SECTOR
UPDATE

2026. 5. 21

Renewable Energy/ Chemicals

China Solar / Chemicals Visit Report:
Technological Advancement and Circular Economy

EV/Mobility Team

Hyunryul Cho
Senior Analyst
hyunryul.cho@samsung.com

Wonyoung Kim
Research Associate
wonyoung10.kim@samsung.com

Samsung Securities

EXECUTIVE **SUMMARY**

Dear Investor,

Over Apr 20-23, we visited Chinese solar company GCL Technology Holdings and refining/ petrochemical firm Sinopec Shanghai Petrochemical. We also toured Chinaplas 2026 (a global top-three plastics exhibition) and SK Chemical's chemical recycling plant in China (SK Shantou).

By visiting GCL Tech, we gained insight into the restructuring of the polysilicon sector, as well as the operational status of GCL Tech's subsidiary (GCL Optoelectronics), which is set to commercialize space-grade photovoltaics. While China's restructuring of its polysilicon industry was being driven by its anti-overcapacity policy, it has recently stalled after the State Administration for Market Regulation determined in January that private-sector production-capacity/pricing agreements could constitute anti-competitive behavior. Nevertheless, as the government continues to encourage restructuring through alternative means, significant supply reductions remain highly probable. Meanwhile, GCL Optoelectronics has already secured commercial production capacity of 1 GW for perovskite solar modules and is attracting interest from satellite manufacturers in China as well as the US.

Sinopec Shanghai Petrochemical (SPC) is modernizing its infrastructure (which is aging) by retiring outdated ethylene cracking centers, building new facilities, and expanding production of specialty chemicals (*eg*, carbon fiber and thermoplastic elastomers). The new crackers are designed to process a mixed feed of naphtha, LPG, and ethane. This transition aligns with a broader industry trend in China to reduce production costs and lessen dependence on geographically concentrated feedstocks.

Chinaplas 2026 highlighted how Chinese and global chemical companies are advancing new materials and green transformations, which shifts are aligned with China's push for New Quality Productive Forces (NQPF; advanced productivity driven by technological innovation). We saw the active development of materials that are tailored to China's vast consumption markets, particularly in the areas of humanoid robots and electric vertical takeoff and landing aircraft (eVTOL).

During our visit to SK Chemicals' facility in China, we were impressed by its distinction as the only Korean chemical firm operating a commercial chemical recycling plant, as well as its ongoing investments to integrate the value chain—critical steps towards scaling its recycling business.

Through this visit to China, we identified three key insights relevant to Korean stocks: 1) China's leadership in space-grade solar cell technology—and its growing use of polysilicon for such applications—reinforces the longer-term growth potential of OCI Holdings; 2) the entry of Chinese chemical firms into the specialty chemical market and their investments in ethane crackers suggest that Korean NCC firms may face increasing competitive pressure over the longer term; and 3) specialty chemical firm SK Chemicals' recycling business is showing early signs of positive earnings contribution this year, driven by increased demand for alternative feedstocks in the wake of the Middle East war.

We hope this report enhances your understanding of the solar and chemical sectors and supports your informed investment decisions.

Thank you.

EV/Mobility team **Hyunryul Cho senior analyst** | hyunryul.cho@samsung.com
Won Young Kim Research Assistant | wonyoung10.kim@samsung.com

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Site visit report: GCL Technology Holdings

Solar industry restructuring and strategic push into the space solar cell market

Restructuring—Confirmation of commitment to anti-overcapacity policy

Approach to polysilicon sector restructuring adjusted, but overall strategic direction valid

On Apr 20, we conducted a corporate site visit to GCL Technology Holdings (hereinafter GCL Tech), a leading Chinese polysilicon producer, to assess: 1) the ongoing restructuring of China's solar industry; and 2) GCL Tech's strategic initiatives in the space solar cell sector.

First of all, China's solar industry restructuring began in 1H25, driven by the government's "anti-overcapacity" policy. While no direct mandates were issued, the policy provided clear directional guidance, prompting industry players to take corrective actions.

In July last year, major Chinese polysilicon producers agreed to establish a joint fund to acquire and permanently shut down approximately one-third of China's polysilicon capacity. In December, they formed a JV (Beijing Guanghe Qiancheng Technology): Tongwei (30.35% stake), GCL Tech (16.79%), East Hope (11.30%), Daqo (11.13%), Xinte (10.12%), and Asia Silicon (7.79%).

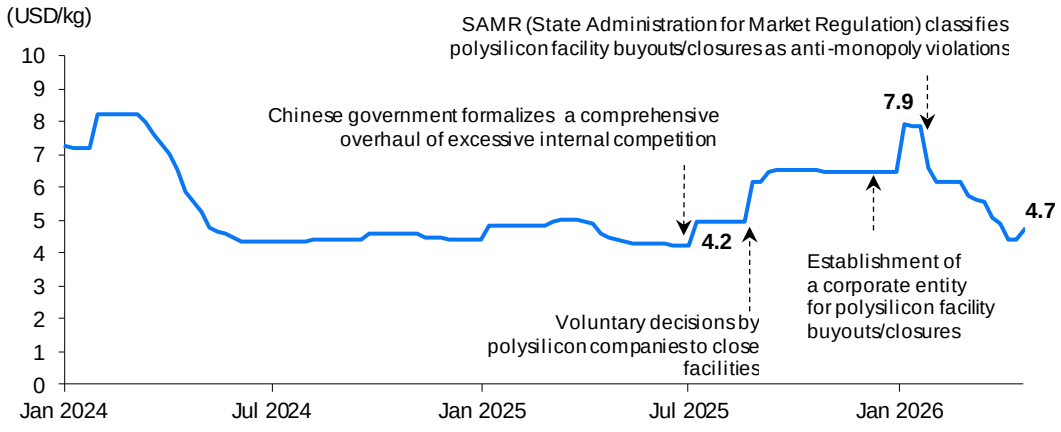
However, in January this year, China's State Administration for Market Regulation (SAMR) summoned the JV partners and issued a strong warning against any production capacity or pricing collusion, deeming such coordination a violation of antitrust regulations (the SAMR views the proposed capacity reductions and output coordination as akin to an OPEC-style cartel, which contravenes China's competition laws). As a result, the JV-led acquisition plan was suspended, resulting in polysilicon prices dropping from 7.9/kg in early January to 4.7/kg today.

Despite this setback, government-led restructuring efforts continue—now shifting from joint efforts to control supply to market-driven consolidation. A key example is the elimination of export VAT rebates for solar products, which was announced in January and became effective from Apr 1. Previously, exporters received a 9% VAT refund. Its full removal (from Apr 1) has imposed an immediate cost burden of approximately 10% on marginal firms relying on below-cost exports. This signals the government's intent to end the dumping of subsidy-backed products.

Additionally, in March, the Chinese government published revised mandatory national standards (Guojia Biaozhun; GB) for solar module manufacturing, tightening oversight of the alignment between actual module output and nameplate ratings, and raising minimum efficiency thresholds. These measures aim to curb the distribution of low-quality, low-price products and raise entry barriers.

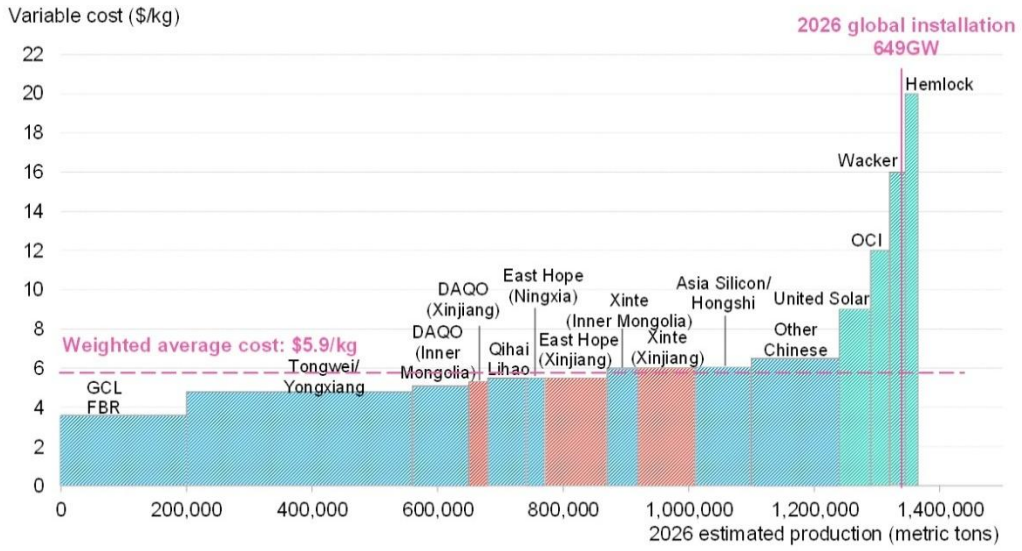
Although the methodology for China's solar restructuring has been adjusted, the government continues to drive structural reform under its anti-overcapacity policy, aligning market mechanisms with policy guidance. As such, the recent decline in China's polysilicon prices is likely to reflect the long-term impact of this restructuring, with a sustained rebound being a probable outcome. Korean polysilicon manufacturers, operating through diversified markets outside of China, are unlikely to benefit significantly from China's restructuring. However, the restructuring is expected to reduce the risk of low-cost Chinese products disguising their origin to compete with non-Chinese products.

Chinese polysilicon: Price trends and key events



Source: PV insights, Samsung Securities

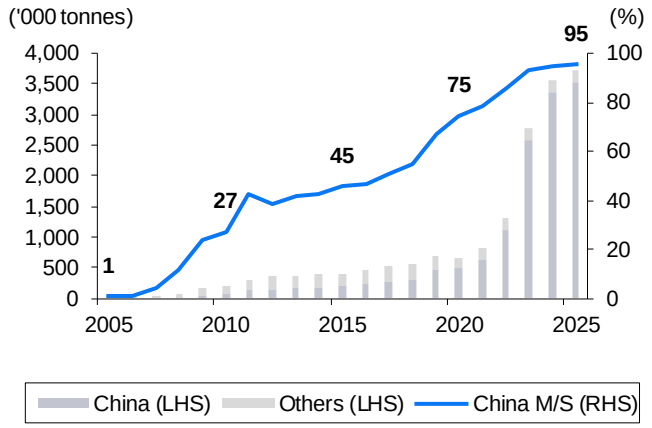
Global solar polysilicon: 2026 cost curve



Note: Blue indicates Chinese facilities excluding Xinjiang Uyghur, red indicates Chinese facilities in Xinjiang Uyghur, and green indicates non-Chinese facilities. Variable cost includes processing and SG&A expenses, excluding depreciation. 2026 demand is based on polysilicon consumption of 2.1g/W, assuming a USD/CNY exchange rate of 7.0.

