COMPANY UPDATE

2025. 10. 21.

Scan to go to
Research Center report database

Kumho Petrochemical (011780)

Visit to Yeosu plant: Portfolio optimization verified

- We visited Kumho Petrochemical's Yeosu rubber plant over Oct 16-17.
- Lowering our earnings forecasts, we trim our target price from KRW160,000 to KRW155,000. But expecting its ROE and share buyback momentum to strengthen further in 2026, we maintain our BUY rating.

EV/Mobility Team

Hyunryul Cho
Senior Analyst
hyunryul.cho@samsung.com

Kim Won Young
Research Associate
wonyoung10.kim@samsung.com

WHAT'S THE STORY?

Yeosu plant tour: Kumho Petrochemical hosted a plant tour for analysts over Oct 16-17. The tour of its solution styrene butadiene rubber (SSBR) plant and cogeneration plant reaffirmed its specialty capabilities that set it apart.

- **SSBR:** Synthetic rubber SBR is classified as emulsion styrene butadiene rubber (ESBR) or SSBR, depending on the production method. ESBR is produced by an emulsion polymerization process in water, which results in lower material uniformity but costs less. SSBR is polymerized using an organic solvent, which results in superior material uniformity but the process is more difficult and it costs more to make. In Europe, SSBR is 37% more expensive than ESBR (USD2,495/tonne vs USD1,825/tonne). Due to SSBR's higher technical requirements in both production and material properties, the market is controlled by a few firms. The company is steadily expanding its SSBR capacity to improve its sales mix. Its ESBR and SSBR capacities stood at a respective 384,000 tonnes and 63,000 tonnes in 2019, but should change to 263,000 tonnes and 158,000 tonnes by end-2025, marking its shift away from commodity products to specialty products.

(Continued on the next page)

AT A GLANCE

BUY

Target price	KRW155,000	37.7%
Current price	KRW112,600	
Market cap	KRW3.0t/USD2.1b	
Shares (float)	26,031,742 (56.4%)	
52-week high/low	KRW146,200/KRW87,800	
Avg daily trading value (60-day)	KRW10.4b/ USD7.4m	

ONE-YEAR PERFORMANCE

	1M	6M	12M
Kumho Petrochemical (%)	6.5	-2.7	-18.9
Vs Kospi (%pts)	-3.8	-36.6	-44.8

KEY CHANGES

(KRW)	New	Old	Diff
Recommend.	BUY	BUY	
Target price	155,000	160,000	-3.1%
2025E EPS	12,786	12,786	0.0%
2026E EPS	16,555	16,555	0.0%

SAMSUNG vs THE STREET

No of estimates	12
Target price	159,750
Recommendation	3.9

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

SUMMARY FINANCIAL DATA

	2024	2025E	2026E	2027E
Revenue (KRWb)	7,155	7,143	6,991	7,075
Operating profit (KRWb)	273	354	399	423
Net profit (adj) (KRWb)	349	378	464	450
EPS (adj) (KRW)	11,321	12,786	16,555	16,796
EPS (adj) growth (% y-y)	-18.4	12.9	29.5	1.5
EBITDA margin (%)	7.7	8.7	9.4	9.6
ROE (%)	5.9	6.2	7.2	6.7
P/E (adj) (x)	8.0	8.8	6.8	6.7
P/B (x)	0.4	0.5	0.4	0.4
EV/EBITDA (x)	5.1	4.8	4.0	3.4
Dividend yield (%)	2.4	2.8	3.6	3.6

Source: Company data, Samsung Securities estimates

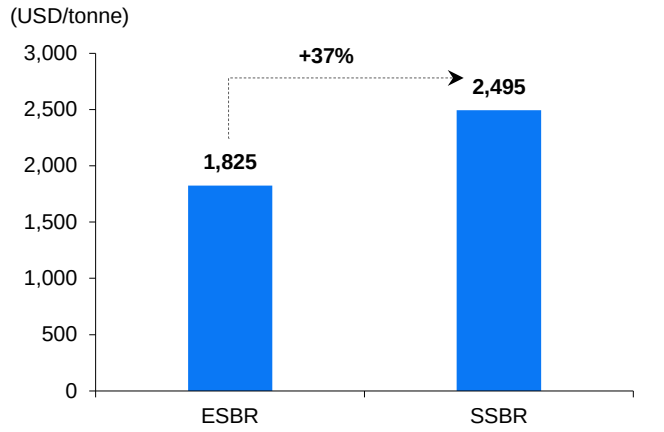
- **Community energy:** The company operates a combined heat and power (CHP) plant that supplies electricity, steam, and purified water to Yeosu Industrial Complex tenants. The plant has a capacity of 300 MW of electricity and 1,710 tonnes of steam per hour. Given that demand is the stable, the company is expected to maintain a strong double-digit operating margin.

