscience

Performance and Outlook

'23.2Q Performance

Revenue **232 bn KRW** (+154.6% YoY, +775.5% QoQ)

Revenue improved due to Novavax settlement and Flu Vaccine

Operating profit **61 bn KRW** (+185.3% YoY, Turned to profit QoQ)

Operating profit increased due to the impact of revenue growth

'23.3Q Outlook

Revenue expected to increase by continuing No.1 domestic M/S of vaccines and supplying updated Novavax COVID Vaccine

3Q23 Business Review

▪ Novavax Contract

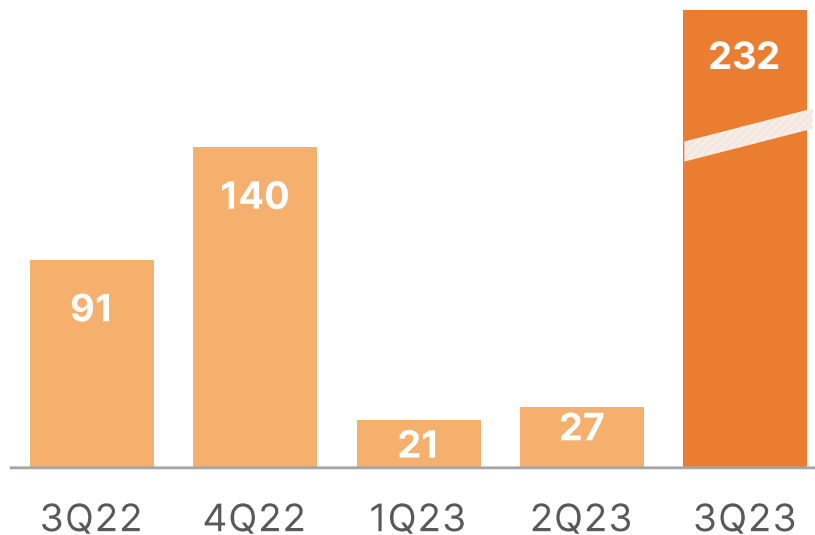
- Strategic partnership with Novavax via new L/I contract & equity investment
- Synergy with Novavax : Expanding vaccine portfolio, Reinforcing Mfg. Partnership, Advancing market experience

▪ Updated Novavax COVID Vaccine Supply

- The only alternative to mRNA XBB Vaccine differentiating with the strength of protein-based vaccines in endemic

Revenue

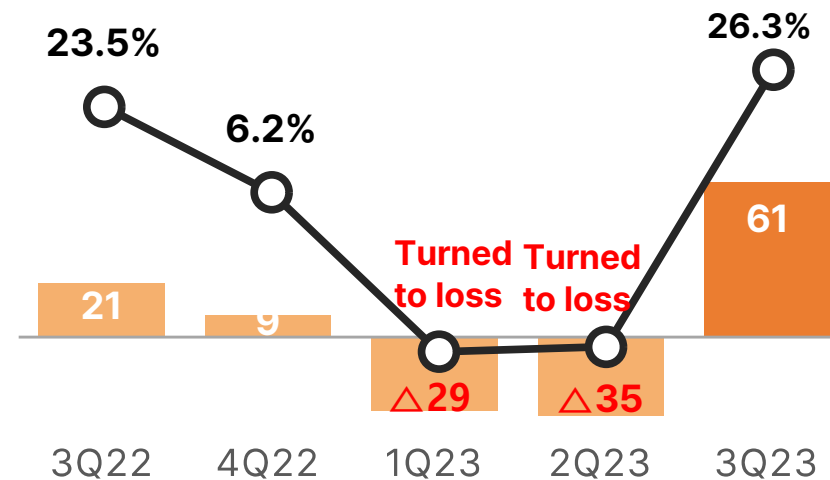
(Unit: bn KRW)



※ Performance : Consolidated

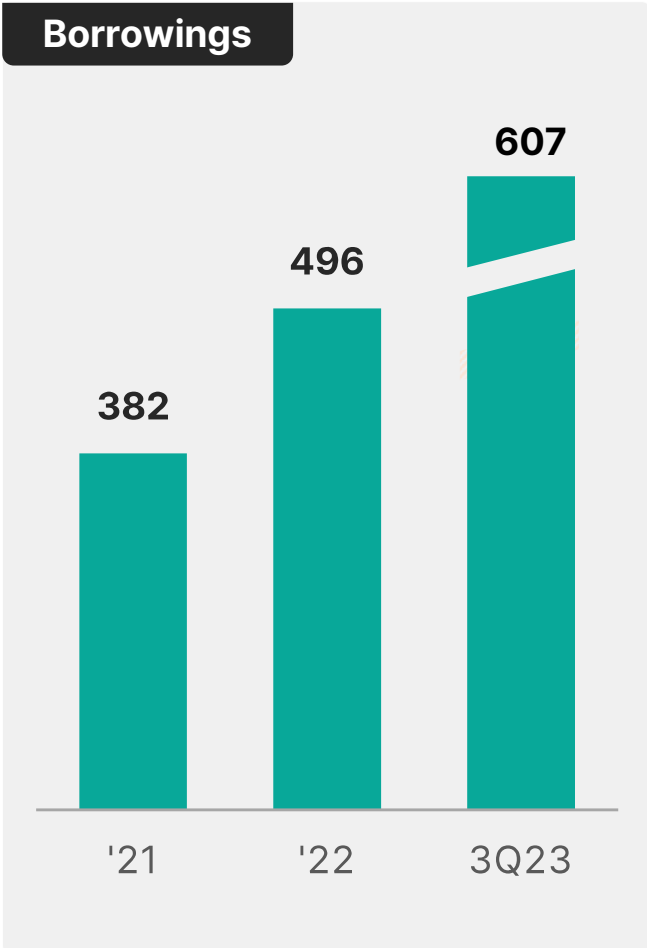
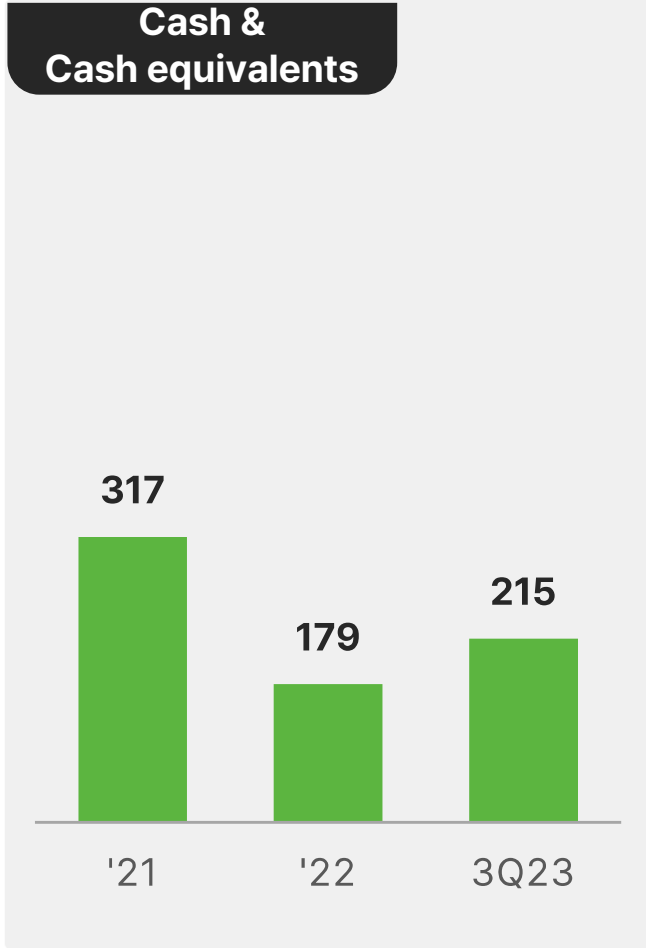
OP & OPM

(Unit: bn KRW)