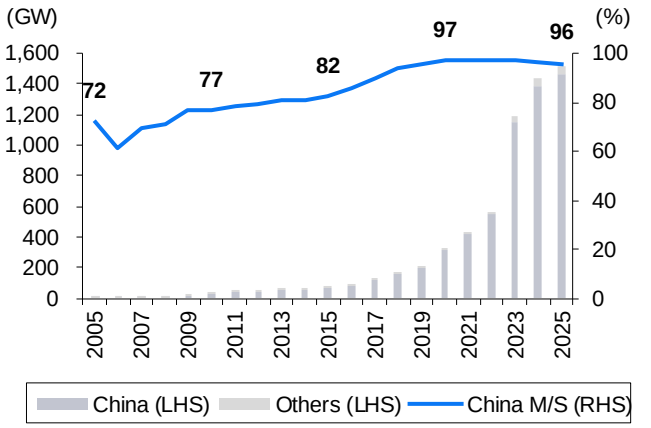
Source: Bloomberg NEF, Samsung Securities

Solar polysilicon: Global capacity and China's share



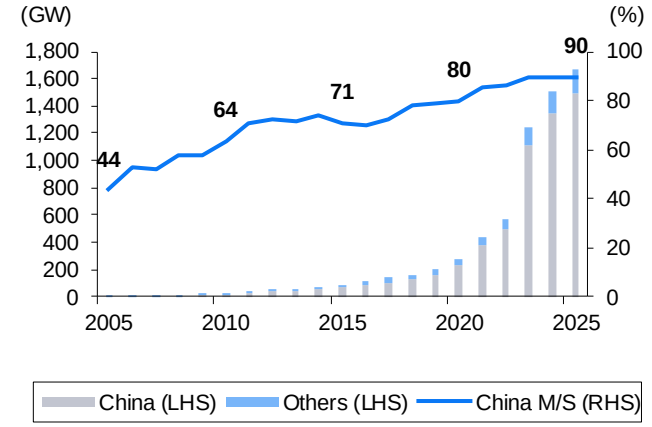
Source: Bloomberg NEF, Samsung Securities

Solar wafers: Global capacity and China's share



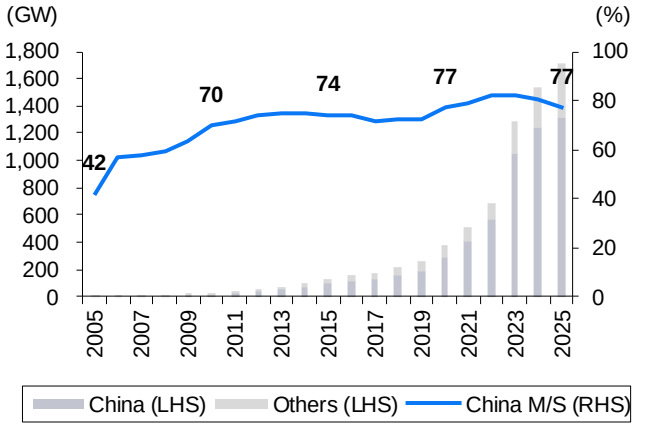
Source: Bloomberg NEF, Samsung Securities

Solar cells: Global capacity and China's share



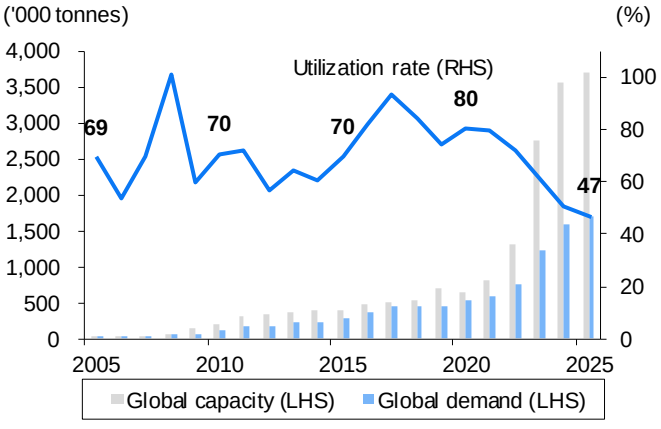
Source: Bloomberg NEF, Samsung Securities

Solar modules: Global capacity and China's share



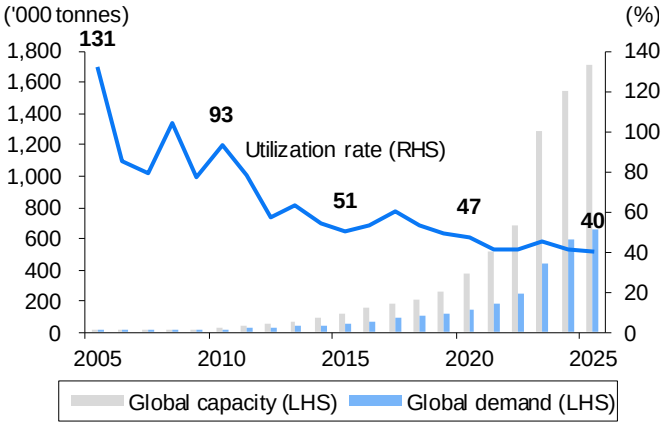
Source: Bloomberg NEF, Samsung Securities

Global polysilicon: Supply-demand balance and utilization rates



Note: Solar polysilicon capacity is limited to silicon-based products, but demand includes both silicon and non-silicon-based products.
Source: Bloomberg NEF, Samsung Securities

Global solar modules*: Supply-demand balance and utilization rates



Note: Solar module capacity is limited to silicon-based products, but demand includes both silicon and non-silicon-based products.
Source: Bloomberg NEF, Samsung Securities

Space solar cells—Commercialization of perovskite solar technology

A second key insight we gleaned from our site visit to GCL Tech concerns its subsidiary (GCL Optoelectronics), which is pioneering the commercialization of perovskite solar cells for space and terrestrial applications. Its shareholders include GCL Tech (42.1% stake), along with major investors such as Tencent, Temasek, Sequoia Capital, and IDG Capital.

GCL Optoelectronics, established in 2019, is focused on the research, development, and mass-production of perovskite photovoltaic modules. The company has already achieved a production capacity of 1 GW. Unlike its competitors (which still operate at the lab-scale cell level), GCL Optoelectronics is aggressively scaling up to mass-produce large-area modules (over 1 m × 2 m) for real-world solar power plants. Since Oct 2025, it has been shipping ultra-large modules measuring 2.76 m^2 (1150 × 2400 mm), marking a significant leap from prototype to commercial product.

In Feb 2026, GCL Optoelectronics' perovskite-tandem module successfully passed the international IEC 61215 and IEC 61730 certifications. These certifications are mandatory for bankability—without them, financial institutions will not fund commercial solar projects that use their products. Passing these standards confirms that GCL Optoelectronics has transitioned from laboratory R&D to industrial-scale manufacturing. As of 2025, the company's perovskite single-junction modules (2 m^2) had a 20.2% efficiency, while its perovskite-silicon tandem modules reached 27.1%—remarkable figures for large-area modules.

Historically, two barriers have hindered perovskite commercialization: Durability and size effect. Perovskite materials are prone to rapid degradation from exposure to moisture, oxygen, light, and heat, leading to performance decay. Additionally, efficiency gains observed in small lab cells have historically plummeted when scaled to large modules due to non-uniform coatings and increased resistive losses—a phenomenon known as the size effect.

However, GCL Optoelectronics' performance trajectory suggests that the size effect has been substantially mitigated. In 2021, a 0.3 m^2 module achieved a 17% efficiency, while its 2 m^2 counterpart reached just 10%. By 2025, efficiency for both sizes had improved dramatically (23% for 0.3 m^2 and 20% for 2 m^2 modules), with the efficiency gap shrinking to under 3%pts. This indicates that the company has overcome critical scaling challenges, bringing perovskite modules to a commercially viable technical maturity.

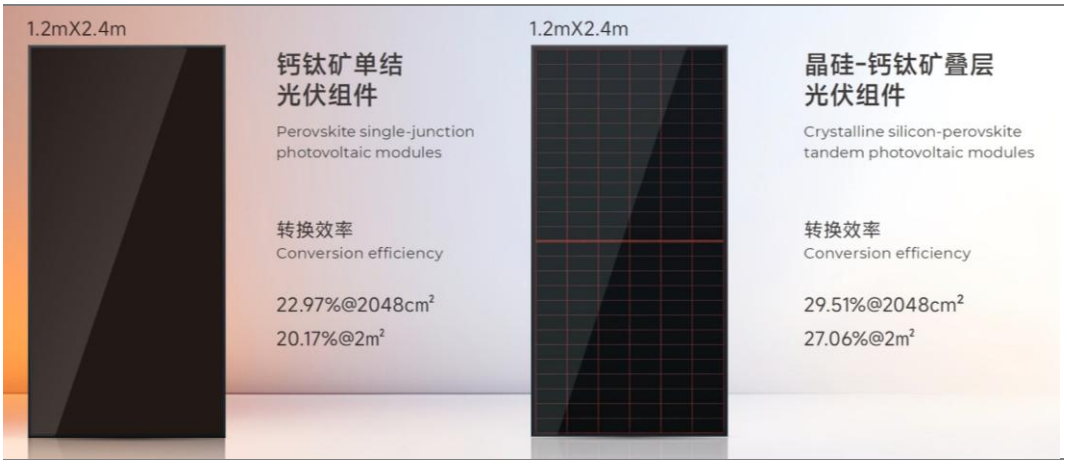
Building on this progress, in Mar 2026, GCL Optoelectronics won China's first commercial contract for perovskite-silicon tandem modules. The project, awarded by China Huaneng Group—one of China's five state-owned power giants—will deploy 1.2 MW of perovskite-HJT (heterojunction) tandem modules. This marks the official start of commercial perovskite deployment in China, with GCL Optoelectronics standing at the center of this breakthrough.

GCL Optoelectronics: Recent R&D and business trends

Date	Event
Jan 2025	Achieved 22.43% efficiency for single-junction and 28.06-29.51% for tandem on a 0.2 m^2 panel.
Mar 2025	Established a joint R&D center with Suzhou University and Suzhou Research Institute.
Jun 2025	Officially commenced operations of a GW-scale perovskite plant.
Jul 2025	Completed Series C2 funding (CNY200m).
Oct 2025	Commenced shipments of 2.76 m^2 (1150*2400 mm) ultra-large commercial perovskite modules.
Feb 2026	First in the world to obtain dual IEC certification, transitioning from the lab stage to large-scale commercialization.
Mar 2026	Secured an order for commercial perovskite-HJT tandem modules (1.2 MW) from China Huaneng Group (one of China's top 5 state-owned power generation companies).