3Q preview—results in line with consensus: We believe Kumho Petrochemical recorded a 3Q operating profit of KRW84.2b (up 29% q-q), in line with consensus (KRW84.6b; FnGuide). Profitability likely improved overall, as demand uncertainty (stemming from the US-imposed reciprocal tariffs in the previous quarter) has eased.

- At the synthetic rubber division, operating profit likely came in at KRW24b (operating margin up 2.3%pts q-q to 3.6%). The SBR spot spread narrowed 2% q-q (vs -16% q-q in 2Q), and the one-month lagging spread widened 11% q-q (vs -30% q-q in 2Q). The switch to a positive lag effect (from a significant negative lag effect in 2Q) likely led to improved profitability.
- The synthetic resin division likely booked an operating profit of KRW1.2b (operating margin down 1.4%pts q-q to 0.4%), with profitability growth slowing due to ABS and PS spreads weakening.
- The energy and 'others' divisions likely recorded a combined operating profit of KRW45.3b (operating margin up 3%pts q-q to 23.7%). Profit likely grew, driven by a recovery in their steam/electricity sales volume after regular maintenance work in 2Q.
- Phenol subsidiary Kumho P&B likely incurred an operating loss of KRW9.5b (operating margin down 2.3%pts q-q to -2.8%) affected by regular maintenance work.
- Operating profit at Kumho Polychem likely rebounded to KRW23.2b in 3Q (operating margin up 3.4%pts q-q to 11.7%) thanks to the completion of regular maintenance work.

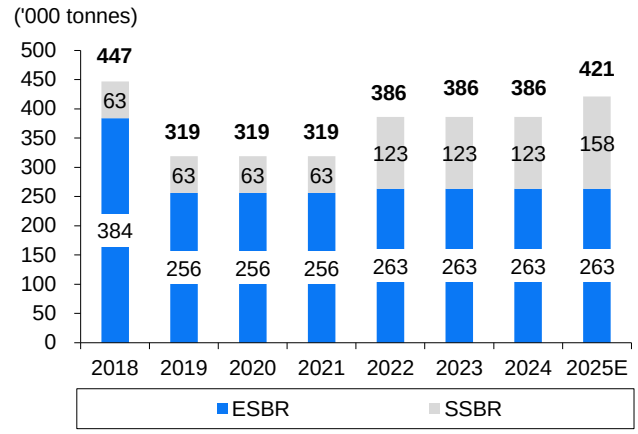
View—ROE and share buyback momentum to strengthen further in 2026: We partially lower our 2025-2026 EPS forecasts, which leads us to cut our target price by 3% from KRW160,000 to KRW155,000 under our ROE-P/B valuation model. That said, the firm is capable of achieving an even higher ROE in 2026 than in 2025, and with an annual share cancellation (5% of outstanding shares) and a dividend yield of 3%, the firm's total payout ratio should remain at 7-8%. As the firm's treasury shares should continue to represent more than 10% of its total shares outstanding next year, expectations towards additional share cancellations should increase. Also considering its ability to generate stable profit through product upgrades and product portfolio optimization, which sets it apart in the domestic chemical sector, we maintain our BUY rating.

ESBR and SSBR: Western European prices (as of Oct 17)



Source: S&P Global Platts, Samsung Securities

KKPC: ESBR and SSBR capacity



Source: S&P Global Platts, Samsung Securities

KKPC: Quarterly results

(KRWb)	3Q25E	2Q25	3Q24	Consensus	Diff (%)		
					(% q-q)	(% y-y)	Consensus
Sales	1,685	1,773	1,828	1,751	-5.0	-7.8	-3.8
Operating profit	84	65	65	85	29.1	29.4	-0.5
Pre-tax profit	109	68	62	118	60.7	76.2	-7.7
Net profit	93	58	53	91	60.7	74.6	2.4
Attributable to parent	93	58	53	97	60.7	74.5	-4.2
Margins (%)							
Operating profit	5.0	3.7	3.6	4.8			
Pre-tax profit	6.4	3.8	3.4	6.7			
Net profit	5.5	3.3	2.9	5.2			
Attributable to parent	5.5	3.3	2.9	5.5			

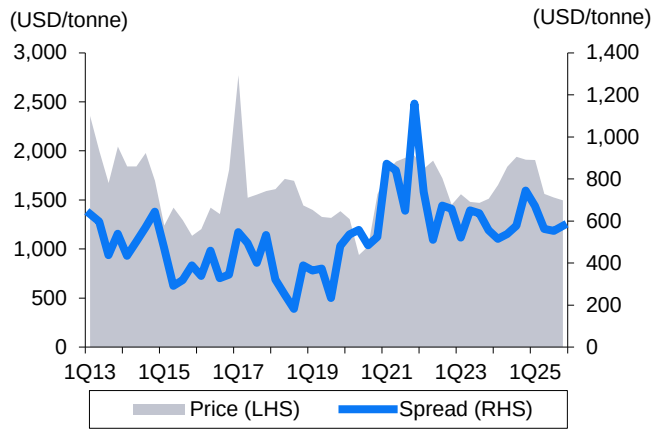
Source: Company data, FnGuide, Samsung Securities estimates