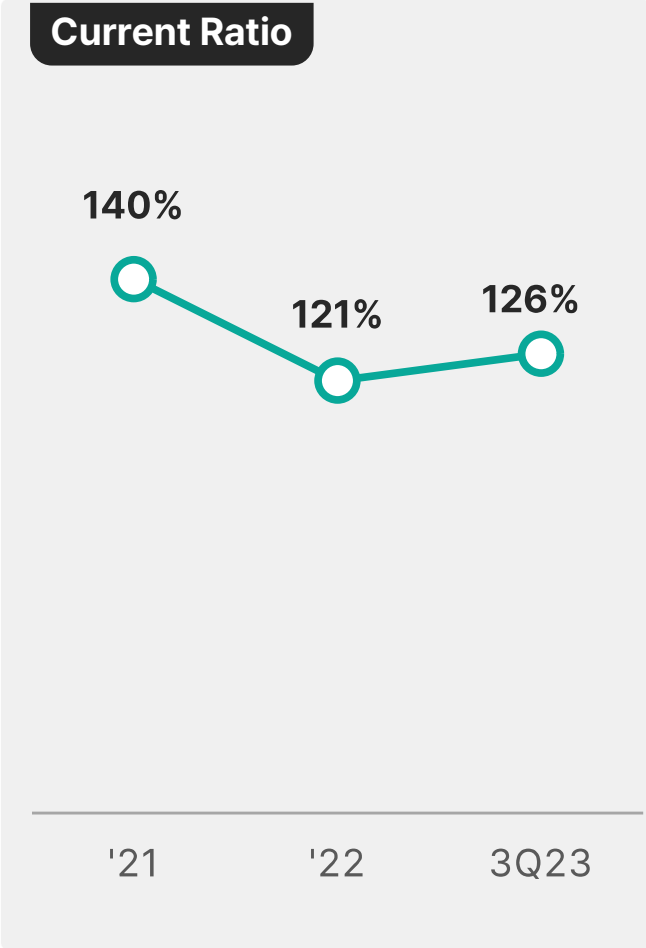
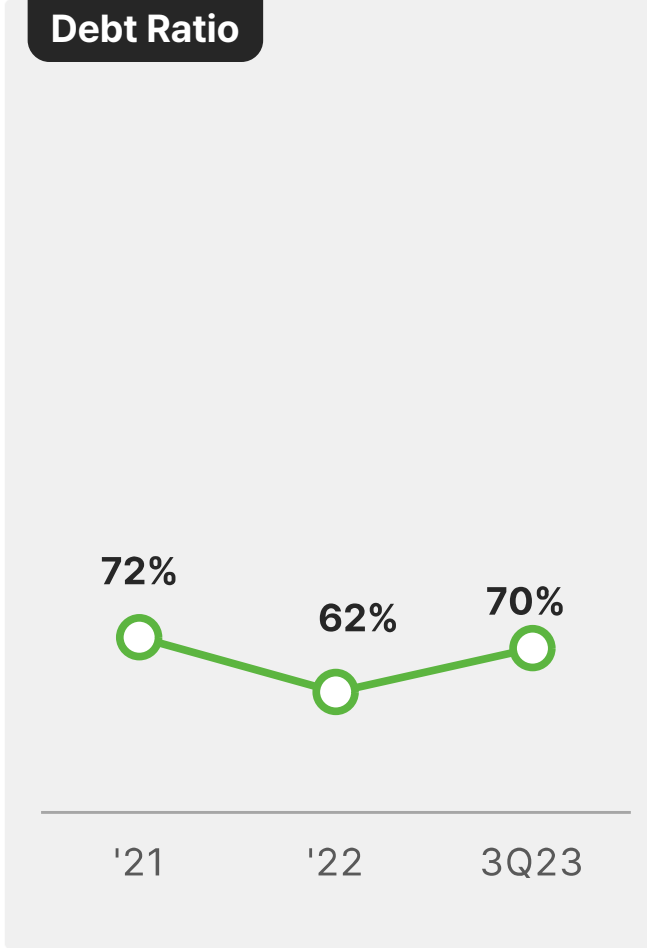


Financial Highlights

Financial status (Separate / Unit: KRW Bn)

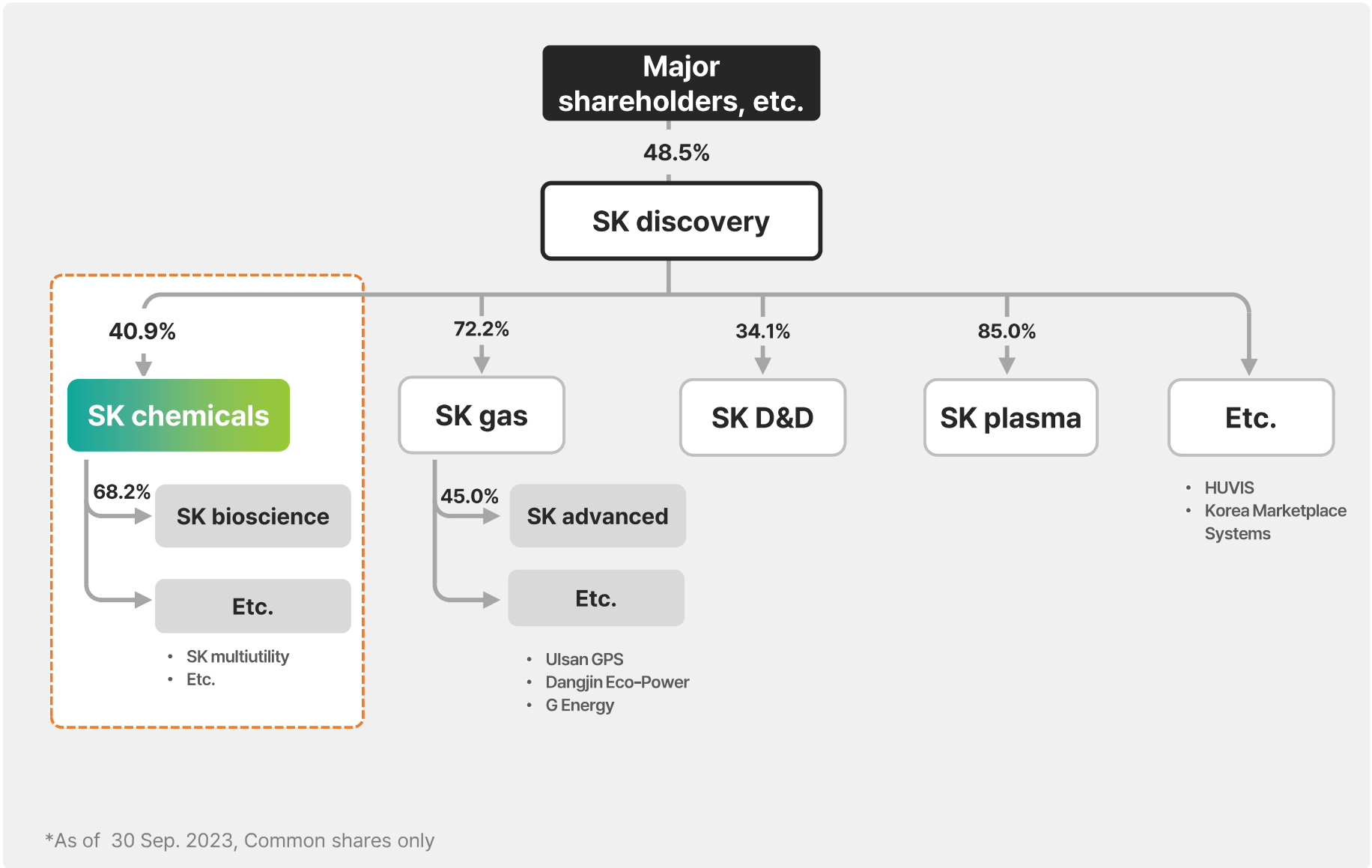


Financial Ratio (Separate)

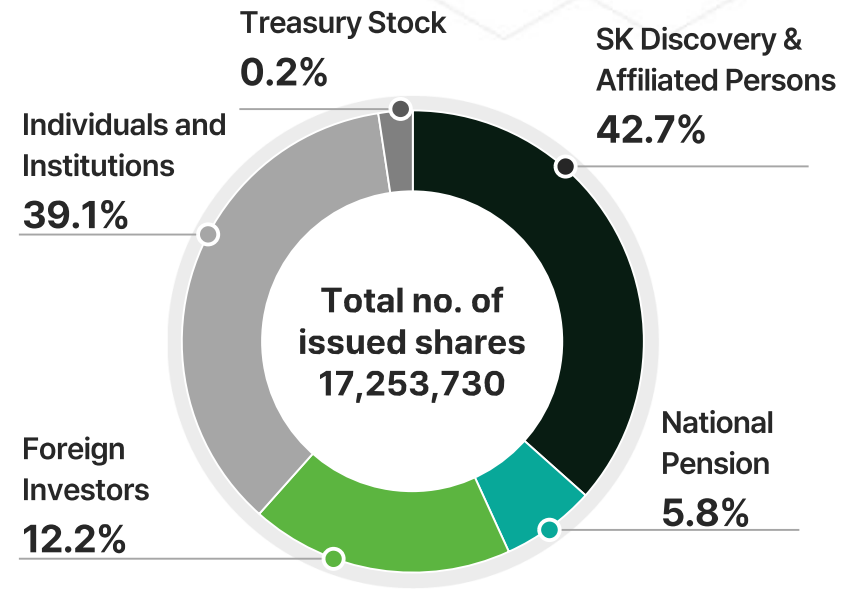


Governance and Shareholders

Corporate Governance



Shareholder Structure



Shareholders Category	No. Shares
SK Discovery & Affiliated Persons	7,361,072
National Pension	1,001,823
Foreign Investors	2,106,811
Individuals and Institutions	6,753,220
Treasury Stock	30,857
Total no. of issued shares	17,253,783

