COMPANY UPDATE

2026. 4. 8

Scan to go to
Research Center report database

LG Energy Solution (373220)

1Q preliminary results meet expectations

- LG Energy Solution reported 1Q preliminary results on Apr 7. It an operating loss of KRW207.8b (KRW85.8b worse q-q) is below consensus (loss of KRW121b) but in line with our estimate (loss of KRW225.9b).
- Its quarterly earnings should improve steadily, with the GM joint venture factory set to resume operations in June. By 2027, it is likely to capture over 40% of the North American ESS market. We maintain our target price and BUY rating.

EV/Mobility Team

Hyunryul Cho
Senior Analyst
hyunryul.cho@samsung.com

Wonyoung Kim
Research Associate
wonyoung10.kim@samsung.com

AT A GLANCE

BUY

Target price	KRW510,000	24.8%
Current price	**KRW408,500**	
Market cap	KRW95.6t/USD63.6b	
Shares (float)	234,000,000 (20.2%)	
52-week high/low	KRW514,000/KRW268,000	
Avg daily trading value (60-day)	KRW164.4b/ USD109.3m	

ONE-YEAR PERFORMANCE

	1M	6M	12M
LG Energy Solution (%)	8.2	2.4	26.5
Vs Kospi (%pts)	10.0	-33.9	-46.4

KEY CHANGES

(KRW)	New	Old	Diff
Recommend.	BUY	BUY	
Target price	510,000	510,000	0.0%
2026E EPS	1,066	1,066	0.0%
2027E EPS	11,254	11,254	0.0%

SAMSUNG vs THE STREET

No of estimates	23
Target price	530,043
Recommendation	4.0

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

WHAT'S THE STORY?

View—North American ESS market share to reach 43% in 2027: LG Energy Solution (LGES) has raised its 2026 North American ESS production capacity forecast from 30 GWh (as of Oct 2025) to 58 GWh. With North American ESS demand projected at 135 GWh in 2027, LGES's market share will likely jump to 43%. LGES is leveraging its preemptively established local production facilities to secure orders at a faster pace than its competitors. We maintain our target price and BUY rating.

(Continued on the next page)

SUMMARY 1Q RESULTS

(KRWb)	1Q26	Chg		Diff (%)	
		(% y-y)	(% q-q)	Samsung	Consensus
Sales	6,555.0	4.6	6.7	0.0	12.2
Operating profit	-207.8	nm	nm	nm	nm
Pre-tax profit	-649.1	nm	nm	nm	nm
Net profit	-572.2	nm	nm	nm	nm
Margins (%)					
Operating profit	-3.2				
Pre-tax profit	-9.9				
Net profit	-8.7				