KKPC: Quarterly results, by division

(KRWb)	3Q25E	2Q25	3Q24	Chg (% q-q)	Chg (% y-y)
Sales	**1,685**	**1,773**	**1,828**	**-5.0**	**-7.8**
Synthetic rubber	674	675	734	-0.1	-8.1
Synthetic resin	285	298	313	-4.6	-9.0
Energy	58	52	64	11.6	-8.4
Kumho P&B	337	433	407	-22.0	-17.0
Kumho Polychem	198	181	160	9.4	23.4
Operating income	**84**	**65**	**65**	**29.1**	**29.4**
Synthetic rubber	24	9	11	182.1	124.1
Synthetic resin	1	5	-9	-78.1	RB
Energy	13	11	14	9.2	-12.2
Kumho P&B	-9	-2	1	RR	BR
Kumho Polychem	23	15	14	54.5	65.6
Pre-tax profit	109	68	62	60.7	76.2
Net income	**93**	**58**	**53**	**60.7**	**74.6**
Margins (%)					
Operating profit	5.0	3.7	3.6		
Synthetic rubber	3.6	1.3	1.5		
Synthetic resin	0.4	1.8	-2.8		
Energy	21.5	21.9	22.4		
Kumho P&B	-2.8	-0.5	0.3		
Kumho Polychem	11.7	8.3	8.7		
Pre-tax profit	6.4	3.8	3.4		
Net profit	5.5	3.3	2.9		

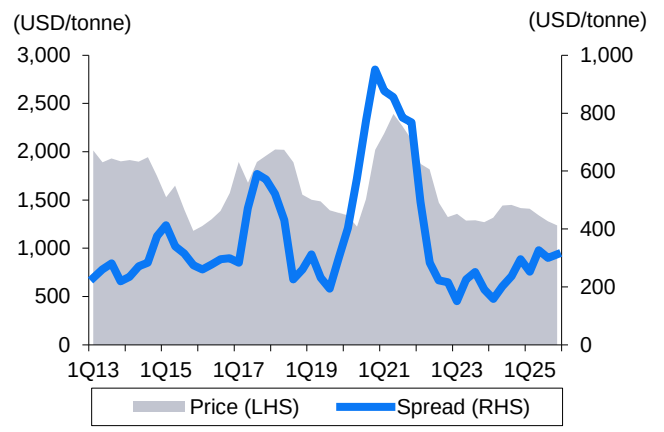
Source: Company data, Samsung Securities estimates

SBR prices vs SBR-SM/BD spread*



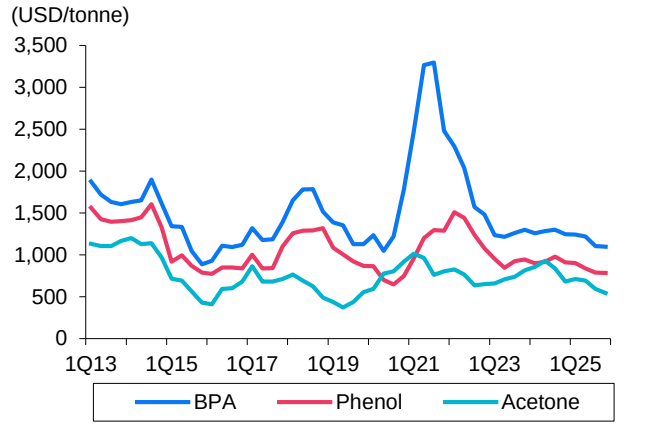
Source: Industry data, Samsung Securities

ABS prices vs ABS-AN/SM/BD spread*



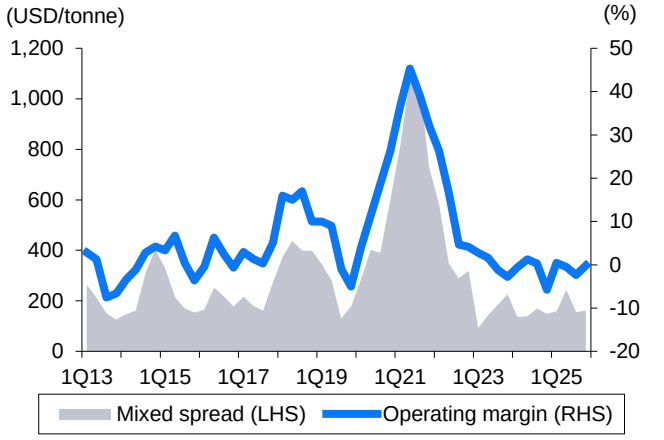
Source: Industry data, Samsung Securities