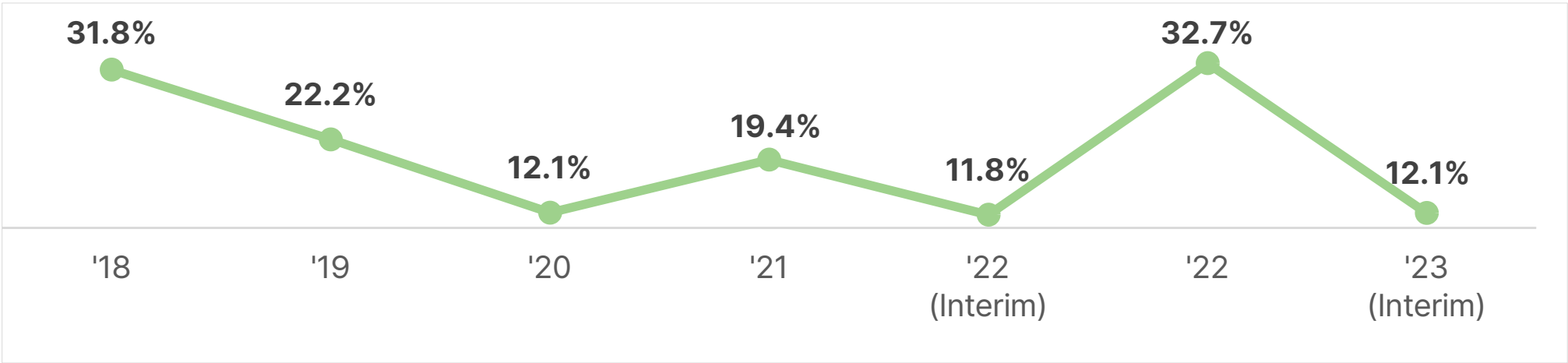
*As of 30 Sep. 2023, Common shares only

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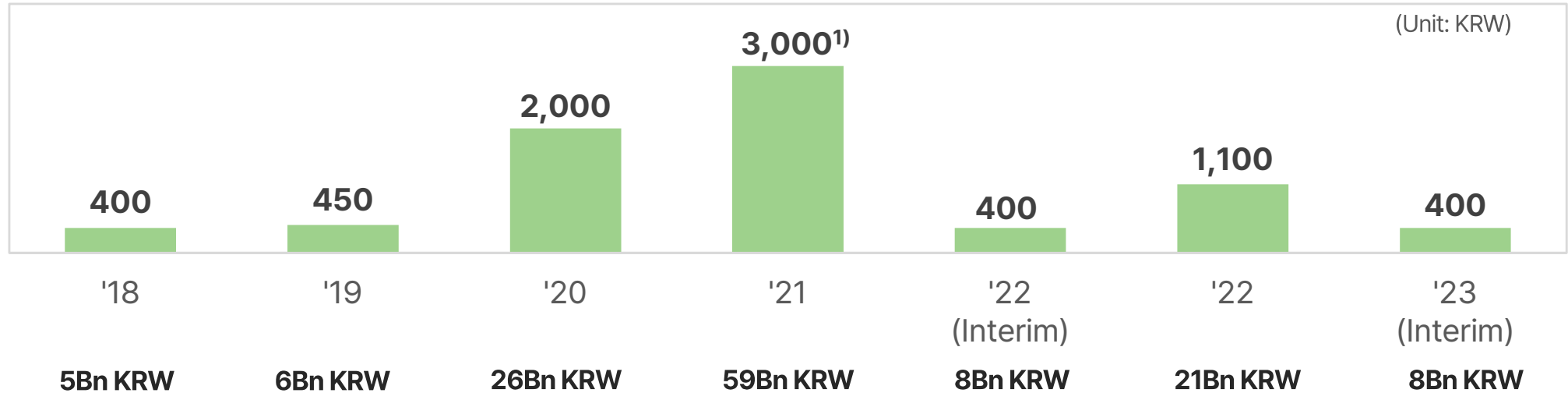
Shareholder returns

Dividend

Payout Ratio



Dividend per share (Common stock)



Others

'17. 6 Retirement of Stock¹⁾

'21. 10 Announced dividend policy²⁾

'21. 11 50% capital increase without consideration

'22. 3 Announced Buy-back of Stock (50 Bn KRW)

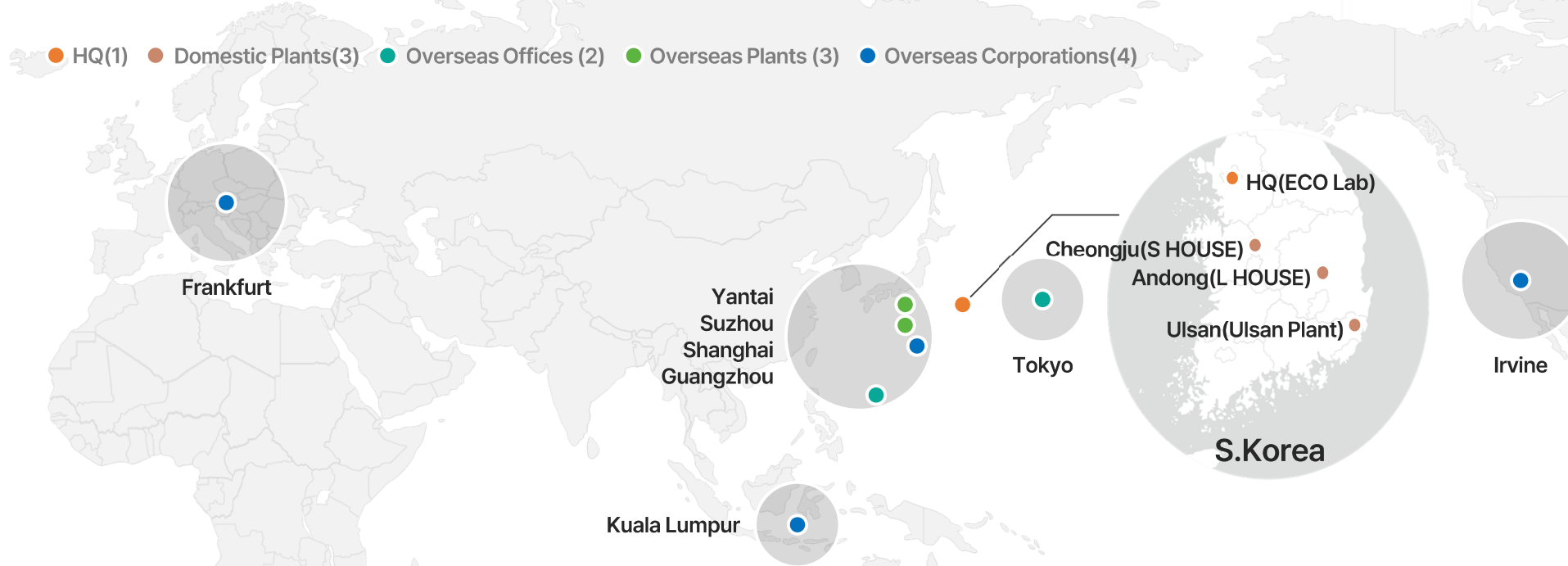
'22. 10 Retirement of Stock (50 Bn KRW)³⁾

1) 1,939,120 shares of common stock
 2) Determining the total amount of dividends at the 30% dividend payout level (Separate net income excluding non-recurring income)
 3) Retired 389,489 common shares

1) Considering the capital increase without compensation, the dividend per share was 4,500 KRW(including extra dividend) in 2021.

Global Network

● HQ(1)
 ● Domestic Plants(3)
 ● Overseas Offices (2)
 ● Overseas Plants (3)
 ● Overseas Corporations(4)



SK Shantou

Construction Status '19 r-BHET , CR-PET Plant takeover (Shuye)
 '23 Mar. Acquisition of Tangible Assets (Shuye)

Production Items r-BHET , CR-PET etc.

Production Capacity r-BHET : 70,000 tons / CR-PET 50,000 tons annually



Ulsan Plant

Certifications ISO 14001(Environment) / ISO 45001 (Safety and Health) / ISO 9001(Quality)

Construction Status '89 SEP. PTA / DMT Plant completion
 '01 JAN. CHDM / PETG Plant completion
 '22 Feb. PO3G Plant completion

Production Items Copolyester resin, DMT etc.

Production Capacity 450,000 tons annually ¹⁾



Cheongju Plant (S HOUSE)

Certifications K GMP/ EU GMP(solid tablets, patches)

Construction Status '09 JUL Cheongju plant takeover
 '12 JUL Production building completion
 '14 MAR Patch building reconstruction

Production Items Solid tablets and patches

Production Capacity 760m solid tablets, 66m patch pouches annually



Andong Plant (L HOUSE)

Certifications MFDS & EU GMP Certifications

Construction Status '12 DEC Completion

Production Items Flu vaccine, varicella/herpes zoster vaccine, COVID vaccine (CMO/CDMO)

Production Capacity Approximately 500m dozes annually based on finished products

1) Reflecting operation of new production facility*(#4) from 15th Jun 2021

Financial Statements (Consolidated)

Balance Sheet

(Unit : KRW Bn)

Items	'22	'23. 3Q
Current assets	2,519	2,276
- Current account	2,036	1,835
- Inventory	483	441
Non-current assets	1,427	1,840
- Investment in affiliated companies and joint ventures	13	12
- Tangible property	1,193	1,495
- Intangible property	52	56
- Other Non-current assets	169	276
Total assets	3,946	4,116
Current liabilities	1,059	765
Non-current liabilities	178	651
Total liabilities	1,237	1,415
Equity attributable to the parent company	2,147	2,145
- Capital stock	99	99
- Consolidated capital surplus	1,199	1,199
- Consolidated other components of equity	△22	△22
- Accumulated other comprehensive income	2	△23
- Consolidated earned surplus	869	892
Non-controlling interest	562	556
Total equity	2,709	2,701
Total liabilities and equity	3,946	4,116

Income Statement

(Unit : KRW Bn)

Items	'22.3Q	'22.4Q	'23.1Q	'23.2Q	'23.3Q
Revenue	433	477	365	371	581
- Cost of Revenue	279	331	267	282	396
- Gross profit from Revenue	153	146	98	90	185
- Revenue and administrative expenses	104	101	89	104	102
Operating profits	50	45	9	△14	83
- Other non-operating income	1	0.8	5	2	3
- Other non-operating expense	3	14	8	13	0.8
- Financial income	71	21	59	28	22
- Financial expense	67	7	54	28	30
- Share of profits	0.1	△0.8	△0.5	△0.4	△0.4
Earnings before interest and taxes	52	48	10	△25	77
- Income tax expense	10	△36	△1	△9	15
Consolidated net income	42	84	11	△16	63
- Equity attributable to the parent company	35	74	16	△11	47
- Non-controlling interest	7	9	△4	△5	16

Financial Statements (Seperate)

Balance sheet

(Unit: KRW Bn)

Items	'22	'23. 3Q
Current assets	645	669
- Current account	401	430
- Inventory	244	240
Non-current assets	1,165	1,243
- Investment in affiliated companies and joint ventures	384	450
- Tangible property	662	677
- Intangible property	32	30
- Other Non-current assets	87	86
Total assets	1,811	1,913
Current liabilities	535	533
Non-current liabilities	156	254
Total liabilities	691	787
Capital	99	99
Capital surplus	158	158
Other components of equity	△13	△13
Earned surplus	876	882
Total equity	1,120	1,126
Total liabilities and equity	1,811	1,913

Income Statement

(Unit: KRW Bn)

Items	'22.3Q	'22.4Q	'23.1Q	'23.2Q	'23.3Q
Revenue*	327	288	303	309	298
- Cost of Revenue	245	212	228	239	226
- Gross profit from Revenue	81	76	75	71	72
- Revenue and administrative expenses	47	51	49	51	48
Operating profits*	35	25	26	20	24
- Other non-operating income	1	4	3	2	2
- Other non-operating expense	3	12	3	10	4
- Financial income	24	5	16	7	7
- Financial expense	23	15	15	13	11
Earnings before interest and taxes*	34	7	26	5	18
- Income tax expense	8	1	10	0.7	4
Net income	26	6	17	5	14

Circular Recycle Biz.