Source: Company data, Fnguide, Samsung Securities estimates

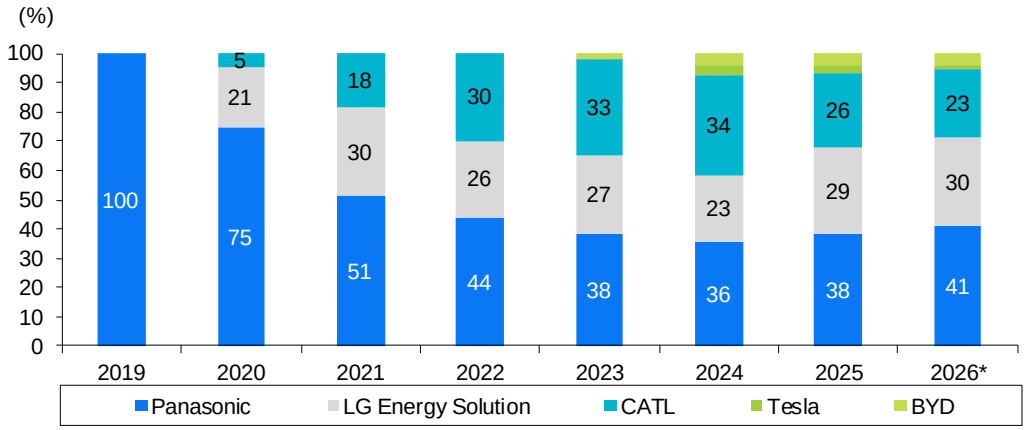
VALUATION SUMMARY

	2025	2026E	2027E
Valuation (x)			
P/E	n/a	383.3	36.3
P/B	4.3	4.7	4.1
EV/EBITDA	33.6	23.6	12.0
Div yield (%)	0.0	0.0	0.0
EPS growth (% y-y)	nm	nm	956.0
ROE (%)	-5.2	1.2	12.1
Per-share data (KRW)			
EPS	-4,585	1,066	11,254
BVPS	86,391	87,457	98,711
DPS	0	0	0

1Q preliminary results in line with our forecasts: LGES reported 1Q sales of KRW6.55t (up 7% q-q), beating consensus by 9% and our forecast by 10%. Its operating loss of KRW207.8b (KRW85.8b worse q-q) is below FnGuide consensus of an operating loss of KRW121b but in line with our estimate of an operating loss of KRW225.9b. The operating profit reflects an estimated operating profit of KRW95.8b (OPM of 5%) from the small battery business, operating loss of KRW495.3b (OPM of -18.6%) from the EV battery business, an operating profit of KRW2b (OPM of 0.1%) from the ESS business, and KRW189.7b (down 43% q-q) in IRA AMPC. The ESS business likely lagged our expectations, but the small battery business likely enjoyed surprisingly strong sales to a leading EV manufacturer. The EV battery business likely saw a sales boost from a one-time compensation receipt, but expenses incurred during the wind-down of joint venture partnerships likely suppressed operating profit contributions.

Continued expansion of battery market share with leading EV maker: After dropping from 30% in 2021 to 23% in 2024, its share in batteries for a leading US EV maker rebounded to 29% in 2025 and reached 30% in the first two months of 2026. In contrast, CATL's share fell from 34% in 2024 to 26% in 2025 and further to 23% in the first two months of 2026. This shift reflects the client's strategy to prioritize LFP batteries for a growing ESS business, which led to increased use of ternary lithium batteries in premium- and standard-trim EVs. Given strong demand for ESS batteries from the client, this trend is likely to continue.

Tesla: Battery procurement as portion of total, by supplier



Source: EV Volumes, Samsung Securities

LG Energy Solution: 1Q preliminary results and estimates*

(KRWb)	1Q26P	4Q25	1Q25	Consensus	Samsung	Diff (%)			
						Chg (q-q)	Chg (y-y)	Consensus	Samsung
Sales	6,555	6,474	6,723	6,015	5,937	1.2	-2.5	9.0	10.4
Operating profit	-208	-122	375	-121	-226	To remain neg	To turn neg	To remain neg	To remain neg
Pre-tax profit	-649	-476	365	-237	-447	To remain neg	To turn neg	To remain neg	To remain neg
Net profit	-572	-772	227	-308	-394	To remain neg	To turn neg	To remain neg	To remain neg
Attributable to parent	-492	-877	-146	-210	-339	To remain neg	To remain neg	To remain neg	To remain neg
Margins (%)									
Operating profit	-3.2	-1.9	5.6	-2.0	-3.8				
Pre-tax profit	-9.9	-7.4	5.4	-3.9	-7.5				
Net profit	-8.7	-11.9	3.4	-5.1	-6.6				
Attributable to parent	-7.5	-13.5	-2.2	-3.5	-5.7				

Note: *Sales and operating profit figures published by company—other figures are our estimates
Source: Company data, FnGuide, Samsung Securities estimates