Prices of phenol and related products



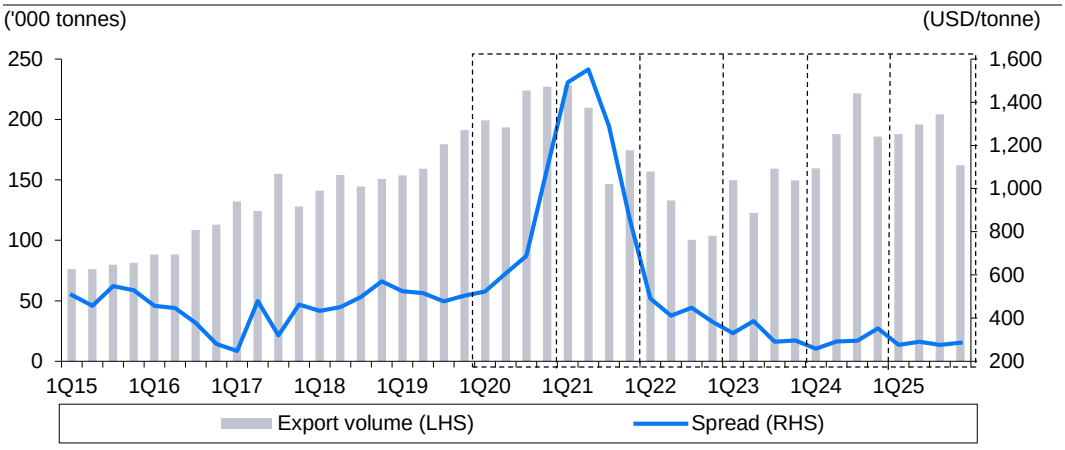
Source: Industry data, Cischem, Samsung Securities

Kumho P&B: Mixed spread and operating margin



Source: Company data, Samsung Securities

NB latex: Quarterly volume and spread



Source: KITA, TRASS, Platts, Samsung Securities

KKPC: Results and forecasts

(KRWb)	1Q25	2Q25	3Q25E	4Q25E	1Q26E	2Q26E	3Q26E	4Q26E	2023	2024	2025E	2026E
KRW/USD (average)	1,453	1,401	1,387	1,390	1,370	1,350	1,330	1,310	1,306	1,365	1,408	1,340
Sales	**1,908**	**1,773**	**1,685**	**1,777**	**1,769**	**1,729**	**1,726**	**1,767**	**6,323**	**7,155**	**7,143**	**6,991**
Chg (% q-q)	5.6	-7.1	-5.0	5.5	-0.4	-2.2	-0.2	2.4				
Chg (% y-y)	14.4	-4.3	-7.8	-1.7	-7.3	-2.5	2.5	-0.5	-20.7	13.2	-0.2	-2.1
Synthetic rubber	757	675	674	682	675	667	660	649	2,162	2,795	2,787	2,651
Synthetic resin	336	298	285	287	284	278	276	273	1,250	1,283	1,205	1,111
Energy	67	52	58	60	70	58	65	71	247	223	238	263
Kumho P&B	432	433	337	391	387	379	376	372	1,484	1,635	1,592	1,513
Kumho Polychem	188	181	198	202	215	215	215	215	645	668	768	860
Operating profit	**121**	**65**	**84**	**82**	**102**	**107**	**100**	**90**	**359**	**273**	**354**	**399**
Chg (% q-q)	1,109.5	-45.9	31.4	-4.1	23.8	5.5	-7.0	-9.4				
Chg (% y-y)	53.4	-45.3	31.7	723.8	-15.7	64.5	16.5	10.1	-68.7	-24.0	29.6	12.9
Synthetic rubber	46	9	24	21	28	29	23	23	97	101	100	103
Chg (% q-q)	150.0	-81.5	181.8	-10.6	30.0	5.9	-22.8	2.9				
Chg (% y-y)	83.3	-81.8	123.8	16.3	-39.5	246.6	-5.0	9.3	-68.9	4.1	-0.9	3.6
Synthetic resin	5	5	1	1	5	6	2	4	-6	-18	12	17
Chg (% q-q)	Turned pos	1.9	-78.1	-43.3	612.0	36.2	-68.2	83.1				
Chg (% y-y)	Turned pos	341.7	To turn pos	To turn pos	-10.0	20.3	74.9	464.7	Turned neg	Remained neg	To turn pos	36.4
Energy	17	11	13	13	15	12	14	15	66	41	54	57
Chg (% q-q)	195.4	-32.5	9.2	2.7	16.4	-17.4	13.2	9.0				
Chg (% y-y)	49.6	20.3	-12.2	123.7	-11.8	7.8	11.8	18.7	-62.9	-38.1	31.6	5.2
Kumho P&B	2	-2	-9	0	2	5	5	1	3	-18	-9	13
Chg (% q-q)	Turned pos	Turned neg	To remain neg	To remain neg	To turn pos	199.7	12.0	-86.4				
Chg (% y-y)	Turned pos	Turned neg	To turn neg	To remain neg	-15.7	To turn pos	To turn pos	To turn pos	-99.1	Turned neg	To remain neg	To turn pos
Kumho Polychem	24	15	23	22	26	28	30	26	86	70	84	109
Chg (% q-q)	127.6	-37.2	54.5	-4.8	16.2	8.4	7.7	-14.4				
Chg (% y-y)	3.0	-33.0	65.6	110.2	7.3	85.3	29.2	16.2	-46.1	-18.9	20.0	29.6
Pre-tax profit	157	68	110	119	139	145	133	140	485	408	454	556
Chg (% q-q)	-61.4	-57.1	62.9	7.8	-69.5	4.7	-8.3	5.0				
Chg (% y-y)	30.7	-56.6	78.6	69.8	-11.9	114.8	20.8	17.7	-61.3	-16.0	11.3	22.6
Net profit	**125**	**58**	**93**	**101**	**115**	**121**	**111**	**116**	**447**	**349**	**378**	**464**
Chg (% q-q)	103.5	-53.8	62.9	7.8	13.8	4.7	-8.3	5.0				
Chg (% y-y)	21.7	-56.1	77.0	65.4	-7.5	109.5	17.9	14.8	-56.2	-22.0	8.4	22.6
Attrib. to parent company	125	58	94	101	115	121	111	116	447	349	378	463
Margins (%)												
Operating profit	6.3	3.7	5.0	4.6	5.7	6.2	5.8	5.1	5.7	3.8	5.0	5.7
Synthetic rubber	6.1	1.3	3.6	3.1	4.1	4.4	3.4	3.6	4.5	3.6	3.6	3.9
Synthetic resin	1.5	1.8	0.4	0.2	1.6	2.3	0.7	1.4	-0.5	-1.4	1.0	1.5
Energy	25.2	21.9	21.5	21.5	21.5	21.5	21.5	21.5	26.7	18.3	22.6	21.5
Kumho P&B	0.4	-0.5	-2.8	-0.1	0.4	1.3	1.4	0.2	0.2	-1.1	-0.6	0.8
Kumho Polychem	12.7	8.3	11.7	10.9	11.9	12.9	13.9	11.9	13.4	10.5	11.0	12.7
Pre-tax profit	8.2	3.8	6.5	6.7	7.8	8.4	7.7	7.9	7.7	5.7	6.3	8.0
Net profit	6.5	3.3	5.6	5.7	6.5	7.0	6.4	6.6	7.1	4.9	5.3	6.6