Recycle Biz. History



2019
Started R&D for
Recycle Biz.



2021
Launched the
Chemical recycled product
for the first in the world
(ECOTRIA CR®)



2022
Established mass production
system of chemical recycled
product (SKYPET CR®)
for the first time in Korea



2023 (3Q)
Secured foundation for
SK Chemicals' own
Closed Loop system



2023 (1Q)
Secured core raw material
for chemical recycling
and manufacturing capacity

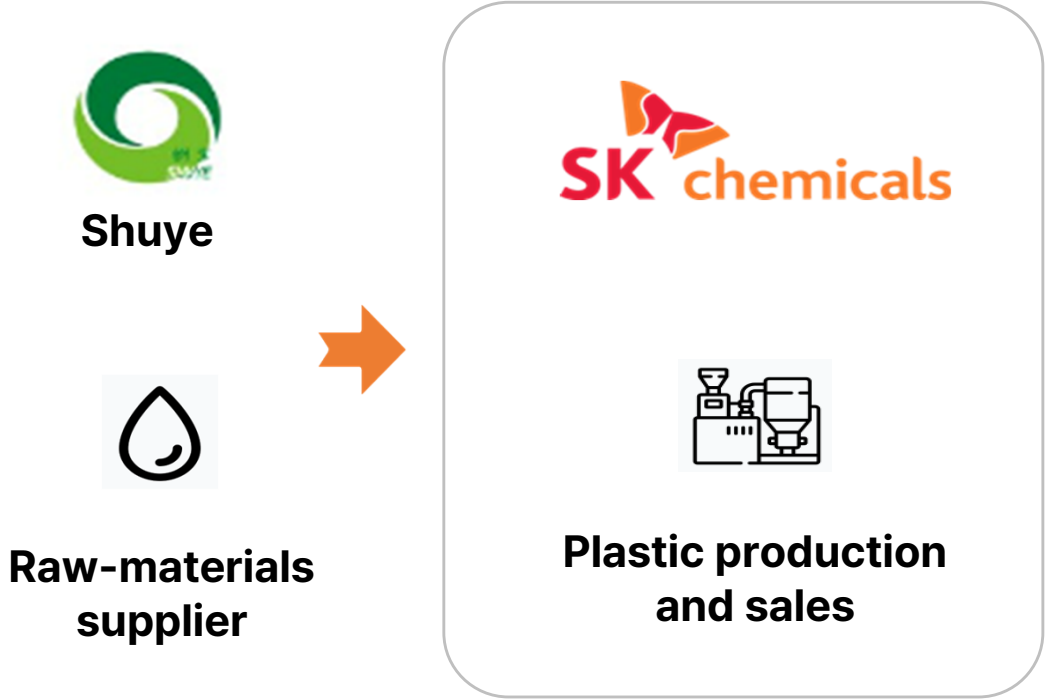


2022
Acquisition of 'Low Carbon'
certification for chemical
recycled Copolyester
for the first in the world

Competency (1) : Internalization of core raw materials

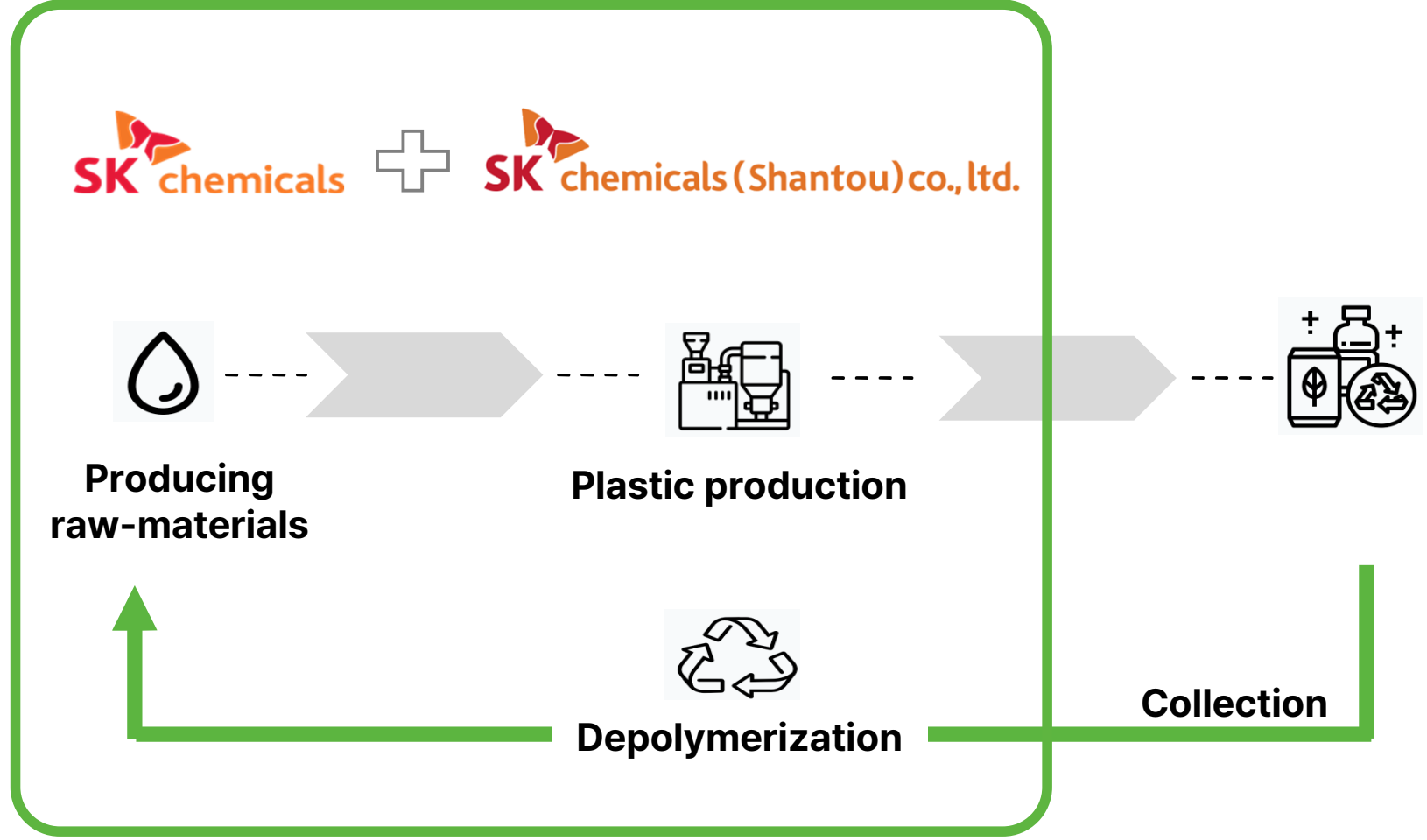
Internalized core raw materials(r-BHET) by acquisition of Shuye's technology and facilities

AS-IS



"Outsourcing raw materials"

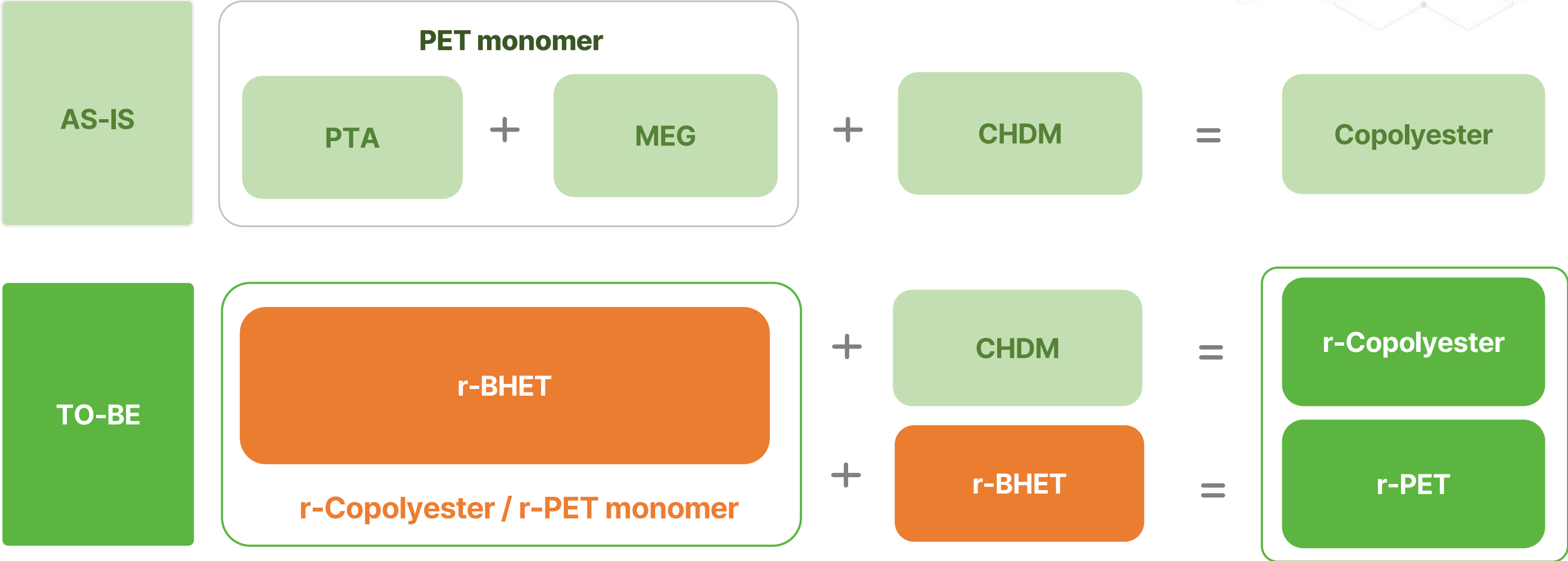
TO-BE



"Internalization of core raw-materials"