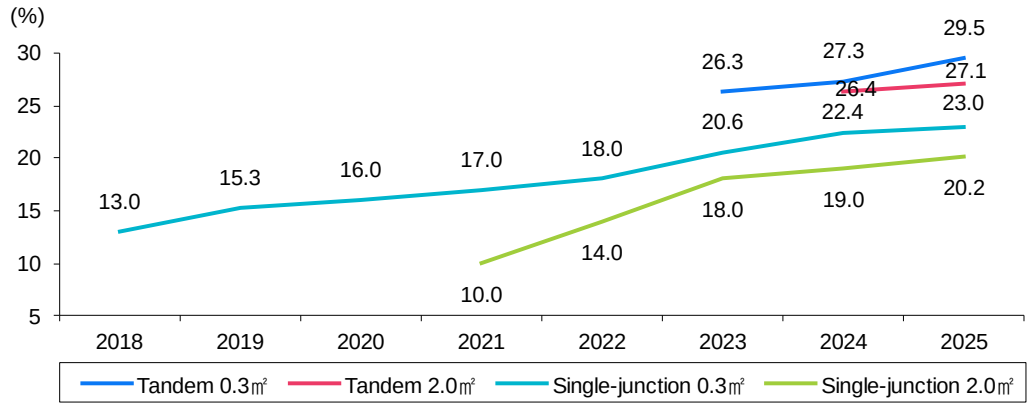
Source: GCL Optoelectronics, Samsung Securities

GCL Optoelectronics: Specifications of large-area perovskite products



Source: GCL Optoelectronics, Samsung Securities

GCL Optoelectronics: Power conversion efficiency improvement trends for large-area perovskite products



Source: GCL Optoelectronics, Samsung Securities

GCL Optoelectronics aims to be listed on the Hong Kong Stock Exchange (HKEX) this year. Following the IPO, the company plans to expand its 1 GW production capacity to 2 GW. A notable feature of this expansion is that half of the additional 1 GW (*ie*, 0.5 GW) is earmarked for a new manufacturing facility in the US. While demand for perovskite technology in the US is strong, technical capabilities there remain limited, leading many American customers to actively request that GCL Optoelectronics establish US production. However, to qualify for Inflation Reduction Act (IRA) subsidies, the company is likely to adopt a licensing-and-management model rather than full ownership. Under this structure, its US partner would hold majority equity in the facility, while GCL Optoelectronics would retain control over technology licensing and production oversight—mirroring the partnership between CATL and Ford in the battery sector, where Ford owns the plant but CATL supplies its LFP technology in exchange for royalties.

In addition, GCL Optoelectronics has recently disclosed its strategy for entering the space solar cell market, which is structured in three phases. First, this year, the company plans to conduct rigorous durability testing of its modules under simulated deep-space conditions. Second, between 2027 and 2028, it will prepare for mass-production of space-optimized perovskite solar modules. Finally, beginning in 2028, the company aims to supply power systems for Chinese spacecraft based on its perovskite solar technology. This roadmap indicates that, leveraging its existing GW-scale manufacturing base, GCL Optoelectronics intends to commercialize space-grade perovskite solar cells around 2027-2028. In comparison, Hanwha Solutions is currently advancing its perovskite-silicon tandem module development through a pilot line, with plans to achieve GW-scale commercialization by 2029. This suggests that GCL Optoelectronics is approximately one to two years ahead in the race to deploy perovskite-based solar technology in the space sector.

GCL Optoelectronics: 2026 business plan

Date	Activity
2026	Plans for an IPO on the Hong Kong stock exchange; considering new investments in a US plant (0.5 GW capacity) post-IPO
2026	Targets annual shipments of 0.1 GW (currently holds 1 GW capacity, with plans to expand to 2 GW)
2026	Dispatched initial test samples to the Shanghai Institute of Space Power - Sources under the China Aerospace Science and Technology Corporation (CASC) 8th Academy (1Q26).
2026	Developing perovskite solar wings and in-orbit application technologies with Shanghai SastSpace; planning a near-space verification mission using high-altitude balloons in 4Q26

Source: GCL Optoelectronics, Samsung Securities

GCL Optoelectronics: Three-step strategy for commercializing space solar cells

Date	Activity
2026	Plans for deep-space durability testing of its products
2027-2028	Plans for mass-production of space-specific perovskite modules
Post-2028	Plans to supply power systems for Chinese spacecraft

Source: GCL Optoelectronics, Samsung Securities

Visit to Sinopec Shanghai Petrochemical

Expanding specialty chemicals and diversifying feedstocks

Expanding specialty chemicals to boost profitability

China's petrochemical industry moving beyond a traditional framework (reduce oil, increase chemicals) and adopting a new strategy (reduce oil, increase specialties)

On Apr 20, we paid a visit to Sinopec Shanghai Petrochemical (SPC; 00338 HK)—one of China's largest integrated oil and chemical producers—to gain insights into the evolving dynamics of China's refining and petrochemical industries and the direction of its strategies.

SPC is 51.8% owned by Sinopec Corp (0386 HK) and runs integrated facilities with an annual crude processing capacity of 14m tonnes and ethylene production of 0.7m tonnes. In 2025, its sales (by business) were composed of 63% refining, 26% chemicals, and 11% others. Operating margins for the same period were -0.9% for refining, -10.1% for chemicals, and +0.5% for others.

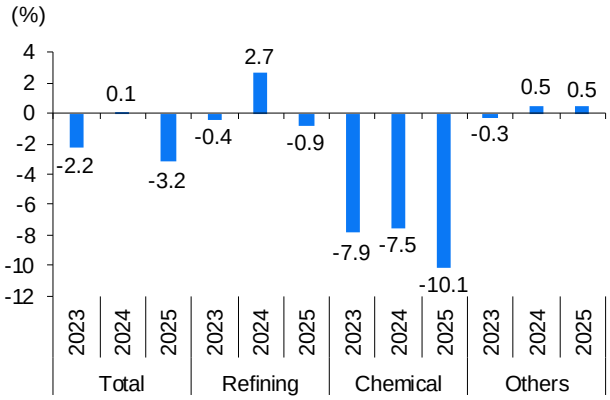
China's refining sector operates under government-regulated retail pricing, which limits pricing flexibility relative to Chinese peers in other Asian markets. As a result, China's refining margins are structurally weaker. Between 2023 and 2025, SPC's chemical segment posted an operating margin of -7% to -10%, slightly below Lotte Chemical's olefins business (-5% to -6%). This reflects SPC's continued focus on commodity-grade products.

SPC: 2025 revenue share by division/product

Business/Product	Revenue Share (%)
Refining	**62.6**
Gasoline	30.0
Diesel	18.8
Aviation fuel	7.8
Other	5.9
Chemicals	**26.5**
PX	6.4
PE	6.2
PP	4.5
Benzene	3.0
Butadiene	1.1
Other	5.4
Other	**10.9**

Source: SPC, Samsung Securities

SPC: Operating margin trends, by division



Source: SPC, Samsung Securities

SPC: 2025 production capacity and utilization, by major product

Product	Capacity ('000 tonnes)	Utilization (%)	Product	Capacity ('000 tonnes)	Utilization (%)
Crude distillation	14,000	86.1	**Acrylonitrile**	650	79.6
Hydrocracking	3,000	95.5	**Aromatics**	835	100.4
Catalytic cracking	3,500	100.6	**C-5 Separation**	185	122.0
Delayed coking	2,200	96.8	**Polyester**	151	
Diesel hydrogenation	3,850	69.0	**Polyester staple fiber**	4	
Ethylene	700	98.9	**Polyester filament**	21	
PE	408	90.6	**Acrylics staple fiber**	94	94.0
EO/EG	525	67.6	**VAM**	86	96.3
PP	400	94.2			

Source: SPC, Samsung Securities

Meanwhile, China's petrochemical industry is moving beyond the traditional framework (reduce oil, increase chemicals) and adopting a new strategy (reduce oil, increase specialties)—a deliberate shift to boost profitability. SPC is fully aligned with this transition and has launched two major investments.

First, in Jan 2025, SPC approved a CNY21.37b (KRW4.54t) 'Quality Upgrading Project' to modernize its aging infrastructure and comply with tightening environmental regulations. The project should take offline 18 outdated units (including its original 0.7m-tonne ethylene cracker) and replace them with new 1.2m-tonne ethylene crackers and downstream facilities.

Second, SPC is investing CNY3.2b (KRW680b) to expand its 'large tow carbon fiber' production capacity. Carbon fiber is categorized by filament count per tow: Small tow (1,000-24,000 filaments) offers high strength and is used in aerospace, defense, and hydrogen storage; large tow (48,000+ filaments) delivers greater production efficiency and lower cost, making it ideal for mass-market applications such as wind-turbine blades, automotive components, and construction materials. SPC achieved commercial production of polyacrylonitrile (PAN)-based large tow precursor and carbon fiber in 2022, becoming the first Chinese company and the fourth globally (following Japan's Toray, Germany's SGL Carbon, and Japan's Mitsubishi Chemical). Combined with the new ethylene cracker, SPC aims to make massive investments to increase its production capacity for precursors by 60,000 tonnes and carbon fiber by 30,000 tonnes.

The company's core specialty chemicals should center on carbon fiber, thermoplastic elastomers (SBC and POE), and specialty polyethylene (*eg*, EVA for solar panels, XLPE, and UHMWPE). With the new cracker expected to come online in 2028, China's petrochemical sector is positioning itself for a full-scale shift towards higher-value differentiated products.

The key implication for Korea's petrochemical industry is that China is shifting away from restructuring and capacity cuts—China is focusing on curbing refinery capacity expansions and accelerating its transition towards high-margin specialty chemicals. In response, Korea needs to develop a strategic roadmap capable of competing in this evolving landscape.

Diversifying feedstocks to reduce costs and mitigate geopolitical risks

A key takeaway from our visit to SPC is China's strategic push towards diversifying feedstocks. In the early 2010s, China rapidly expanded its coal-to-olefins and methanol-to-olefins (CTO/MTO) capacity. In the mid-2010s, many of these plants came online but experienced myriad operational challenges. In the early 2020s, the industry gradually focused on naphtha cracking crackers (NCC). Since 2020, a new trend has emerged: The rapid adoption of ethane cracking crackers (ECC).

As the supply glut deepened following the large-scale rollout of NCCs in the 2020s, Chinese chemical producers began: 1) retrofitting NCCs to process mixed feedstocks (*eg*, ethane and LPG), instead of pure naphtha; and 2) building new ECCs to strengthen their cost competitiveness. SPC stands at the forefront of this shift. Rather than simply shutting down its 0.7m-tonne ethylene cracker, the company is building new 1.2m-tonne crackers that are designed to process mixed feeds (naphtha, LPG, ethane).

SP Chemicals and Satellite Chemical (both are private companies) have aggressively invested in ECCs to challenge the dominance of state-owned companies (SPC and PetroChina) in the NCC market. Meanwhile, SPC and PetroChina are: 1) building new ECCs, leveraging their own gas fields; and 2) retrofitting facilities so they can accept a more diverse range of feedstocks (shifting from naphtha to a blend of naphtha, LPG, and ethane) to improve profitability.

When companies do not have (or utilize) their own gas fields—as is true for most Asian chemical producers—transitioning to ECCs requires substantial upfront investment. For example, supplying a 1m tonne-capacity ECC with overseas-bought ethane requires around six very large ethane carriers (VLECs) to ensure the continuous flow of feedstock. Beyond transportation, both exporting and importing nations must invest in specialized infrastructure: Cryogenic loading terminals in producing regions and import facilities in the importing country. In Asia, only deep-pocketed firms can realistically pursue this shift from naphtha to ethane.