Source: Company data, Samsung Securities estimates

Income statement

Year-end Dec 31 (KRWb)	2023	2024	2025E	2026E	2027E
Sales	**6,323**	**7,155**	**7,143**	**6,991**	**7,075**
Cost of goods sold	5,677	6,569	6,476	6,286	6,342
Gross profit	**646**	**586**	**667**	**705**	**733**
Gross margin (%)	10.2	8.2	9.3	10.1	10.4
SG&A expenses	287	313	313	306	310
Operating profit	**359**	**273**	**354**	**399**	**423**
Operating margin (%)	5.7	3.8	5.0	5.7	6.0
Non-operating gains (losses)	**126**	**135**	**100**	**157**	**116**
Financial profit	75	77	60	116	65
Financial costs	60	70	78	67	69
Equity-method gains (losses)	111	93	120	120	120
Other	1	33	-2	-12	1
Pre-tax profit	**485**	**408**	**454**	**556**	**540**
Taxes	38	59	75	93	90
Effective tax rate (%)	7.8	14.5	16.6	16.6	16.6
Profit from continuing operations	447	349	378	464	450
Profit from discontinued operations	0	0	0	0	0
Net profit	**447**	**349**	**378**	**464**	**450**
Net margin (%)	7.1	4.9	5.3	6.6	6.4
Net profit (controlling interests)	447	349	378	463	449
Net profit (non-controlling interests)	0	-0	0	0	0
EBITDA	610	548	621	659	677
EBITDA margin (%)	9.7	7.7	8.7	9.4	9.6
EPS (parent-based) (KRW)	13,880	11,321	12,786	16,555	16,796
EPS (consolidated) (KRW)	13,887	11,320	12,791	16,572	16,814
Adjusted EPS (KRW)*	13,880	11,321	12,786	16,555	16,796