Competency (2) : Expansion of biz. criteria

Secured potentially high-growth recycling value chain in which consisted of
①Specialty(r-Copolyester) and ②Mass market product(r-PET)

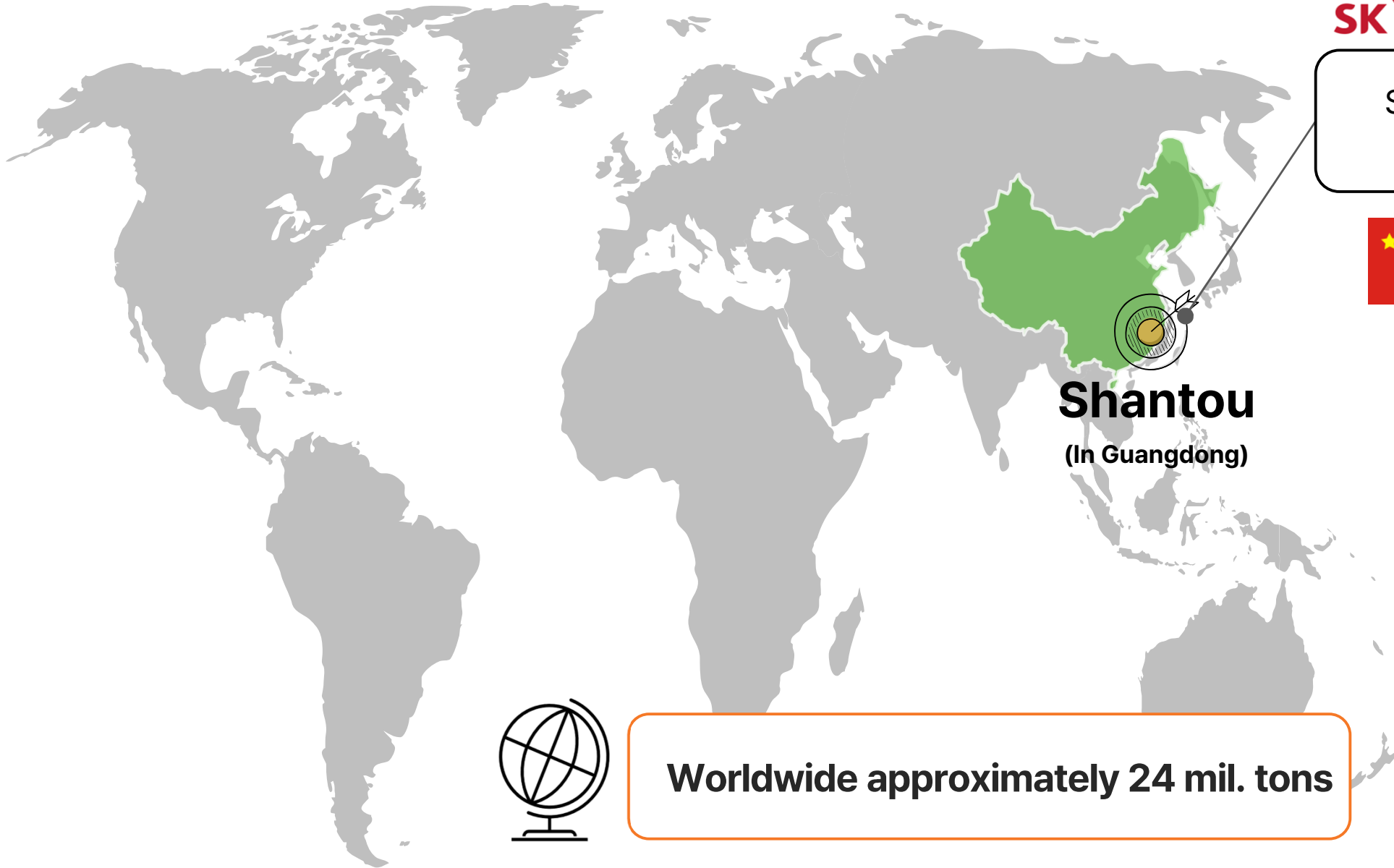


Competency (3) : Securing Feedstock in advance

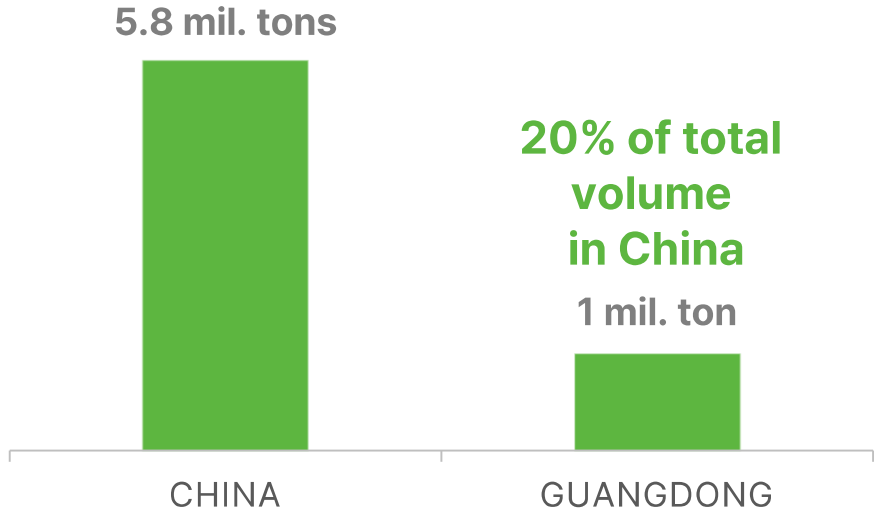
Securing sustainability of recycle business by stable w-PET supply



Securing feedstock preemptively by taking advantage of location



"Waste PET volume in China"



* Source : W.M. MEG Supply/Demand_2020, W.M. Global Bale Flake RPET Capacity_2023 May

Strengthening recycle biz. competency (1)

Working on the 'Basic but Important Tasks' to strengthen biz. sustainability

Key Activities

Expectations

	Key Activities	Expectations
Certification / Regulation	<ul style="list-style-type: none"> Acquisition of GRS and ISCC Plus certification Conducting tasks to respond regulations by major regions 	<ul style="list-style-type: none"> Securing a core-marketing competitiveness Constructing entry barriers against competitors
SK Shantou	<ul style="list-style-type: none"> Processing PMI by adapting SK process after acquisition of Shuye's facilities & technology ('23.3) Promoting cooperation with w-PET (ISCC certified) companies to secure stable flake supply 	<ul style="list-style-type: none"> Enhancing cost competitiveness and optimizing processes through continuous PMI process Building recycling cluster by taking geographical advantage of Shantou
Customers	<ul style="list-style-type: none"> Securing domestic/overseas clients Validation with major brand-owners on the progress 	<ul style="list-style-type: none"> Strengthening Global networks by securing new customers in various markets

Strengthening key factors through analysis & advancement

Raw-materials

Cost-leadership

Advanced strategy

Financial outcome



"Sustainability & Competitiveness"

Strengthening recycle biz. competency (2) - 3Q23 Highlight

Established the foundation of Closed Loop system by signing MOU with waste collection company

LOVERE Overview

- ✓ A Subsidiary of ATRenew,* an electronic device collection and recycling company listed on New York Stock Exchange
- ✓ Currently collecting approximately 420K tons of household waste in 37 cities in China
- ✓ Implementing self-developing AI-based sorting automation device and digital service-based reward program

MOU Overview

- ✓ When : Sep. 18, 2023
- ✓ Why : Securing waste plastic collection / sorting system for establishing Recycle Plastic Closed Loop
- ✓ Expectations : Accelerating the establishment of Closed Loop by expanding the value chain to plastic collection and sorting

Expectations



“Establishment of SK Chemicals’ own closed-loop recycling system, laying the foundation for future customized circular model business for various brand-owners”

2

Business Status and Strategies

2-1. Overview



Vision



Providing eco-friendly materials and total healthcare solution
Global Leading Company



The Green Chemical Company

Leading resource recycling ecosystem



Total Life Science Company

Innovating human lives with technologies

History

Secured business identity through restructuring chemical business and SK bioscience IPO