This pattern, transitioning towards ECCs, holds true beyond China. Vietnam's Long Son Petrochemical, Thailand's PTTGC, and Taiwan's Formosa Petrochemical have all adopted ECCs, but these firms are either state-backed or part of a larger conglomerate (with the financial strength to absorb these costs). In contrast, Korea currently has no major chemical company with the scale or capital to switch to ECCs. This absence has raised serious concerns about Korea's ability to compete globally over the longer term.

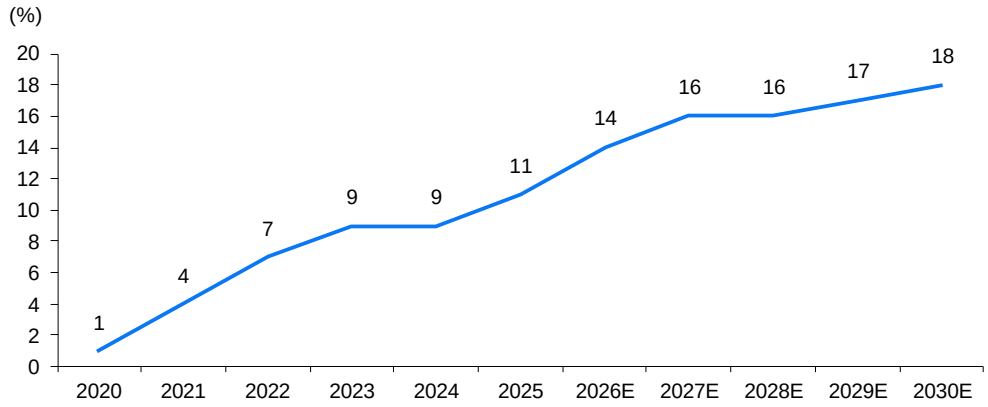
Moreover, the outbreak of the conflict in the Middle East has heightened concerns over supply-chain vulnerabilities tied to an overreliance on feedstocks from a single region—particularly impacting energy companies in Northeast Asia, including those in Korea and Japan. In this context, China's strategy to diversify its feedstock sources offers a meaningful way to reduce exposure to geopolitical risk. Korean companies would do well to consider adopting a similar approach.

Chinese market: Status of new or retrofitted ethylene facilities utilizing ethane

Company	Location	Type	Capacity (Ethylene)	Ethane input ratio & features	Status & operating timeline
Satellite Chemical	Lianyungang, Jiangsu	New	2,500	100% imported ethane (China's first pure ethane cracker)	P1 (May 2021), P2 (Jun 2022) Both in operation
Wanhua Chemical	Yantai, Shandong	Retrofit	1,000	Propane → converted to 100% pure ethane (Phase 1)	Retrofit completed in Jan 2026
Wanhua Chemical	Yantai, Shandong	New	1,200	Mixed feed (approx. 40% ethane + naphtha/LPG) (Phase 2)	Successfully commenced operations in Apr 2025
CNPC (PetroChina) Dushanzi	Tarim, Xinjiang	New	600	By-product ethane from own gas field (P1)	Operating since Aug 2021
CNPC (PetroChina) Dushanzi	Tarim, Xinjiang	New	1,200	By-product ethane from own gas field (P2)	Scheduled to operate in 2026 (under construction)
CNPC (PetroChina) Lanzhou	Yulin, Shaanxi	New	800	By-product ethane from own gas field (P1)	Operating since Aug 2021
SP Chemicals	Taixing, Jiangsu	Upgrade	780	Increased ethane ratio (75% → 90%)	Scheduled for completion in 2028
Huatai Shengfu	Ningbo, Zhejiang	Retrofit	600	LPG → Retrofitted to a dedicated ethane heating furnace	Retrofit completed in Jan 2026
Sinopec-INEOS JV	Nangang, Tianjin	New	1,200	Mixed feed with a high ethane ratio	Successfully commenced operations in Nov 2024
SPC	**Jinshan, Shanghai**	**New**	**1,200**	**Mixed feed (naphtha + ethane/LPG) after closing existing 0.7m tonne capacity**	**Target: Construction in 2025, Operation in 2028**
Sinopec Zhenhai	Ningbo, Zhejiang	New	1,500	Mixed feed (utilizing ethane-rich gas, etc.) (P2)	Scheduled to operate in 2028 (Under construction)
Sinopec Yangzi	Nanjing, Jiangsu	Upgrade	1,000	BASF JV, retrofitted for mixed-feed input	Scheduled for completion in 2027
Sinopec Qilu	Zibo, Shandong	Upgrade	1,000	Oil-to-chemicals upgrade and mixed-feed input	Scheduled for completion in 2027
Sinopec Maoming	Maoming, Guangdong	Retrofit	1,000	Built new large mixed feed after closing existing 360,000 tonne capacity	Scheduled to operate in 2027
Sinopec Luoyang	Luoyang, Henan	New	1,000	Flexible facility for LPG/naphtha/ethane	Scheduled to operate in 2026

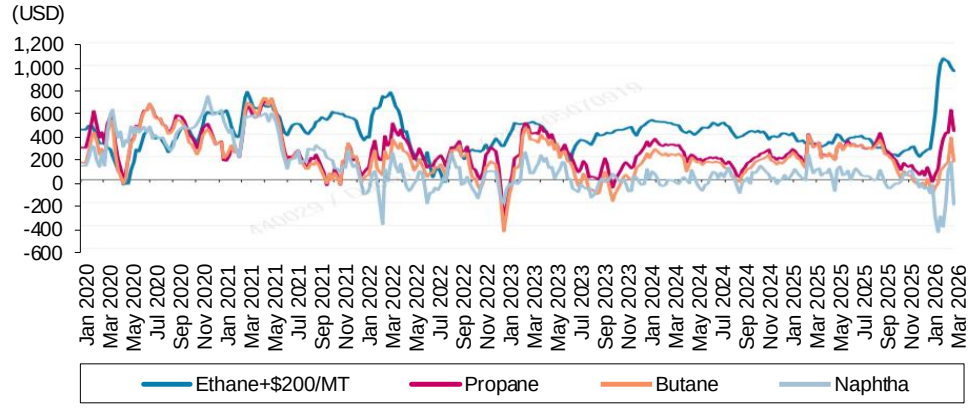
Source: Samsung Securities

Northeast Asia: Portion of ethane used as feedstock at ethylene production facilities



Source: ICIS, Samsung Securities

Northeast Asia: Cracker margin trends, by feedstock



Source: S&P Global Platts, Samsung Securities

Takeaways from one of world's three largest plastics exhibitions

Chinaplas 2026

Emphasis on NQPF

Over Apr 21-22, we went to Chinaplas 2026 (one of the world's three largest plastic exhibitions), which visit gave us valuable insights into global chemical companies' latest strategies and China's evolving R&D trends. The event, held in Shanghai, brought together over 5,000 companies from around the world, showcasing cutting-edge technologies.

A central theme running through Chinaplas 2026 was China's push to strengthen its 'new quality productive forces' (NQPF). NQPF refers to a new model of production that moves beyond traditional labor- and capital-intensive growth. Instead, it emphasizes advanced productivity driven by technological innovation, high efficiency, and superior quality. The Chinese government began highlighting NQPF at the 2024 Two Sessions, as various trends (a property market slump, shrinking population, and weak consumer spending) had invalidated its old growth formula. At the same time, the US tightened export controls on key technologies like semiconductors and AI, and is pushing to remove China from its supply chains. Faced with these pressures, China sees NQPF as a way to break through its technological limits. NQPF also serves as the industrial policy framework for China's 15th Five-Year Plan (2026-2030), and therefore has gained significant importance in the country.

At Chinaplas 2026, China's efforts to build NQPF were clearly reflected in three key areas: New materials, intelligent transformation, and green transformation. First, new materials are being developed for industries where China already leads globally—*eg*, EVs, low-altitude economies (including drones and electric vertical takeoff and landing aircraft (eVTOL)), wind power, and solar energy. Second, intelligent transformation goes beyond basic automation in manufacturing to AI-driven process optimization, millisecond-level AI-powered quality inspection, cloud-based integrated factory management, and digital twin factories—all are aimed at enhancing productivity through AI. Third, green transformation emphasizes a circular plastic economy (including recycling and bio-based materials) as a key pillar to achieving China's dual-carbon goals: Peaking carbon emissions before 2030 and attaining carbon neutrality by 2060.

Chinaplas 2026: China's NQPF focuses on three areas

Area	Details
New materials	Material innovation responding to downstream demand such as EVs, low-altitude economy, humanoids, aerospace, wind power, and solar energy.
Intelligent transformation	Smart manufacturing transition based on AI and automation—moving beyond automation to include intelligence.
Green transformation	Recycling, bio-materials, and low-carbon solutions to achieve the Dual Carbon goals.

Source: Press Reports, Samsung Securities

Leveraging vast consumption markets to showcase new products

At Chinaplas 2026, Chinese and global chemical companies demonstrated a clear focus on developing material solutions for emerging industries backed by vast consumption markets. While solar energy, battery, and EV markets have been on the rise in China for years, humanoid robots and eVTOL have taken center stage this year.

Solar energy, batteries, EVs, humanoid robots, and eVTOL share one defining trait: China controls 50-90% of each global supply chain. This has concentrated technological leadership in the country. Even amid sustained restraint from other major powers, China kept pushing to innovate. China's dominance across these supply chains means materials industries like chemicals have vast consumption markets. Moreover, it signifies the advantage of closer technological communication with customers, enabling the more effective development of features aligned with customer needs.

A clear example is China's battery industry. As China fostered its EV industry, battery makers quickly adapted their product specifications to match customer needs. This is why, at Chinaplas 2026, not only Chinese but also global chemical companies emphasized their collaborations with Chinese clients—as evident in the booths manned by Covestro and SABIC.

European chemical company Covestro showcased Govy's (a subsidiary of China's GAC Group) eVTOL (the AirCab) at the event, highlighting materials specifically designed for this aircraft: Lightweight polycarbonate (PC), integrated roof-sensor modules, polyurethane foam for battery protection, and coating solutions for aerodynamic lightweighting. Given that Govy aims to begin mass-production of the AirCab this year, Covestro's exhibition appears to emphasize the expansion of its material applications in support of this milestone.

SABIC, a Middle Eastern chemical firm, highlighted plastic solutions for humanoid robots. It categorized the key areas of material use into four systems: Sensing, power, shell & skeleton, and actuator. For the sensing system, PC and PMMA were used for optical sensors, PBT for radar components, and PC/ABS for displays/lighting/audio modules. For the power system, PC/ABS and polypropylene (PP) were highlighted for their impact protection qualities (to protect the batteries). For the shell & skeleton system, PC/ABS was applied to the outer shell, while PEEK, PEI, and PP were used in the structural skeleton. For the actuator system, POM, PEEK, PEI, and PPO were applied to gearboxes, encoders, screws, and gears, respectively.