Balance sheet

Year-end Dec 31 (KRWb)	2023	2024	2025E	2026E	2027E
Current assets	**2,571**	**2,711**	**2,789**	**3,113**	**3,412**
Cash & equivalents	452	429	681	1,050	1,324
Accounts receivable	742	869	804	787	796
Inventories	746	958	851	833	842
Other current assets	632	454	454	444	449
Fixed assets	**5,408**	**5,629**	**5,641**	**5,642**	**5,683**
Investment assets	1,139	1,213	1,211	1,190	1,201
Tangible assets	3,965	4,102	4,122	4,150	4,184
Intangible assets	37	38	31	26	21
Other long-term assets	268	277	277	277	277
Total assets	**7,980**	**8,340**	**8,430**	**8,756**	**9,095**
Current liabilities	**1,530**	**1,534**	**1,424**	**1,401**	**1,413**
Accounts payable	494	544	543	531	537
Short-term debt	346	346	346	346	346
Other current liabilities	690	645	535	524	530
Long-term liabilities	**616**	**764**	**763**	**757**	**760**
Bonds & long-term debt	295	428	428	428	428
Other long-term liabilities	321	336	335	329	332
Total liabilities	**2,146**	**2,298**	**2,187**	**2,158**	**2,174**
Owners of parent equity	**5,829**	**6,038**	**6,239**	**6,593**	**6,915**
Capital stock	167	167	167	167	167
Capital surplus	404	404	404	404	404
Retained earnings	5,392	5,571	5,892	6,274	6,623
Other	-133	-104	-224	-253	-279
Non-controlling interests' equity	**5**	**4**	**5**	**5**	**6**
Total equity	**5,834**	**6,042**	**6,244**	**6,598**	**6,921**
Net debt	-107	160	-200	-561	-839

Cash flow statement

Year-end Dec 31 (KRWb)	2023	2024	2025E	2026E	2027E
Cash flow from operations	**631**	**322**	**685**	**597**	**560**
Net profit	447	349	378	464	450
Non-cash profit and expenses	195	251	161	153	128
Depreciation	244	267	260	254	249
Amortization	8	9	7	6	4
Other	-56	-24	-106	-107	-126
Changes in A/L from operating activities	101	-297	171	9	-5
Cash flow from investments	**-592**	**-259**	**-281**	**-288**	**-294**
Change in tangible assets	-588	-435	-281	-282	-283
Change in financial assets	53	185	1	8	-4
Other	-57	-10	-1	-14	-7
Cash flow from financing	**-153**	**-91**	**-166**	**-81**	**-101**
Change in debt	86	60	-109	-0	0
Change in equity	0	-0	0	0	0
Dividends	-147	-77	-57	-81	-101
Other	-93	-73	-0	0	0
Change in cash	-115	-23	252	369	274
Cash at beginning of year	567	452	429	681	1,050
Cash at end of year	452	429	681	1,050	1,324
Gross cash flow	**642**	**599**	**539**	**616**	**578**
Free cash flow	**41**	**-114**	**404**	**315**	**277**

Financial ratios

Year-end Dec 31	2023	2024	2025E	2026E	2027E
Growth (%)					
Sales	-20.7	13.2	-0.2	-2.1	1.2
Operating profit	-68.7	-24.0	29.6	12.9	6.0
Net profit	-56.2	-22.0	8.4	22.6	-3.0
Adjusted EPS**	-55.0	-18.4	12.9	29.5	1.5
Per-share data (KRW)					
EPS (parent-based)	13,880	11,321	12,786	16,555	16,796
EPS (consolidated)	13,887	11,320	12,791	16,572	16,814
Adjusted EPS**	13,880	11,321	12,786	16,555	16,796
BVPS	221,466	232,363	248,286	276,699	279,968
DPS (common)	2,900	2,200	3,200	4,000	4,000
Valuations (x)					
P/E***	9.6	8.0	8.8	6.8	6.7
P/B***	0.6	0.4	0.5	0.4	0.4
EV/EBITDA	6.4	5.1	4.8	4.0	3.4
Ratios (%)					
ROE	7.8	5.9	6.2	7.2	6.7
ROA	5.7	4.3	4.5	5.4	5.0
ROIC	7.2	4.7	5.9	6.7	7.1
Payout ratio	15.1	14.5	18.7	19.1	19.7
Dividend yield (common)	2.2	2.4	2.8	3.6	3.6
Net debt to equity	-1.8	2.7	-3.2	-8.5	-12.1
Interest coverage (x)	11.8	8.2	10.9	13.1	13.9