LG Energy Solution: 1Q estimates, by division

(KRWb)	1Q26P	4Q25	1Q25	Chg (% q-q)	Chg (% y-y)
Sales	**6,555**	**6,474**	**6,723**	**1.2**	**-2.5**
Small batteries	1,928	1,935	1,678	-0.3	14.9
EV batteries	2,663	3,068	4,568	-13.2	-41.7
ESS	1,964	1,472	477	33.5	311.5
Operating profit	**-208**	**-122**	**375**	**To remain neg**	**To turn neg**
Small batteries	96	174	136	-45.0	-29.5
EV batteries	-495	-525	-119	To remain neg	To remain neg
ESS	2	-104	-100	To turn pos	To turn pos
IRA AMPC	190	333	458	-43.0	-58.6
Pre-tax profit	-649	-476	365	To remain neg	To turn neg
Net profit	**-572**	**-772**	**227**	**To remain neg**	**To turn neg**
Margins (%)					
Operating profit	-3.2	-1.9	5.6		
Small batteries	5.0	9.0	8.1		
EV batteries	-18.6	-17.1	-2.6		
ESS	0.1	-7.1	-21.0		
Pre-tax profit	-9.9	-7.4	5.4		
Net profit	-8.7	-11.9	3.4		

Note: Based on consolidated sales and operating profit, as reported by the company
Source: Company data, Samsung Securities estimates

LG Energy Solution: Results and forecasts

(KRWb)	1Q25	2Q25	3Q25	4Q25	1Q26P	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	**6,723**	**6,056**	**6,065**	**6,474**	**6,555**	**6,532**	**7,192**	**7,628**	**25,620**	**25,319**	**27,907**	**36,515**
Growth (% q-q)	4.2	-9.9	0.2	6.7	1.2	-0.3	10.1	6.1				
Growth (% y-y)	9.7	-1.7	-11.8	0.4	-2.5	7.9	18.6	17.8	-24.1	-1.2	10.2	30.8
Small batteries	1,678	1,552	1,653	1,935	1,928	2,034	2,130	2,101	7,363	6,817	8,192	8,763
Growth (% q-q)	3.6	-7.5	6.5	17.0	-0.3	5.5	4.7	-1.4				
Growth (% y-y)	-22.9	-16.0	-3.9	19.5	14.9	31.0	28.9	8.6	-22.9	-7.4	20.2	7.0
EV batteries	4,568	4,087	3,784	3,068	2,663	2,302	2,458	2,470	16,408	15,508	9,893	11,536
Growth (% q-q)	8.9	-10.5	-7.4	-18.9	-13.2	-13.5	6.8	0.5				
Growth (% y-y)	22.2	2.0	-15.3	-26.8	-41.7	-43.7	-35.0	-19.5	-24.5	-5.5	-36.2	16.6
ESS batteries	477	417	628	1,472	1,964	2,196	2,604	3,057	1,849	2,994	9,821	16,217
Growth (% q-q)	-25.3	-12.7	50.8	134.3	33.5	11.8	18.6	17.4				
Growth (% y-y)	122.5	35.2	-8.7	130.4	311.5	427.3	314.6	107.7	-24.5	61.9	228.1	65.1
EBITDA	**1,231**	**1,375**	**1,519**	**913**	**774**	**1,021**	**1,690**	**1,816**	**3,621**	**5,037**	**5,301**	**10,268**
Growth (% q-q)	94.3	11.7	10.5	-39.9	-15.2	31.9	65.5	7.5				
Growth (% y-y)	50.8	47.8	22.4	44.1	-37.1	-25.7	11.3	99.0	-18.6	39.1	5.2	93.7
Operating profit	**375**	**492**	**601**	**-122**	**-208**	**69**	**670**	**765**	**575**	**1,346**	**1,296**	**5,137**