Covestro: Lightweight PC and coating solutions for eVTOL

Source: Samsung Securities

SABIC: PC, ABS, PMMA, and PBT applied in humanoid robots

Source: Samsung Securities

Middle East conflict sheds new light on plastic circular economy

Another key takeaway from Chinaplas 2026 was the intensified efforts by global chemical companies to advance plastic circular economy technologies. Since the global net-zero targets were set in 2020, expectations have risen that expanding bio-based plastics and plastic recycling initiatives would create a circular plastic economy.

The recent conflict in the Middle East has caused a sharp rise in virgin plastic prices, increasing the price competitiveness of recycled plastics. This, combined with growing demand for feedstock diversification (from fossil-based to recycled inputs) amid geopolitical risks, is reigniting interest in the circular economy.

The plastic circular economy should gain further importance as the EU's Packaging and Packaging Waste Regulation (PPWR) is set to be phased in from August. Under the PPWR, PET beverage bottles must contain at least 30% post-consumer recycled (PCR) content by 2030, while other plastic packaging must meet a minimum PCR content of 35%.

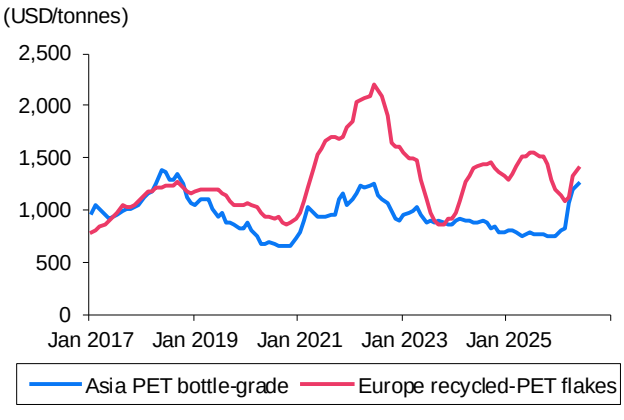
Amide increased interest in the circular economy (because of the geopolitical crisis in the Middle East and tightening regulations), many materials companies showcased technologies related to plastic recycling and bio-based materials. BASF, for example, has partnered with Porsche and Austria's Bioenergy and Sustainable Technologies (BEST) research institute in a three-party consortium to demonstrate a chemical recycling technology that transforms end-of-life vehicle composite waste into recycled steering wheels. Among domestic companies, SK Chemicals presented its chemically recycled product Skypet CR (made at its recycling facility in China) alongside bio-based plastics.

Chemical companies: Circular economy technology sharing cases at Chinaplas 2026

	Tech Type	Details
BASF	Chemical recycling (gasification)	Manufacture of recycled steering wheels via a 3-party consortium with Porsche-BEST
SK Chemicals	Chemical recycling (depolymerization)	Shared application cases of Skypet CR, a chemically recycled PET
SK Chemicals	Bio-based materials	Exhibited plant-based bio-polyol Ecotrion
SK Chemicals	Raw material internalization	Shared value chain integration strategy following the establishment of the Feedstock Innovation Center (FIC)
Avient	Bio-based TPE	Unveiled a bio-based thermoplastic polymer containing 40-50% sugarcane-derived renewable raw materials

Source: Samsung Securities

PET: Price trends of PET and recycled PET



Source: S&P Global Platts, Samsung Securities

A hub for chemical recycling

Visit to SK Chemicals' plant in China

SK Chemicals' Shantou plant—a hub for chemical recycling

Over Apr 22-23, we visited SK Shantou (SK Chemicals' manufacturing site in China) to better understand its plastic recycling operations. Established in 2023 after SK Chemicals invested KRW130b to acquire Shuye (a Chinese green materials company), SK Shantou now has a production capacity of 70,000 tonnes of recycled BHET (r-BHET) and 50,000 tonnes of chemically recycled PET (CR-PET).

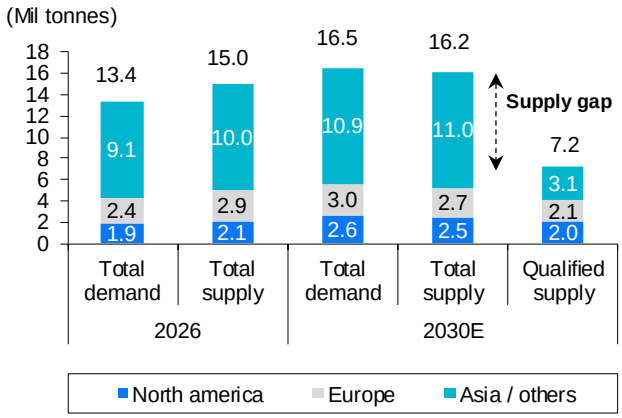
SK Chemicals' flagship product, copolyester, is made from PTA, MEG, and CHDM. By acquiring Shuye, SK Chemicals has secured access to PET recycling technology—PET produced from PTA and MEG—which should ultimately enable the production of recycled copolyester.

At SK Shantou, waste PET is processed through depolymerization to produce r-BHET, which is then converted to CR-PET. Importantly, the same platform can also be used to produce CR-copolyester. As such, SK Shantou is not only the operational hub for SK Chemicals' recycling business but also poised to spearhead its Green Chemicals division.

Global demand for recycled PET is projected to rise from 13.4m tonnes in 2026 to 16.5m tonnes by 2030, growing at a CAGR of 5.3%. Supply, however, is expected to grow far more slowly—from 15m tonnes to 16.2m tonnes—increasing at a CAGR of just 1.8%. Of the 16.2m tonnes projected to be available in 2030, only 7.2m tonnes are anticipated to meet the stringent global qualifications required by major customers. These standards hinge on four critical criteria: 1) quality—physical properties matching those of virgin plastic, going beyond the limitations of mechanical recycling; 2) certification & regulatory compliance—adherence to global food-safety standards (*eg*, EFSA and FDA) and regulatory frameworks (*eg*, PPWR and ELVR); 3) traceability—end-to-end transparency across the value chain—from waste collection to final material production; and 4) commercial scale—sufficient production capacity to serve high-volume customers in food, beverage, and cosmetics markets. As regulations increasingly mandate minimum recycled content in packaging, the gap between the overall supply and qualified supply should widen further.

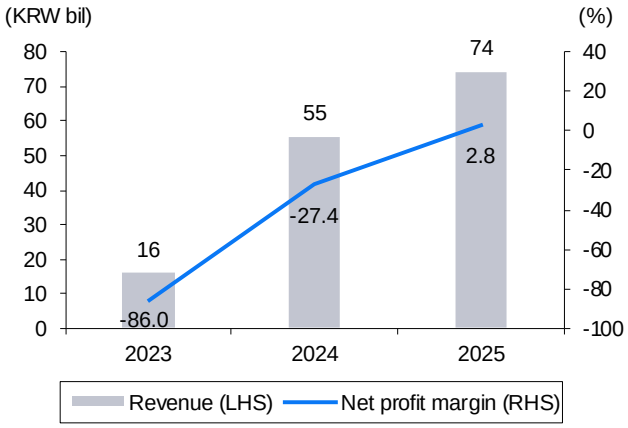
SK Shantou's operating results began to head north in 2025 and should trend higher in 2026. Its sales reached only KRW16b in 2023 and KRW55b in 2024, with net margins of -86% and -27%, respectively. However, its sales jumped to KRW74b last year, with a net margin of +3%. This year, sales and operating profit should expand further, driven by its starting to supply key customers (following certification completion) and rising global demand for certified recycled plastics (as a result of the Middle East conflict).

Global recycled PET supply-demand balance outlook



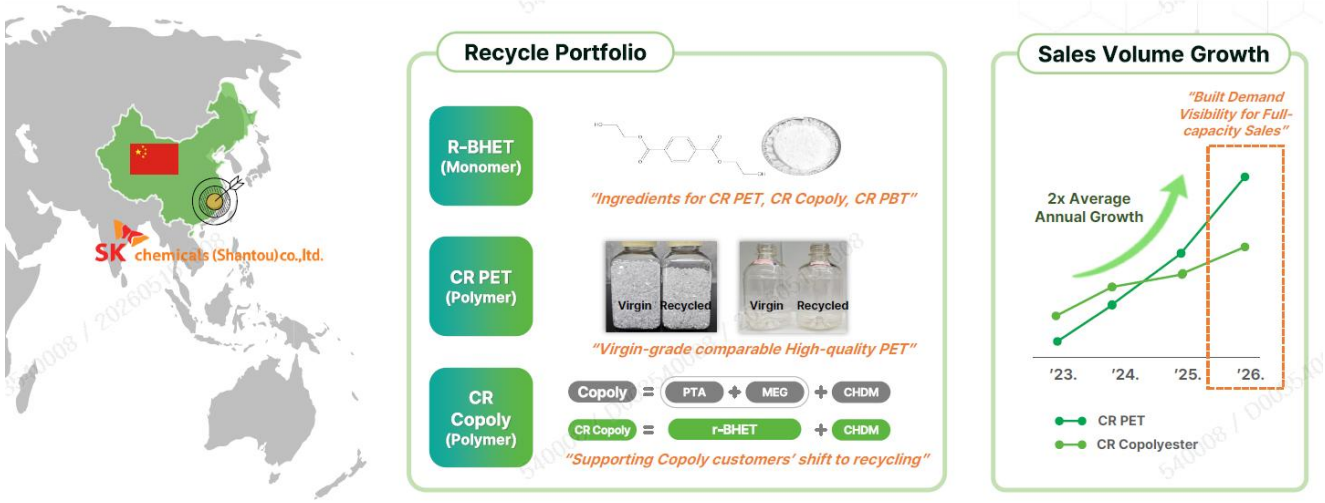
Source: Company data, Samsung Securities

SK Shantou: Earnings trend



Source: Company data, Samsung Securities

SK Chemicals: Chinese subsidiary's (SK Shantou) product portfolio



Source: Company data, Samsung Securities

SK Chemicals' growth strategy for its recycled plastic business

Beyond its investment in SK Shantou, SK Chemicals has been strategically expanding its exposure to the recycled plastics value chain through launching two new centers: The Feedstock Innovation Center (FIC) and the Recycle Innovation Center (RIC).

FIC represents a deliberate move upstream in the recycled PET value chain, focusing on securing high-quality, uniform feedstock for chemical recycling. Traditionally, the process begins with the collection of post-consumer plastic waste—such as shredded bottles or used textiles—followed by sorting PET from other polymers and pre-treating plastic waste to remove contaminants. Only then does physical or chemical recycling take place. FIC specializes in these critical mid-stream stages: Advanced sorting and pre-treatment of contaminated waste streams to produce certified, uniform feedstock suitable for chemical recycling. SK Chemicals holds a 67% stake in the venture, with its Chinese partner holding the remaining 33%.

Through FIC, SK Chemicals can secure stable access to the raw materials that are essential for SK Shantou, while simultaneously targeting a 20% reduction in depolymerization process costs. As the plastic recycling business expands, the reliable supply of recycled feedstock should become more important, making SK Chemicals' investment in FIC a strategic pillar in strengthening SK Shantou's long-term market position.