Green Materials

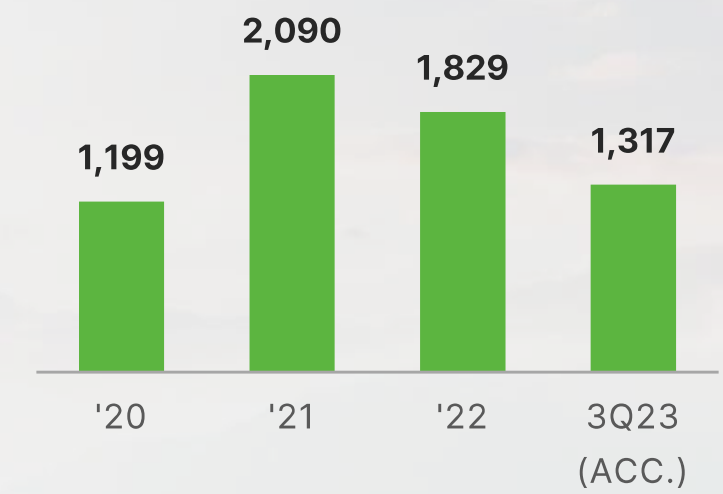
- 2020**
 - Bio energy business sold
 - Drive green portfolio centered growth
- 2021**
 - Initiate commercialization of world's 1st chemical recycling technology-based r-Copolyester (Jul 2021) : securing stable raw material, and inhouse production infrastructure and technical skill
 - New copolyester plant (#4) commercial production started
 - Limited business (PPS business) sold
 - Spin-off Multi Utility business
- 2022 ~**
 - Regularize chemical recycle business
 - Complete bio-materials technology development and start operating commercialized plant (Mar 2022)
 - Develop highly flexible PLA technology and develop commercialization
 - SK-Shantou establishment Mar.'23

Life Science

- 2020**
 - Covid-19 vaccine CMO/CDMO contracts
- 2021**
 - SK bioscience listing on KOSPI
 - Covid-19 vaccine phase 3 trial commenced
- 2022 ~**
 - Expanding new pipelines utilizing AI/DI technologies
 - Fortifying existing portfolio and procuring new technologies
 - Completed Covid-19 GBP 510 Phase 3 trial
 - Supplying updated Novavax COVID vaccine

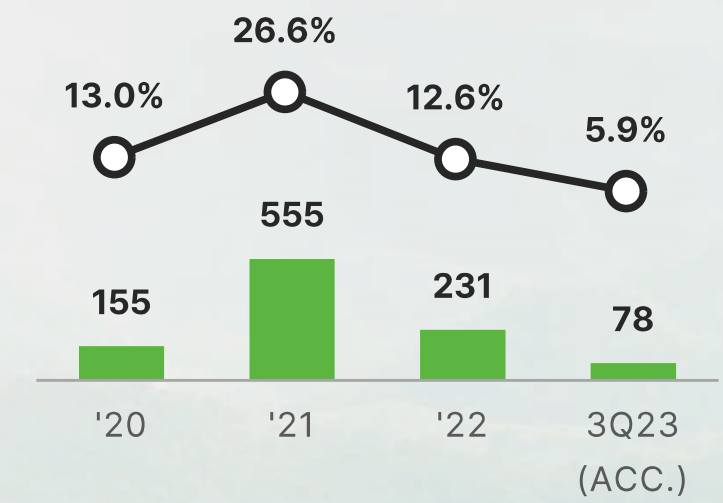
Revenue

(Unit : KRW Bn)



OP & OPM

(Unit : KRW Bn)



* Consolidated, excluding discontinued businesses
 * Reflecting re-written financial statements for the past 2 years from the completion of the sale of business
 - PPS business sale completion: 31st Dec 2021
 - Bioenergy business sale completion: 29th May 2020

Strategies

Jump-up through each unit's organic/inorganic growth strategies

Green Materials(Eco-transition)

1 Transition to Recycled Copolyester

- Focusing on globalization through securing production bases, strengthening network etc.
- Recycle portfolio **50% by 2026**
Recycle portfolio **100% by 2030**

2 Expand into new Bio-material business

- Development and commercialization of corn based PO3G technology
- Development of highly flexible PLA technology overcoming shortcoming of existing PLA

3 Drive 'Net Zero' with green energy usages

- Value creation with LNG fuel transition
- Drive carbon reduction in future by establishing hydrogen economy

1 Expansion of promising future green material business

- Expand into promising future green material business

Organic Growth

Inorganic Growth

Life Science

1 Formation of R&D platform utilizing open innovation and AI

- Development of new drug through open innovation
- Formation of new drug search platform utilizing AI/DI
- Introduction of external projects and venture investments

2 Partnership

- Collaborating with major pharmaceutical companies to develop new products

3 Expansion into the vaccine business and related fields

- Global Top-tier level vaccine platform
- Possession of world-class vaccine production facilities
- Fortification of international cooperation for global vaccine distribution expansion

1 Search for business opportunities in new bio fields

- Search for new business opportunities such as genetic editing/genetic therapy, Proteolysis targeting chimera, cell therapeutics, etc.

A photograph of a large industrial facility, possibly a refinery or chemical plant, at night. The structure is illuminated by numerous bright lights, creating a complex network of steel beams and pipes. A prominent green ribbon graphic, resembling a stylized 'L' or a path, is overlaid on the right side of the image. The background is a dark blue sky.

2

Business Status and Strategies

2-2. Green Materials

Global Market Outlook

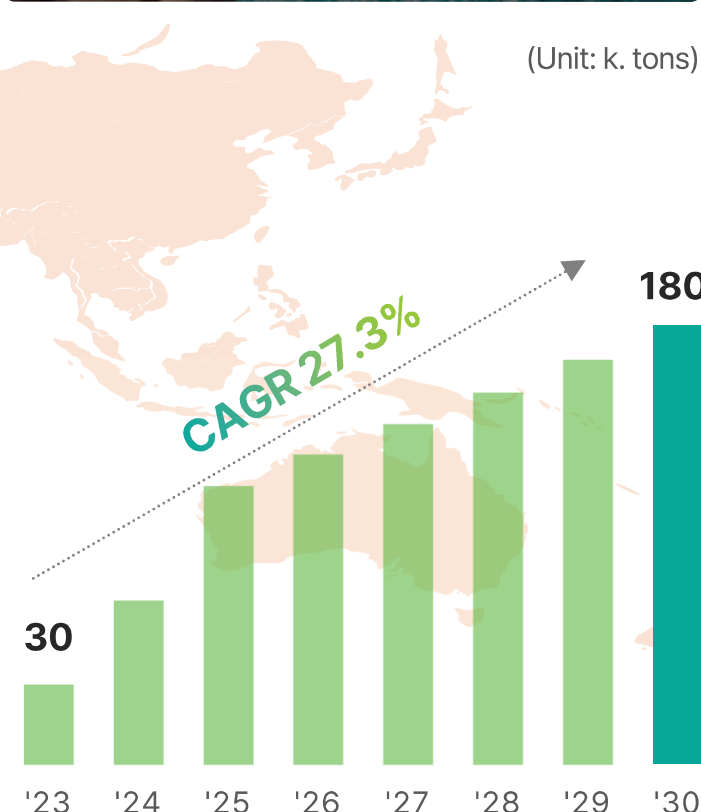
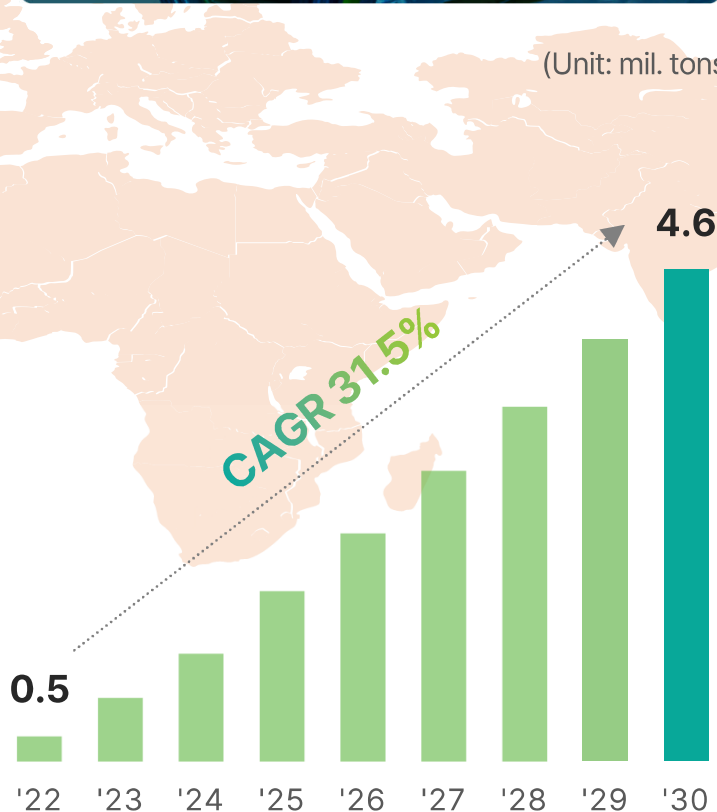
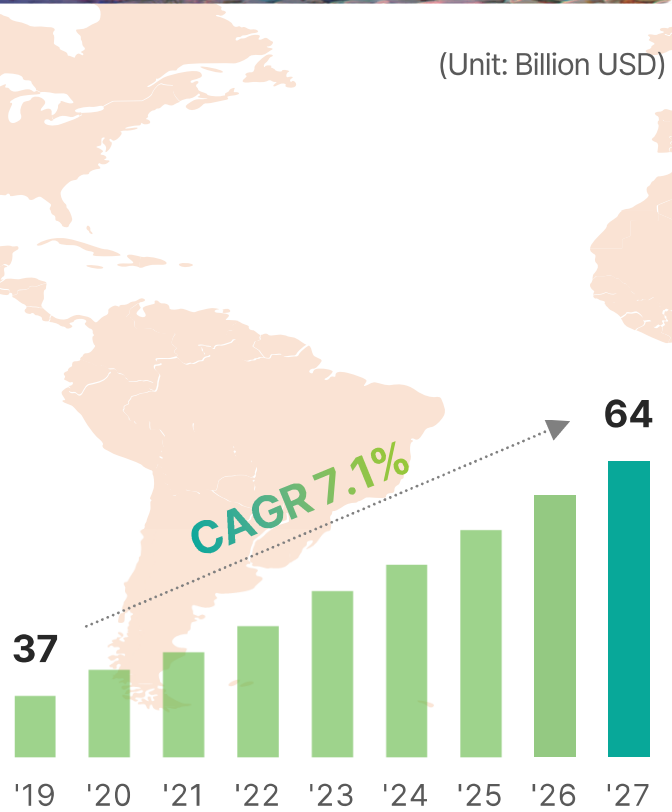
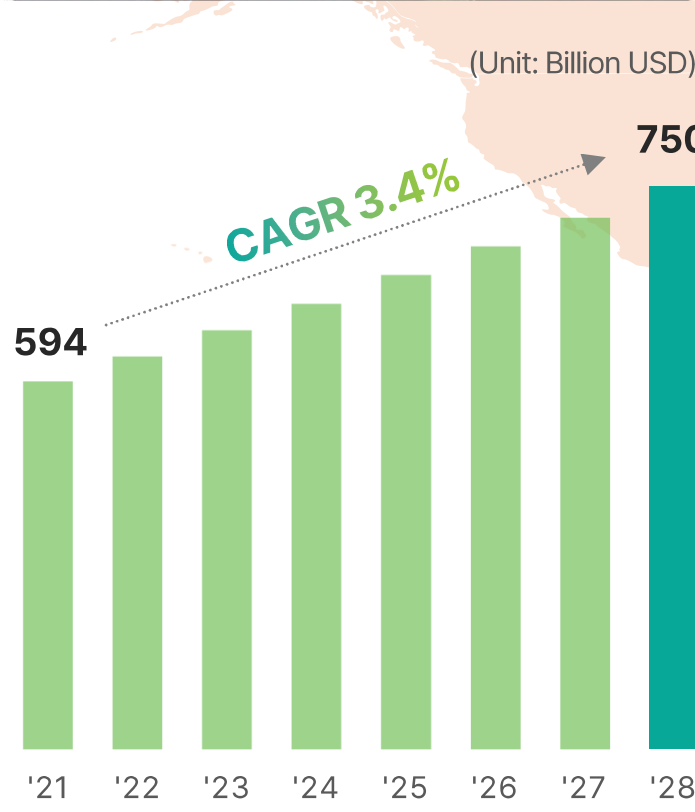
The circular recycling market is expected to show rapid growth, while traditional plastic market shows gradual growth