Growth (% q-q)	Turned pos	31.4	22.2	Turned neg	Remained neg	To turn pos	875.2	14.2				
Growth (% y-y)	138.1	152.0	34.1	Remained neg	Turned neg	-86.0	11.4	To turn pos	-73.4	134.0	-3.7	296.3
Small batteries	117	92	115	129	96	121	191	104	195	453	513	551
Growth (% q-q)	Turned pos	-21.5	24.7	12.0	-25.5	26.7	57.4	-45.3				
Growth (% y-y)	49.2	42.4	48.9	Turned pos	-18.4	31.8	66.3	-18.9	-74.3	132.8	13.2	7.6
EV batteries	-107	-91	87	-488	-495	-359	-39	59	-880	-599	-834	174
Growth (% q-q)	Remained neg	Remained neg	Turned pos	Turned neg	Remained neg	To remain neg	To remain neg	To turn pos				
Growth (% y-y)	Remained neg	Remained neg	Turned pos	Remained neg	Remained neg	To remain neg	To turn neg	To turn pos	Turned neg	Remained neg	To remain neg	To turn pos
ESS batteries	-93	0	34	-96	2	57	76	83	-219	-155	217	454
Growth (% q-q)	Remained neg	Turned pos	81,331.0	Turned neg	Turned pos	2,807.1	32.3	9.3				
Growth (% y-y)	Remained neg	Turned pos	49,214.9	Remained neg	Turned pos	136,985.4	122.7	To turn pos	Turned neg	Remained neg	To turn pos	109.1
AMPC	458	491	365	333	190	249	443	519	1,480	1,647	1,401	3,958
Growth (% q-q)	21.3	7.2	-25.5	-8.9	-43.0	31.5	77.6	17.2				
Growth (% y-y)	142.2	9.6	-21.6	-11.8	-58.6	-49.2	21.2	56.0	118.7	11.3	-14.9	182.5
Pre-tax profit	**365**	**-27**	**553**	**-476**	**-649**	**135**	**570**	**681**	**349**	**414**	**736**	**4,272**
Growth (% q-q)	4.5	Turned neg	Turned pos	Turned neg	Turned neg	To turn pos	323.5	19.5				
Growth (% y-y)	63.7	Turned neg	63.0	Remained neg	Turned neg	To turn pos	3.0	To turn pos	-82.9	18.7	77.6	480.8
Net profit	**227**	**91**	**536**	**-772**	**-572**	**119**	**502**	**600**	**339**	**81**	**648**	**3,852**
Growth (% q-q)	-33.1	-60.0	491.7	Turned neg	Turned neg	To turn pos	323.5	19.5				
Growth (% y-y)	6.8	Turned pos	-4.5	Remained neg	Turned neg	30.9	-6.3	To turn pos	-79.3	-76.1	702.5	494.0
Attributable to parent	-146	-297	247	-877	-492	84	301	357	-1,019	-1,073	249	2,633
Margins (%)												
EBITDA	18.3	22.7	25.0	14.1	11.8	15.6	23.5	23.8	14.1	19.9	19.0	28.1
Operating profit	5.6	8.1	9.9	-1.9	-3.2	1.1	9.3	10.0	2.2	5.3	4.6	14.1
Small batteries	7.0	5.9	6.9	6.7	5.0	6.0	9.0	5.0	2.6	6.6	6.3	6.3
EV batteries	-2.4	-2.2	2.3	-15.9	-18.6	-15.6	-1.6	2.4	-5.4	-3.9	-8.4	1.5
ESS batteries	-19.5	0.0	5.4	-6.5	0.1	2.6	2.9	2.7	-11.9	-5.2	2.2	2.8
Pre-tax profit	5.4	-0.4	9.1	-7.4	-9.9	2.1	7.9	8.9	1.4	1.6	2.6	11.7
Net profit	3.4	1.5	8.8	-11.9	-8.7	1.8	7.0	7.9	1.3	0.3	2.3	10.5