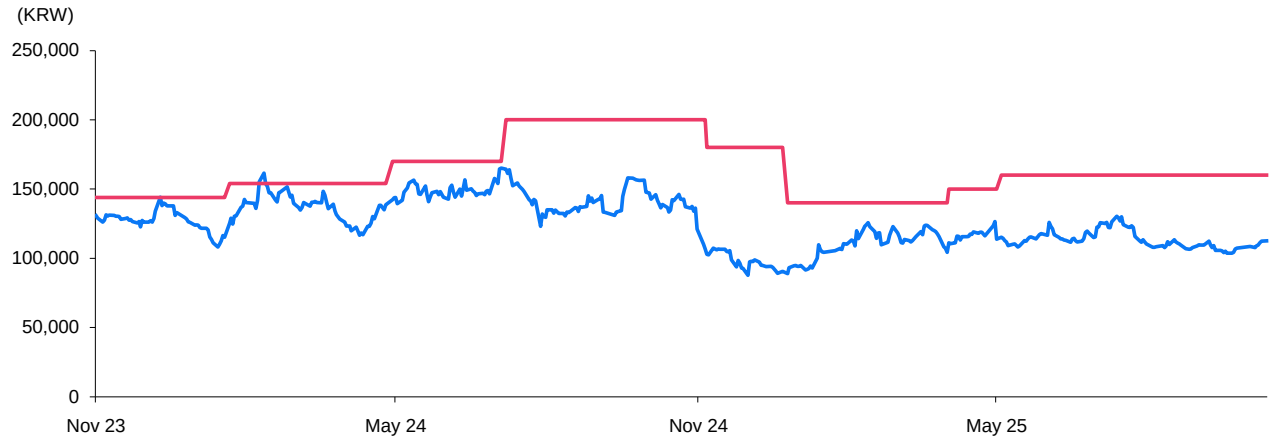
Note: *Excluding one-off items
**Fully diluted, excluding one-off items
***From companies subject to equity-method valuation

Source: Company data, Samsung Securities estimates

Compliance notice

- We hereby disclose that Cho Hyunryul, a financial investment analyst at Samsung Securities, attended the Kumho Petrochemical plant tour event on October 16–17, 2025, with expenses covered by Kumho Petrochemical.
- As of 10/20 2025, the covering analyst(s) did not own any shares, or debt instruments convertible into shares, of any company covered in this report.
- As of 10/20 2025, Samsung Securities' holdings of shares and debt instruments convertible into shares of each company covered in this report would not, if such debt instruments were converted, exceed 1% of each company's outstanding shares.
- This report has been prepared without any undue external influence or interference, and accurately reflects the views of the analyst(s) covering the company or companies herein.
- All material presented in this report, unless specifically indicated otherwise, is under copyright to Samsung Securities.
- Neither the material nor its content (including copies) may be altered in any form, or by any means transmitted, copied, or distributed to another party, without prior express written permission from Samsung Securities.
- This memorandum is based upon information available to the public. While we have taken all reasonable care to ensure its reliability, we do not guarantee its accuracy or completeness. This memorandum is not intended to be an offer, or a solicitation of any offer, to buy or sell the securities mentioned herein. Samsung Securities shall not be liable whatsoever for any loss, direct or consequential, arising from the use of this memorandum or its contents. Statements made regarding affiliates of Samsung Securities are also based upon publicly available information and do not necessarily represent the views of management at such affiliates.
- This material has not been distributed to institutional investors or other third parties prior to its publication.

Target price changes in past two years



Rating changes over past two years (adjusted share prices)

Date	2023/8/4	2024/1/29	5/7	7/15	11/14	2025/1/2	4/10	5/12	10/21
Recommendation	HOLD	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
Target price (KRW)	144000	154000	170000	200000	180000	140000	150000	160000	155000
Gap* (average)	-12.23	-11.30	-12.30	-30.01	-45.45	-20.78	-22.09	-29.07	
(max or min)**	0.14	4.87	-2.82	-18.05	-40.33	-10.21	-15.67	-18.56	

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

Samsung Securities uses the following investment ratings*

Company

BUY	Expected to increase in value by 15% or more within 12 months and is highly attractive within sector
HOLD	Expected to increase/decrease in value by less than 15% within 12 months
SELL	Expected to decrease in value by 15% or more within 12 months

Industry

OVERWEIGHT	Expected to outperform market by 5% or more within 12 months
NEUTRAL	Expected to outperform/underperform market by less than 5% within 12 months
UNDERWEIGHT	Expected to underperform market by 5% or more within 12 months

* Note: Effective Jul 27, 2023, BUY, HOLD, and SELL criteria are based on expectations of share-price moves of 15% or more within 12 months

Percentage of ratings in 12 months prior to 2025.09.30

BUY (83.5%)·HOLD (16.5%)·SELL (0%)

Global Disclosures & Disclaimers

General

This research report is for information purposes only. It is not and should not be construed as an offer or solicitation of an offer to purchase or sell any securities or other financial instruments or to participate in any trading strategy. This report does not provide individually tailored investment advice. This report does not take into account individual client circumstances, objectives, or needs and is not intended as recommendations of particular securities, financial instruments or strategies to any particular client. The securities and other financial instruments discussed in this report may not be suitable for all investors. The recipient of this report must make its own independent decisions regarding any securities or financial instruments mentioned herein and investors should seek the advice of a financial adviser.

This report may not be altered, reproduced, distributed, transmitted or published in whole or in part for any purpose. References to "Samsung Securities" are references to any company in the Samsung Securities, Co., Ltd. group of companies.