Global Plastic Market
 Market size in '28
Forecasted to USD 750 Billion

Global Plastic Recycle Market
 Market size in '27
Forecasted to USD 64 Billion

Global CR-PET Market
 Market size in '30
Forecasted to 5 mil. tons

r-Copolyester Market
 Market size in '30
Forecasted to 180k. tons



(Sources: Global plastic market size 2016-2028
 Published by Ian Tiseo, 2021)

(Sources: "Transition to a Circular Economy and
 Response Strategy Published by PwC Korea, 2022)

(Sources: Wood Mackenzie, HIS Markit, Expert Interview)

(Sources: Wood Mackenzie, HIS Markit, Expert Interview)

Copolyester Business

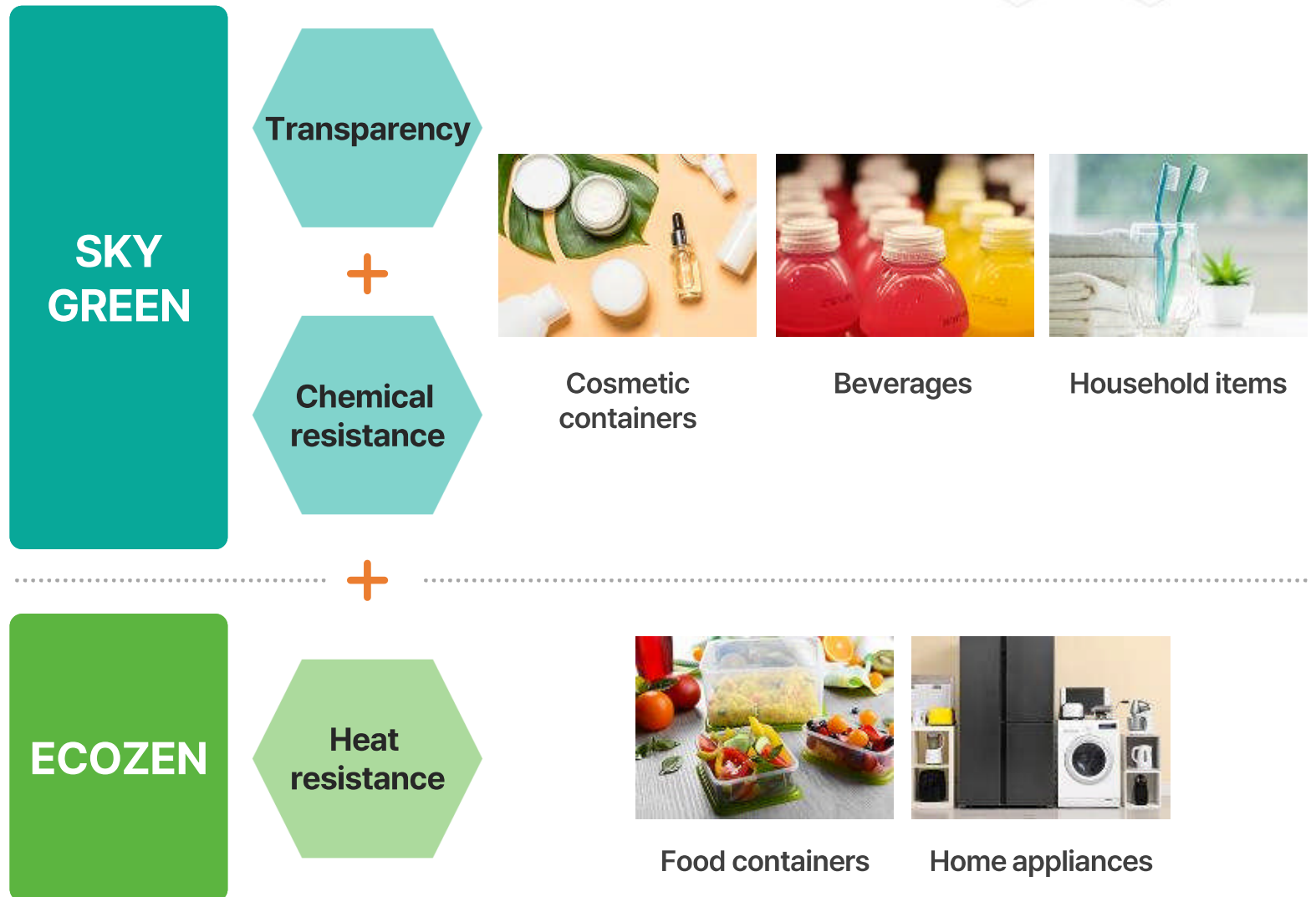
Expansion into the range of applications with Copolyester through continuous product development

Copolyester

Excellent transparency, chemical resistance,
and superior processibility

High performance PETG (BPA Free)

High functional resin
that can replace PC, PMMA, PVC



Global Regulations and Market Trends

Demands for recycled plastic products are expected to hike explosively as global regulation gets stricter


Global Regulations

Europe 


- Mandated recyclable plastic usage in plastic packaging : 55% by 2022, 100% by 2030
(Sources: European Commission, COM(2018))
- Mandated usage of Recycled PET (r-PET) for PET beverage bottles : 25% by 2025, 30% by 2030
(Sources: European Parliament, Single-Use Plastics Directive)

US 

- California : Mandates recycled content in PET bottles - 15% by 2022, 50% by 2030
- Washington State: Mandates recycled content for plastic containers across food and household product - 15% by 2022, 25% by 2025, 50% by 2030