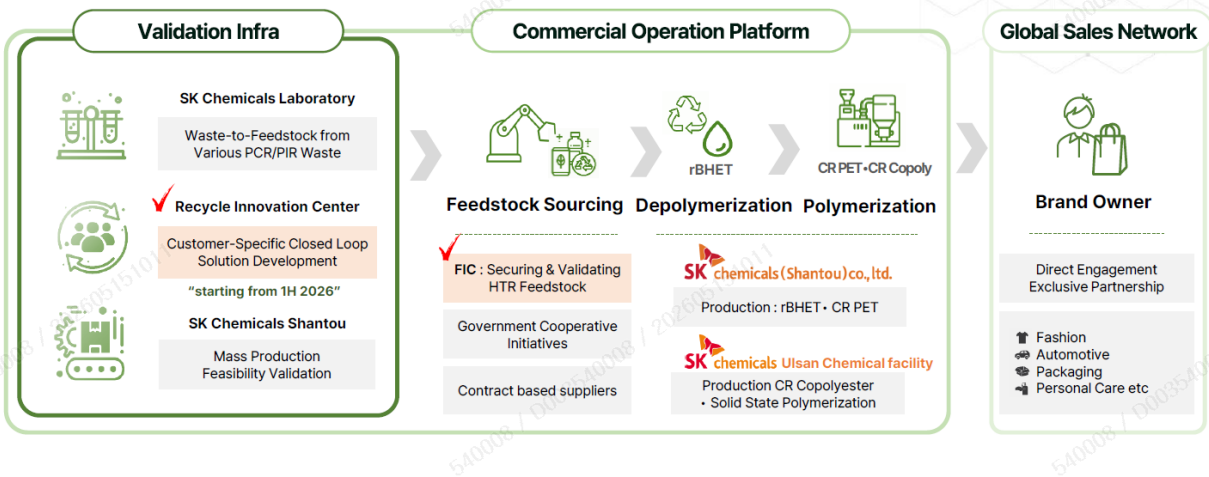
RIC, a subsidiary of SK Chemicals, should serve as a domestic testbed for chemical recycling, which segment is currently being restructured in China. RIC has built a r-BHET pilot plant (50 tonnes capacity) within SK Chemicals' Ulsan facility and commenced trial operations in March. Starting in 2H26, it should enter the sample evaluation and customer development phases. Global packaging companies often require tonne-scale samples from recyclers to validate performance. RIC is positioned to address this by conducting real-world tests across diverse feedstocks, regions, and industries, enabling small-batch production tailored to specific customer needs. Rather than targeting general-purpose applications, RIC is expected to focus on high-value segments such as automotive, textiles, and electric & electronic (E&E) materials.

SK Chemicals: Chemical recycling value chain and responsible entities

Value chain	Description	Responsible entity (within SK Chemicals)
Plastic waste	Procures fine plastic powder (plastic fines), discarded bedding, etc.	
Sorting	Sorts PET from collected plastic waste	FIC
Pre-treatment / raw materialization	Pre-treatment for impurity removal and converting hard-to-recycle (HTR) waste into valuable raw materials	FIC
Chemical recycling	Produces high-quality r-BHET at the world's first chemical recycling facilities, SK Shantou and RIC	SK Shantou & RIC
Commercialization	Converts r-BHET into various circular recycling products	SK Chemicals Ulsan Plant
New products	Produces high-quality products (using circular recycled plastics) with properties identical to those held by virgin plastics	SK Chemicals Ulsan Plant

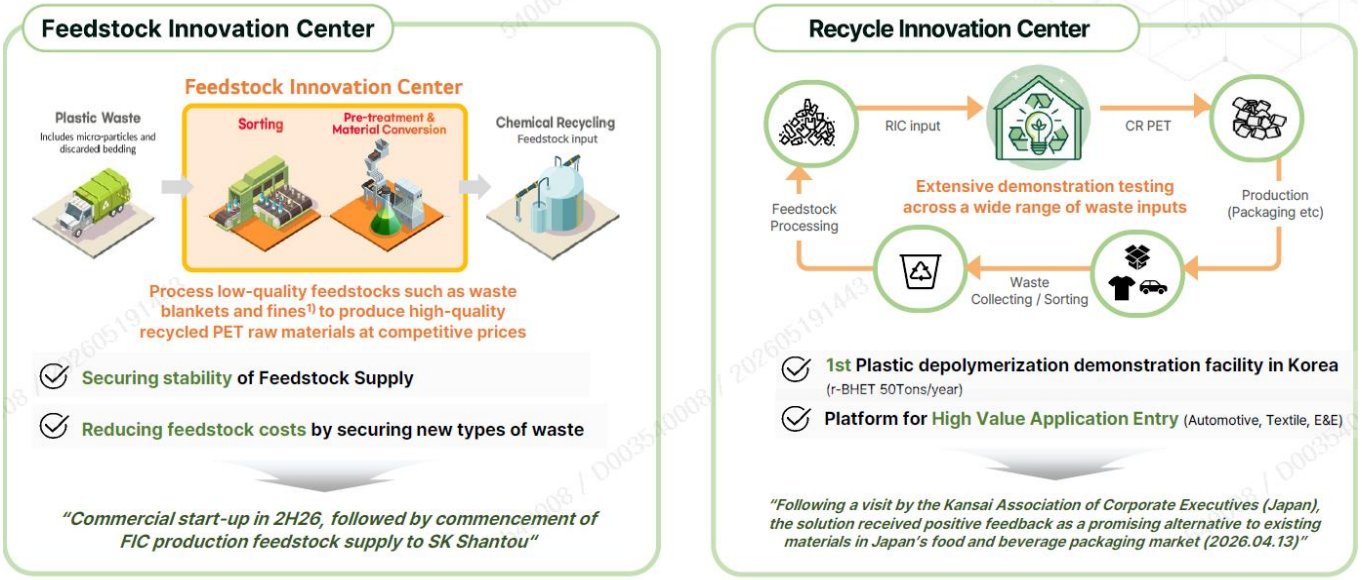
Source: Company data, Samsung Securities

SK Chemicals: Recycling business's growth strategy



Source: Company data, Samsung Securities

SK Chemicals: Two investments to complete the recycling value chain



Note: 1) Fine particles generated during the PET bottle crushing process; a by-product from processing virgin PET and mechanically recycled PET.
Source: SK Chemicals, Samsung Securities

COMPANY UPDATE

2026. 5. 15

EV/Mobility Team

Hyunryul Cho
Senior Analyst
hyunryul.cho@samsung.com

Wonyoung Kim
Research Associate
wonyoung10.kim@samsung.com

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SK Chemicals (285130)

Leader in plastic recycling

- One of SK Chemicals' Chinese subsidiary, SK Shantou, is engaged in chemical recycling of PET, with a production capacity of 70,000 tonnes of r-BHET and 50,000 tonnes of chemically recycled PET.
- By investing early in chemical recycling while many other Korean chemical firms held back, the company established itself as a technology leader in the field.
- As the Middle East war persists, major countries are increasingly likely to announce policies aimed at expanding the plastic recycling market from a resource circularity perspective, potentially benefiting the company's recycling business.

WHAT'S THE STORY?

SK Shantou, the foundational base of chemical recycling: SK Shantou, a subsidiary of SK Chemicals located in Shantou, China, operates a PET recycling plant that specializes in chemical recycling (CR-PET), not mechanical recycling (MR-PET) which degrades material properties with each cycle. The facility has a production capacity of 70,000 tonnes of r-BHET, an intermediate material produced during the PET recycling process, and 50,000 tonnes of CR-PET. Since r-BHET is essential for manufacturing SK Chemicals' core product, copolyester, SK Shantou serves as the foundational base for SK Chemicals' transition to a circular economy.

(This report was originally published on May 15, 2026)

(Continued on the next page)

AT A GLANCE

BUY

Target price	KRW80,000	55.3%
Current price	KRW51,500	
Market cap	KRW890.89b/USD597.51m	
Shares (float)	17,298,766 (57.2%)	
52-week high/low	KRW79,800/KRW49,500	
Avg daily trading value (60-day)	KRW3.5b/ USD2.4m	

ONE-YEAR PERFORMANCE

	1M	6M	12M
SK Chemicals (%)	-9.5	-34.7	3.6
Vs Kospi (%pts)	-32.3	-67.2	-65.7

KEY CHANGES

(KRW)	New	Old	Diff
Recommend.	BUY	BUY	
Target price	80,000	80,000	0.0%
2026E EPS	553	553	0.0%
2027E EPS	4,720	4,720	0.0%

SAMSUNG vs THE STREET

No of estimates	2
Target price	86,500
Recommendation	4.0

※ Rating: 4 < → BUY, 3 = HOLD, 2 > → SELL

SUMMARY FINANCIAL DATA

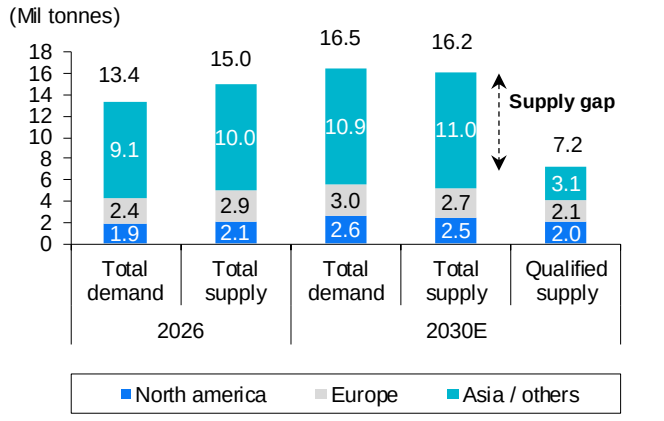
	2025	2026E	2027E	2028E
Revenue (KRWb)	2,365	2,680	2,826	2,997
Operating profit (KRWb)	-0	-21	90	165
Net profit (adj) (KRWb)	27	-10	85	155
EPS (adj) (KRW)	2,304	553	4,720	8,218
EPS (adj) growth (% y-y)	404.8	-76.0	753.2	74.1
EBITDA margin (%)	8.0	5.9	10.1	12.7
ROE (%)	2.0	0.5	4.0	6.7
P/E (adj) (x)	28.4	93.1	10.9	6.3
P/B (x)	0.6	0.4	0.4	0.4
EV/EBITDA (x)	14.4	17.1	9.9	7.4
Dividend yield (%)	1.8	2.2	3.0	5.9

Source: Company data, Samsung Securities estimates

EU PPWR, a turning point for expansion of recycling industry: The EU Packaging and Packaging Waste Regulation (PPWR), which entered into force in Feb 2025, will generally apply across EU starting Aug 2026, following an 18-month transition period. It introduces stricter rules on packaging recyclability, use of recycled content, and labeling. Although mandatory recycled content targets are set for 2030, global customers are looking to adopt recycled materials as soon as the PPWR becomes applicable. This makes PPWR a turning point for expansion of the plastic recycling industry

Middle East war to renew focus on recycling industry: Following the outbreak of the Middle East war, prices of virgin plastic have surged, accelerating demand for plastic recycling. The increased adoption of recycled raw materials extends beyond economic considerations, reflecting a strategic move toward raw material diversification for resource security. As the war persists, demand for recycled plastic is likely to grow further, benefiting SK Chemicals.