Samsung Securities and/or other affiliated companies, its and their directors, officers, representatives, or employees may have long or short positions in any of the securities or other financial instruments mentioned in this report or of issuers described herein and may purchase and/or sell, or offer to purchase and/or sell, at any time, such securities or other financial instruments in the open market or otherwise, as either a principal or agent. Any pricing of securities or other financial instrument contained herein is as of the close of market for such day, unless otherwise stated. Opinions and estimates contained herein constitute our judgment as of the date of this report and are subject to change without notice.

The information provided in this report is provided "AS IS". Although the information contained herein has been obtained from sources believed to be reliable, no representation or warranty, either expressed or implied, is provided by Samsung Securities in relation to the accuracy, completeness or reliability of such information or that such information was provided for any particular purpose and Samsung Securities expressly disclaims any warranties of merchantability or fitness for a particular purpose. Furthermore, this report is not intended to be a complete statement or summary of the securities, markets or developments referred to herein.

Samsung Securities does not undertake that investors will obtain any profits, nor will it share with investors any investment profits. Samsung Securities, its affiliates, or any of its and their affiliates, directors, officers, employees or agents disclaim any and all responsibility or liability whatsoever for any loss (direct or consequential) or damage arising out of the use of all or any part of this report or its contents or otherwise arising in connection therewith. Information and opinions contained herein are subject to change without notice. Past performance is not indicative of future results. Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. For investment advice, trade execution or other enquiries, clients should contact their local sales representative. Any opinions expressed in this report are subject to change without notice and may differ or be contrary to opinions expressed by other business areas or groups of Samsung Securities. Any analysis contained herein is based on numerous assumptions. Different assumptions may result in materially different results. Samsung Securities is under no obligation to update or keep current the information contained herein. Samsung Securities relies on information barriers to control the flow of information contained in one or more areas or groups within Samsung Securities into other areas or groups of Samsung Securities. Any prices stated in this report are for information purposes only and do not represent valuations for individual securities or other financial instruments. Samsung Securities makes no representation that any transaction can or could have been effected at those prices and any prices contained herein may not reflect Samsung Securities' internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions by Samsung Securities or any other source may yield substantially different results. Additional information is available upon request.

For reports to be distributed to US:

Securities research is prepared, issued and exclusively distributed by Samsung Securities Co., Ltd., an organization licensed with the Financial Supervisory Service of South Korea. This research may be distributed in the United States only to major institutional investors as defined in Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended, and may not be circulated to any other person otherwise. All transactions by U.S. investors involving securities discussed in this report must be effected through Samsung Securities (America) Inc., a broker-dealer registered with the U.S. Securities & Exchange Commission and a member of the Financial Industry Regulatory Authority/SIPC, and not through any non-U.S. affiliate thereof. The analysts listed [on the front of this report] are employees of Samsung Securities Co., Ltd., or a non-U.S. affiliate thereof, and are not registered/qualified as research analysts under applicable U.S. rules and regulations and may not be subject to U.S. restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

For reports to be distributed to UK:

This report is not an invitation nor is it intended to be an inducement to engage in investment activity for the purpose of section 21 of the Financial Services and Markets Act 2000 of the United Kingdom ("FSMA"). To the extent that this report does constitute such an invitation or inducement, it is directed only at (i) persons who are investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 (as amended) of the United Kingdom (the "Financial Promotion Order"); (ii) persons who fall within Articles 49(2)(a) to (d) ("high-net-worth companies, unincorporated associations etc.") of the Financial Promotion Order; and (iii) any other persons to whom this report can, for the purposes of section 21 of FSMA, otherwise lawfully be made (all such persons together being referred to as "relevant persons").

Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons. Persons who are not relevant persons must not act or rely on this report.

For reports to be distributed to Korea:

This report is for private circulation only, not for sale, and is issued and distributed only to persons permitted under the laws and regulations of Korea.

For reports to be distributed to Singapore:

This report is provided pursuant to the financial advisory licensing exemption under Regulation 27(1)(e) of the Financial Advisers Regulation of Singapore and accordingly may only be provided to persons in Singapore who are "institutional investors" as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore. This report is intended only for the person to whom Samsung Securities has provided this report and such person may not send, forward or transmit in any way this report or any copy of this report to any other person.

Analyst certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of such analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views in this research report. The analyst(s) principally responsible for the preparation of this research report receives compensation based on determination by research management and senior management (not including investment banking), based on the overall revenues, including investment banking revenues of Samsung Securities Co., Ltd. and its related entities and has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations.

Copyright © 2010 Samsung Securities Co., Ltd. All rights reserved. This report or any portion hereof may not be reprinted, sold or redistributed without the prior written consent of Samsung Securities America Inc

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

Member of
Dow Jones
Sustainability Indices
Powered by the S&P Global CSA