Japan 

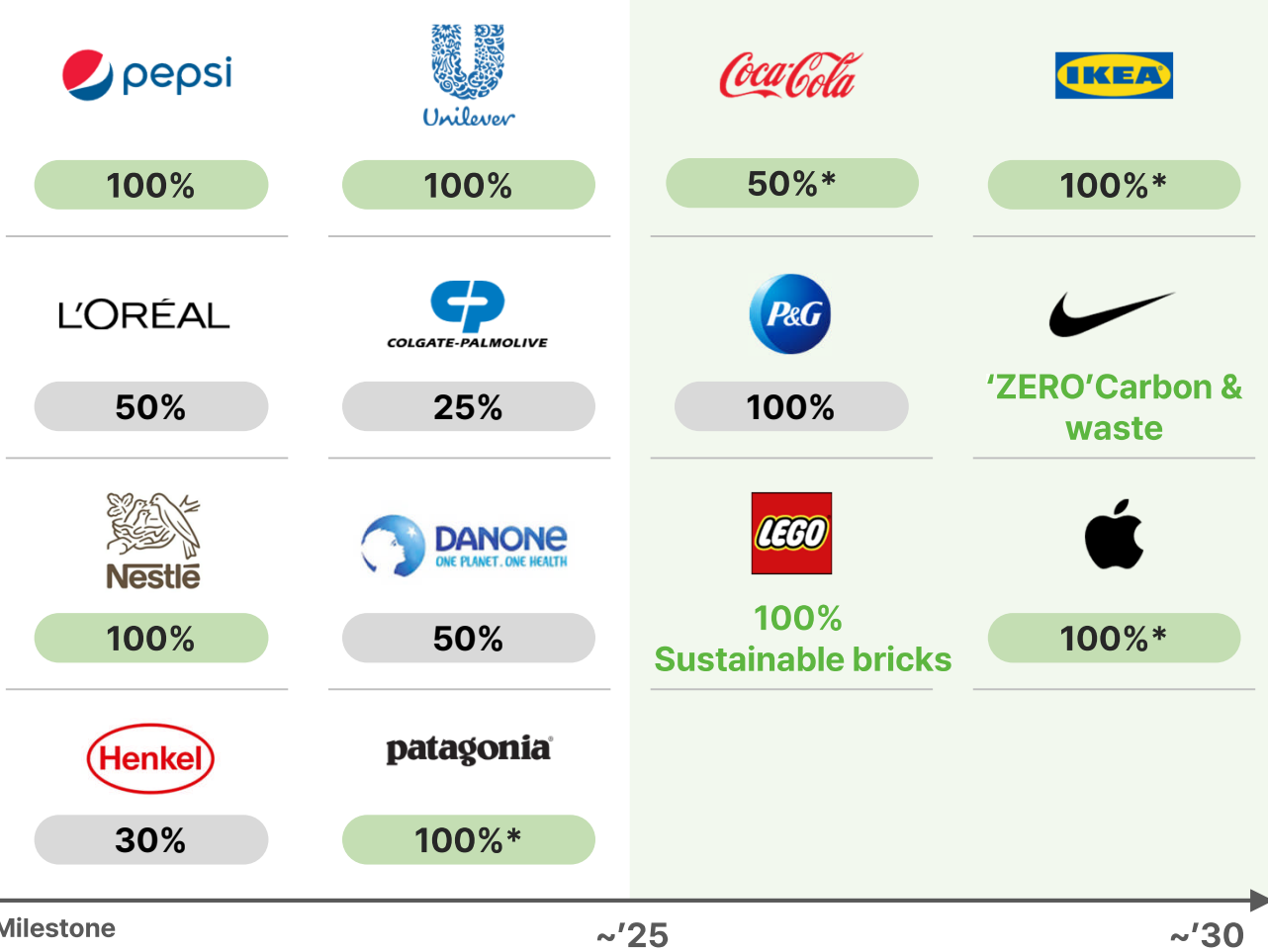
- Establishing goals for recycling rates of plastic containers : 60% by 2030, 100% by 2035

Korea 

- Enlarging 30% of the usage of recycled plastic materials by 2030
- Targeting to reduce 20% of waste plastic by '25

Brand owners' Commitments

Announces from Brand owners :
"Transition to 50%~100% recyclable materials by 2030"



* Renewable & recycle content

(Sources: Branded-audit report (2022)& Homepages of each company)

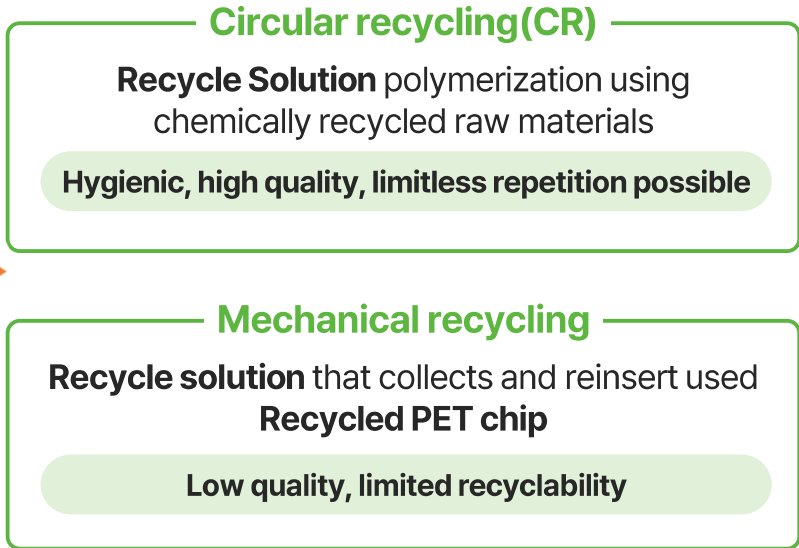
Recycled Copolyester

SK chemicals' sustainable packaging solutions

Establishment of circular economy through recycle closed loop



"Beginning the world's first Circular recycling (CR) commercialization"



Recycle portfolio
100% by 2030

Recycled Copolyester production process



- Strengths**
- 1 Stable raw material secured through self production of r-BHET and CHDM
 - 2 Demonstrate Recycle technology by being the world's 1st to commercialize r-Copolyester

Bio-materials Business

Expansion into bio-material business such as PO3G and high flexibility PLA



Product (Polymer)

Market



Spandex



Artificial leather



Bio-PU



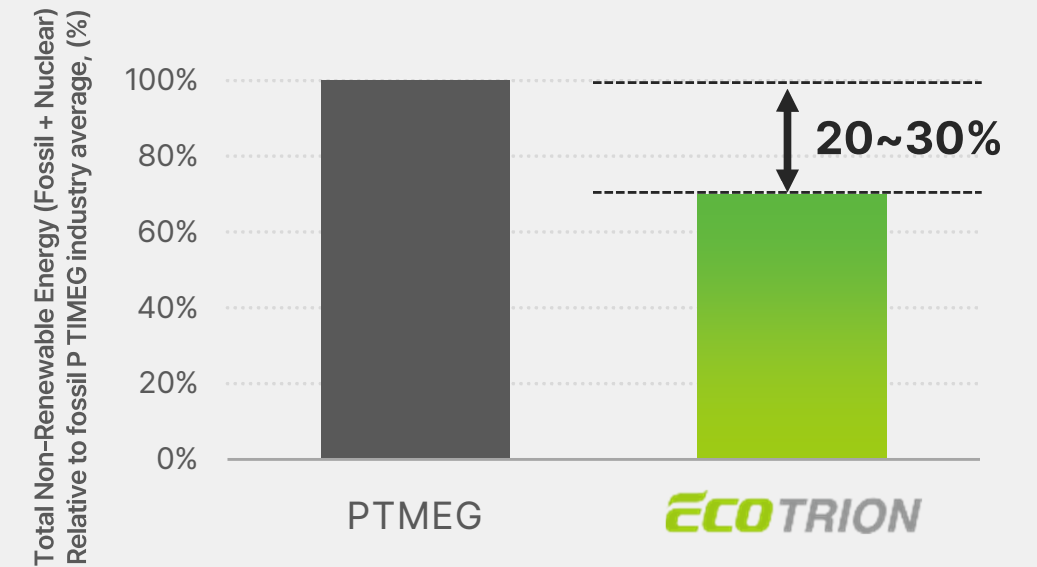
Packaging



- Investment term** Feb 2020 ~ Feb 2022
- Capacity** 5,000 tons annually
- Features** High elastic recovery, Abrasion resistance
- Applications** Elastomer, 3D Printing, Spandex, etc.
- Progress** Commercial plant started (Mar 2022)

PO3G eco friendly features

Up to 30% reduction of greenhouse emissions compared to existing Polytetramethylene Ether Glycol (PTMEG)



Reference : DuPont™ Cerenol® -A New Family of Sustainable and Environmentally Friendly Materials, 2008, Washington DC

2

Business Status and Strategies

2-3. Life Science



Life Science - Pharma

Main Products

Ginexin-F



No.1 Ginkgo extract circulatory enhancer

Joins



Korea's no.1 herbal medicinal products for arthritis

Trast



World no.1 patch formulation for arthritis

Mvix S



World's 1st film type impotency treatment

Rivastigmine Patch



Patch type Alzheimer treatment

Strengths and Growth Strategy

Top class marketing and partnerships in Korea



New drug development strategic cooperation

- Open Innovation
- CMO · CDMO



Establishment of a new drug search platform utilizing AI

- Expand new pipelines and minimization of failure costs
- Secure analysis capacity level on par with established AI companies



Introduction of external projects and venture investments

- Build high-prospect venture capital investment pipelines, and search for new business fields
- Generate investment profits and develop introduction pipelines

Life Science - SK bioscience

- COVID/Endemic
- Premium (Potential)
- Routine Vaccines

		Pre-Clinical	Phase 1	Phase 2	Phase 3	Registration
SKYcovione(COVID-19)	CEPI BILL & MELINDA GATES foundation	●	●	●	●	✓
Pan-Sarbeco(Sarbecovirus)	CEPI INSTITUTE FOR Protein Design	✓				Domestic : BLA Approval Overseas : MHRA MA / WHO EUL Approval
Nasal Spray	INSTITUTE FOR Protein Design BILL & MELINDA GATES foundation iavi	✓				
PCV21	sanofi			✓ US		
RSV		✓				
Recombinant Zoster		✓				
HPV10	Sunflower	✓				
Cancer/Obesity Vaccine, etc.		✓				
SKYCellflu(Quadrivalent)						✓
SKYZoster						✓
SKYVaricella						✓
TCV	International Vaccine Institute BILL & MELINDA GATES foundation					✓ BLA Approval for Export
HPV4	Sunflower		✓ Phase 1/2			
Rotavirus Pentavalent			✓			
Hepatitis A Vaccine		✓				
Other Vaccines		Pursuing acquisition of new pipelines & commercialized vaccines via partnerships and M&A				