Global recycled PET supply-demand balance outlook



Source: Company data, Samsung Securities

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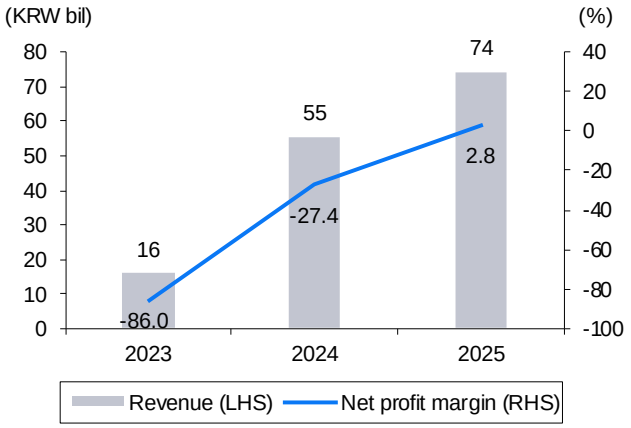

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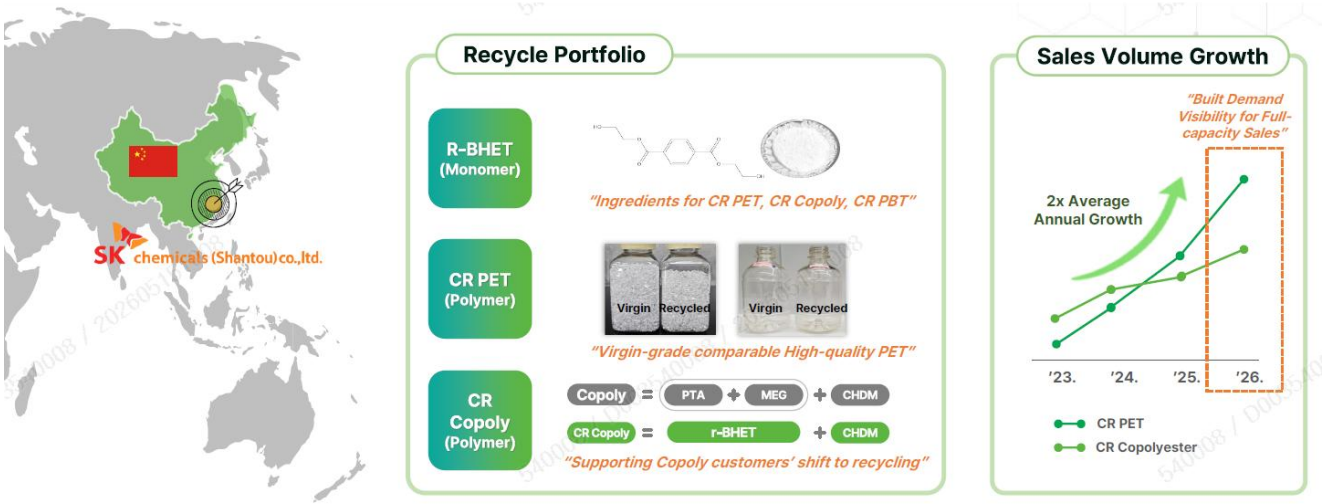

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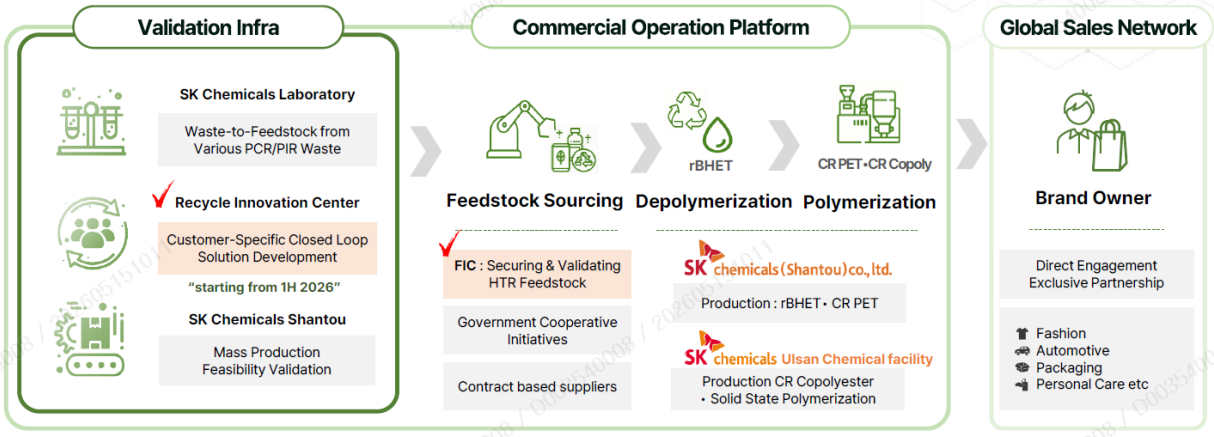
Source: Company data, Samsung Securities

SK Chemicals: Recycling business's growth strategy



"Achieving global competitiveness through the internalization of core assets at every stage of the value chain and offering tailored, optimized solutions to customers."

Source: Company data, Samsung Securities

SK Chemicals: Results and forecasts

(KRWb)	1Q25	2Q25	3Q25	4Q25	1Q26	2Q26E	3Q26E	4Q26E	2024	2025	2026E	2027E
KRW/USD (average)	1,453	1,401	1,387	1,452	1,467	1,420	1,380	1,335	1,365	1,423	1,401	1,335
Sales	**536.6**	**596.9**	**609.9**	**621.8**	**655.9**	**665.7**	**652.3**	**705.7**	**1,736.8**	**2,365.2**	**2,679.6**	**2,826.4**
Chg (% q-q)	4.1	11.2	2.2	1.9	5.5	1.5	-2.0	8.2				
Chg (% y-y)	40.9	44.2	43.1	20.6	22.2	11.5	6.9	13.5	-0.7	36.2	13.3	5.5
1. Green Chemicals	257.0	270.1	236.5	227.0	235.1	260.0	240.7	244.6	995.3	990.6	980.4	1,034.1
1-1. Copolyester/Monomer	232.0	241.7	208.5	200.8	199.0	219.7	203.2	207.9	909.9	883.0	829.8	871.4
1-2. Others	25.0	28.4	28.0	26.2	36.1	40.4	37.5	36.6	85.4	107.6	150.6	162.6
2. Life Science	251.9	289.3	288.6	309.7	295.4	299.2	304.6	354.2	624.8	1,139.5	1,253.5	1,334.0
2-1. Pharma	97.3	127.4	137.9	125.5	126.8	130.6	139.2	140.4	357.2	488.1	536.9	617.5
2-2. SK Bioscience	154.6	161.9	150.8	184.2	168.6	168.6	165.5	213.9	267.5	651.4	716.5	716.5
3. SK Multi Utility	34.4	29.6	71.0	84.6	94.6	102.6	103.1	103.1	126.5	219.6	403.3	415.9
EBITDA	**68.5**	**43.8**	**61.9**	**14.2**	**3.1**	**47.3**	**56.7**	**52.2**	**90.4**	**188.3**	**159.3**	**286.5**
Chg (% q-q)	348.0	-36.1	41.4	-77.1	-78.1	1,422.4	19.8	-7.9				
Chg (% y-y)	204.7	11.7	361.3	-7.3	-95.5	8.1	-8.3	268.3	-53.9	108.4	-15.4	79.8
1. Green Chemicals	52.3	42.9	45.3	29.4	41.8	49.8	46.4	49.5	162.7	169.9	187.5	233.1
1-1. Copolyester/Monomer	64.0	58.0	53.0	40.7	48.8	54.7	50.2	50.4	186.4	215.7	204.1	230.7
1-2. Others	-11.6	-15.1	-7.7	-11.3	-7.0	-5.0	-3.9	-0.8	-23.7	-45.8	-16.6	2.4
2. Life Science	13.4	-5.8	14.6	-23.7	-13.9	-8.3	-6.9	-17.6	-62.9	-1.5	-46.8	-6.3
2-1. Pharma	7.3	10.1	11.4	2.2	9.3	9.6	10.2	10.3	26.3	31.0	39.5	51.6
2-2. SK Bioscience	6.0	-15.9	3.2	-25.9	-6.7	-6.7	-6.6	-8.5	-89.2	-32.5	-28.6	-21.4
3. SK Multi Utility	2.4	0.2	4.6	10.8	8.2	10.0	21.3	24.4	14.4	18.0	64.0	104.6
Operating profit	**24.3**	**-1.0**	**15.6**	**-39.1**	**-18.9**	**-6.5**	**4.8**	**-0.4**	**-45.2**	**-0.2**	**-21.0**	**90.1**
Chg (% q-q)	Turned pos	Turned neg	Turned pos	Turned neg	Remained neg	To remain neg	To turn pos	To turn neg				
Chg (% y-y)	Turned pos	Turned neg	Turned pos	Remained neg	Turned neg	To remain neg	-69.3	To remain neg	Turned neg	Remained neg	To remain neg	To turn pos
1. Green Chemicals	31.9	22.8	24.2	4.6	21.9	27.7	25.9	28.7	88.9	83.5	104.2	136.6
1-1. Copolyester/Monomer	45.5	40.0	34.4	18.7	31.4	35.6	32.5	32.2	118.9	138.7	131.7	145.9
1-2. Others	-13.6	-17.2	-10.2	-14.1	-9.6	-7.9	-6.6	-3.5	-30.0	-55.2	-27.5	-9.3
2. Life Science	-9.7	-29.2	-9.9	-51.1	-39.2	-33.6	-32.0	-43.0	-119.3	-99.8	-147.8	-108.5
2-1. Pharma	5.5	8.2	9.5	0.5	5.3	5.9	6.0	6.0	19.2	23.7	23.1	26.6
2-2. SK Bioscience	-15.1	-37.4	-19.4	-51.6	-44.5	-39.5	-37.9	-49.0	-138.4	-123.5	-170.9	-135.1
3. SK Multi Utility	-0.8	-2.5	-1.9	2.9	-1.5	-0.6	10.8	13.9	-2.6	-2.3	22.6	62.0
Pre-tax profit	19.5	-3.9	19.5	-18.5	-27.3	-0.7	7.5	10.3	-27.4	16.7	-10.1	92.4
Net profit	**21.1**	**8.2**	**47.9**	**-49.9**	**-26.1**	**-0.6**	**6.9**	**9.5**	**-4.4**	**27.3**	**-10.3**	**84.7**
Attrib. to parent company	20.0	14.0	42.9	-32.2	-12.1	1.6	9.1	12.3	8.8	44.6	10.7	91.6
Margins (%)												
EBITDA	12.8	7.3	10.1	2.3	0.5	7.1	8.7	7.4	5.2	8.0	5.9	10.1
Operating profit	4.5	-0.2	2.6	-6.3	-2.9	-1.0	0.7	-0.1	-2.6	-0.0	-0.8	3.2
1. Green Chemicals	12.4	8.5	10.2	2.0	9.3	10.7	10.8	11.7	8.9	8.4	10.6	13.2
1-1. Copolyester/Monomer	19.6	16.6	16.5	9.3	15.8	16.2	16.0	15.5	13.1	15.7	15.9	16.7
1-2. Others	-54.6	-60.6	-36.6	-53.9	-26.5	-19.5	-17.5	-9.5	-35.2	-51.3	-18.3	-5.7
2. Life Science	-3.8	-10.1	-3.4	-16.5	-13.3	-11.2	-10.5	-12.1	-19.1	-8.8	-11.8	-8.1
2-1. Pharma	5.6	6.5	6.9	0.4	4.2	4.5	4.3	4.3	5.4	4.9	4.3	4.3
2-2. SK Bioscience	-9.8	-23.1	-12.8	-28.0	-26.4	-23.4	-22.9	-22.9	-51.7	-19.0	-23.9	-18.9
3. SK Multi Utility	-2.2	-8.6	-2.7	3.5	-1.5	-0.5	10.5	13.5	-2.1	-1.1	5.6	14.9
Pre-tax profit	3.6	-0.7	3.2	-3.0	-4.2	-0.1	1.2	1.5	-1.6	0.7	-0.4	3.3
Net profit	3.9	1.4	7.8	-8.0	-4.0	-0.1	1.1	1.3	-0.3	1.2	-0.4	3.0

Source: Company data, Samsung Securities estimates

Income statement

Year-end Dec 31 (KRWb)	2024	2025	2026E	2027E	2028E
Sales	**1,737**	**2,365**	**2,680**	**2,826**	**2,997**
Cost of goods sold	1,341	1,866	2,101	2,122	2,172
Gross profit	**396**	**499**	**578**	**705**	**826**
Gross margin (%)	22.8	21.1	21.6	24.9	27.5
SG&A expenses	441	499	599	614	661
Operating profit	**-45**	**-0**	**-21**	**90**	**165**
Operating margin (%)	-2.6	-0.0	-0.8	3.2	5.5
Non-operating gains (losses)	**18**	**17**	**11**	**2**	**9**
Financial profit	98	99	27	18	14
Financial costs	92	125	32	31	22
Equity-method gains (losses)	-1	1	2	3	3
Other	13	42	13	13	13
Pre-tax profit	**-27**	**17**	**-10**	**92**	**173**
Taxes	-23	-11	0	8	18
Effective tax rate (%)	84.1	-63.7	-2.6	8.4	10.6
Profit from continuing operations	-4	27	-10	85	155
Profit from discontinued operations	0	0	0	0	0
Net profit	**-4**	**27**	**-10**	**85**	**155**
Net margin (%)	-0.3	1.2	-0.4	3.0	5.2
Net profit (controlling interests)	9	45	11	92	160
Net profit (non-controlling interests)	-13	-17	-21	-7	-5
EBITDA	90	188	159	286	380
EBITDA margin (%)	5.2	8.0	5.9	10.1	12.7
EPS (parent-based) (KRW)	456	2,304	553	4,720	8,218
EPS (consolidated) (KRW)	-225	1,408	-533	4,361	7,980
Adjusted EPS (KRW)*	456	2,304	553	4,720	8,218

Balance sheet

Year-end Dec 31 (KRWb)	2024	2025	2026E	2027E	2028E
Current assets	**2,386**	**2,541**	**2,597**	**2,715**	**2,813**
Cash & equivalents	542	568	361	356	312
Accounts receivable	258	313	355	374	397
Inventories	565	625	708	747	793
Other current assets	1,020	1,035	1,173	1,237	1,312
Fixed assets	**2,981**	**3,546**	**3,759**	**3,918**	**4,003**
Investment assets	105	326	329	330	331
Tangible assets	2,459	2,729	2,925	3,070	3,180
Intangible assets	163	228	241	255	228
Other long-term assets	254	264	264	264	264
Total assets	**5,367**	**6,088**	**6,356**	**6,633**	**6,817**
Current liabilities	**983**	**1,136**	**1,256**	**1,303**	**1,351**
Accounts payable	118	204	231	244	259
Short-term debt	303	326	326	326	326
Other current liabilities	562	605	698	732	766
Long-term liabilities	**1,351**	**1,811**	**1,989**	**2,157**	**2,167**
Bonds & long-term debt	1,203	1,662	1,822	1,982	1,982
Other long-term liabilities	148	149	167	175	185
Total liabilities	**2,334**	**2,947**	**3,245**	**3,460**	**3,518**
Owners of parent equity	**2,201**	**2,259**	**2,251**	**2,321**	**2,450**
Capital stock	99	99	99	99	99
Capital surplus	1,240	1,242	1,242	1,242	1,242
Retained earnings	861	884	873	942	1,072
Other	1	34	37	37	37
Non-controlling interests' equity	**832**	**881**	**860**	**853**	**848**
Total equity	**3,033**	**3,140**	**3,111**	**3,174**	**3,299**
Net debt	270	645	919	1,031	1,008

Cash flow statement

Year-end Dec 31 (KRWb)	2024	2025	2026E	2027E	2028E
Cash flow from operations	**-89**	**236**	**130**	**260**	**337**
Net profit	-4	27	-10	85	155
Non-cash profit and expenses	23	199	171	197	217
Depreciation	119	162	154	170	189
Amortization	17	26	26	26	26
Other	-112	10	-9	0	1
Changes in A/L from operating activities	-70	66	-32	-15	-17
Cash flow from investments	**-157**	**-685**	**-511**	**-411**	**-356**
Change in tangible assets	-405	-306	-350	-315	-299
Change in financial assets	349	-99	-128	-60	-69
Other	-102	-280	-34	-36	13
Cash flow from financing	**380**	**463**	**171**	**144**	**-28**
Change in debt	554	500	193	167	1
Change in equity	28	2	0	0	0
Dividends	-18	-23	-22	-22	-30
Other	-184	-17	-0	-0	0
Change in cash	138	25	-206	-5	-45
Cash at beginning of year	404	542	568	361	356
Cash at end of year	542	568	361	356	312
Gross cash flow	**19**	**226**	**160**	**281**	**372**
Free cash flow	**-511**	**-149**	**-220**	**-55**	**38**

Financial ratios

Year-end Dec 31	2024	2025	2026E	2027E	2028E
Growth (%)					
Sales	-0.7	36.2	13.3	5.5	6.1
Operating profit	nm	nm	nm	nm	82.5
Net profit	nm	nm	nm	nm	83.0
Adjusted EPS**	-77.8	404.8	-76.0	753.2	74.1
Per-share data (KRW)					
EPS (parent-based)	456	2,304	553	4,720	8,218
EPS (consolidated)	-225	1,408	-533	4,361	7,980
Adjusted EPS**	456	2,304	553	4,720	8,218
BVPS	114,678	117,452	117,026	120,634	127,373
DPS (common)	1,150	1,150	1,150	1,550	3,050
Valuations (x)					
P/E***	97.1	28.4	93.1	10.9	6.3
P/B***	0.4	0.6	0.4	0.4	0.4
EV/EBITDA	21.1	14.4	17.1	9.9	7.4
Ratios (%)					
ROE	0.4	2.0	0.5	4.0	6.7
ROA	-0.1	0.5	-0.2	1.3	2.3
ROIC	-0.3	-0.0	-0.6	2.2	3.7
Payout ratio	224.1	44.4	184.9	29.2	33.0
Dividend yield (common)	2.6	1.8	2.2	3.0	5.9
Net debt to equity	8.9	20.5	29.5	32.5	30.6
Interest coverage (x)	-1.1	-0.0	n/a	n/a	n/a

Note: *Excluding one-off items
**Fully diluted, excluding one-off items
***From companies subject to equity-method valuation

Source: Company data, Samsung Securities estimates

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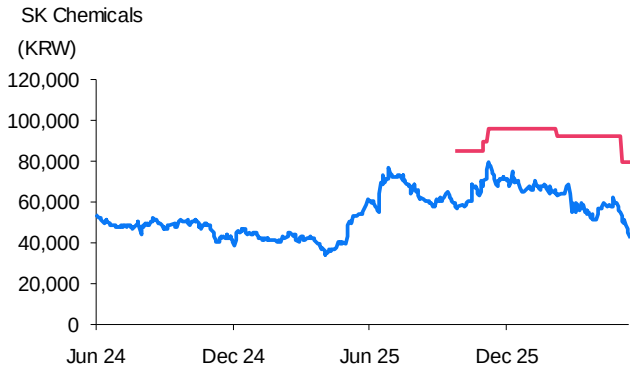
Target price changes in past two years



Rating changes over past two years (adjusted share prices)

SK Chemicals					
Date	2025/10/2	11/6	11/13	2026/2/12	5/11
Recommendation	BUY	BUY	BUY	BUY	BUY
Target price (KRW)	85000	90000	96000	93000	80000
Gap* (average)	-24.71	-18.92	-27.95	-37.48	
(max or min)**	-16.82	-15.56	-17.81	-26.02	

Note: * [(average, maximum, or minimum share price over duration of target price minus target price) / target price] x 100%
** Maximum/minimum share price if new target is higher/lower than market close on the business day prior to target price change

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Industry

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Samsung Securities

SAMSUNG SECURITIES
Samsung Electronics Bldg., 11, 74-gil,
Seochodae-ro, Seocho-gu, Seoul, Korea 06620
Tel: 02 2020 8000 / www.samsungpop.com

Family Center: 1588 2323

Voice Of Customer: 080 911 0900

**For more information,
please call our sales representatives:**

LONDON

Samsung Securities Europe Limited
1st Floor, 30 Gresham Street, London EC2V 7PG UK
Tel. 44-207-776-4311
Fax. 44-203-837-9219

NEW YORK

Samsung Securities America Limited
1330 Avenue of the Americas. 10th Floor. New York,
NY 10019
Tel: 1-212-972-2454
Fax: 1-212-972-2704

HONG KONG

Samsung Securities (Asia) Limited
Suite 4511, Two International Finance Center,
8 Finance Street, Central, Hong Kong
Tel: 852-3411-3608
Fax: 852-2114-0290

BEIJING

Samsung Securities Beijing Representative Office
Rm. 910, The Exchange Building No 118 JianGuo Lu, Chao
Yang District, Beijing, China
Tel: 86-10-6522-1855 (extension 7891)
Fax: 86-10-6522-1855 (extension 7889)

TOKYO

Samsung Securities Tokyo Representative Office
#106-8532 19F, Roppongi T-Cube 3-1-1,
Roppongi Minato-ku Tokyo, Japan
Tel: 81-3-6333-2952
Fax: 81-3-6333-2953

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