Note: Due to a change in the accounting method for IRA AMPC (shifting from reflecting in "Other Operating Income" to reflecting in "Revenue"; applied retroactively from 1Q25), the figures may differ from previously reported revenue data.

Source: LG Energy Solution, Samsung Securities Estimates

Income statement

Year-end Dec 31 (KRWb)	2024	2025	2026E	2027E	2028E
Sales	**25,620**	**23,672**	**27,907**	**36,515**	**44,273**
Cost of goods sold	22,214	19,440	23,097	28,851	34,800
Gross profit	**3,406**	**4,232**	**4,810**	**7,664**	**9,473**
Gross margin (%)	13.3	17.9	17.2	21.0	21.4
SG&A expenses	4,311	4,533	4,915	6,484	7,829
Operating profit	**575**	**1,346**	**1,296**	**5,137**	**7,799**
Operating margin (%)	2.2	5.7	4.6	14.1	17.6
Non-operating gains (losses)	**-227**	**-932**	**-561**	**-865**	**-976**
Financial profit	1,048	1,018	683	466	434
Financial costs	1,261	1,104	953	944	991
Equity-method gains (losses)	-49	-2	-2	-2	-2
Other	35	-844	-289	-386	-417
Pre-tax profit	**349**	**414**	**736**	**4,272**	**6,823**
Taxes	10	333	87	420	535
Effective tax rate (%)	2.9	80.5	11.8	9.8	7.8
Profit from continuing operations	339	81	648	3,852	6,288
Profit from discontinued operations	0	0	0	0	0
Net profit	**339**	**81**	**648**	**3,852**	**6,288**
Net margin (%)	1.3	0.3	2.3	10.5	14.2
Net profit (controlling interests)	-1,019	-1,073	249	2,633	4,335
Net profit (non-controlling interests)	1,357	1,154	399	1,218	1,953
EBITDA	3,621	3,391	5,301	10,268	7,732
EBITDA margin (%)	14.1	14.3	19.0	28.1	17.5
EPS (parent-based) (KRW)	-4,354	-4,585	1,066	11,254	18,524
EPS (consolidated) (KRW)	1,447	345	2,771	16,460	26,871
Adjusted EPS (KRW)*	-4,354	-4,585	1,066	11,254	18,524

Balance sheet

Year-end Dec 31 (KRWb)	2024	2025	2026E	2027E	2028E
Current assets	**15,327**	**18,412**	**18,298**	**27,355**	**39,957**
Cash & equivalents	3,899	3,779	1,047	4,783	12,590
Accounts receivable	4,944	4,311	5,082	6,650	8,063
Inventories	4,552	4,350	5,129	6,711	8,136
Other current assets	1,932	5,971	7,039	9,211	11,168
Fixed assets	**44,979**	**48,736**	**50,149**	**50,815**	**49,958**
Investment assets	1,272	1,522	1,643	1,890	2,111
Tangible assets	38,350	40,795	43,048	43,560	42,561
Intangible assets	1,285	1,592	1,483	1,390	1,311
Other long-term assets	4,073	4,827	3,975	3,975	3,975
Total assets	**60,307**	**67,148**	**68,448**	**78,170**	**89,915**
Current liabilities	**12,055**	**16,785**	**14,918**	**18,632**	**21,953**
Accounts payable	2,705	2,153	2,538	3,321	4,026
Short-term debt	1,291	2,681	2,681	2,681	2,681
Other current liabilities	8,058	11,952	9,699	12,631	15,246
Long-term liabilities	**17,285**	**21,041**	**23,560**	**25,716**	**27,853**
Bonds & long-term debt	12,641	15,513	17,530	18,665	19,883
Other long-term liabilities	4,644	5,528	6,030	7,051	7,971
Total liabilities	**29,340**	**37,826**	**38,477**	**44,348**	**49,806**
Owners of parent equity	**21,116**	**20,216**	**20,465**	**23,098**	**27,433**
Capital stock	117	117	117	117	117
Capital surplus	17,165	17,165	17,165	17,165	17,165
Retained earnings	1,397	332	582	3,215	7,550
Other	2,437	2,602	2,602	2,602	2,602
Non-controlling interests' equity	**9,850**	**9,106**	**9,505**	**10,723**	**12,677**
Total equity	**30,967**	**29,322**	**29,970**	**33,822**	**40,110**
Net debt	11,493	18,690	19,756	17,181	10,588

Cash flow statement

Year-end Dec 31 (KRWb)	2024	2025	2026E	2027E	2028E
Cash flow from operations	**5,112**	**4,432**	**4,057**	**8,350**	**11,804**
Net profit	339	81	648	3,852	6,288
Non-cash profit and expenses	4,984	5,524	4,611	6,306	7,100
Depreciation	2,856	3,414	3,746	4,888	5,859
Amortization	190	278	259	243	229
Other	1,939	1,832	606	1,175	1,012
Changes in A/L from operating activities	691	-365	-301	-612	-551
Cash flow from investments	**-12,065**	**-10,881**	**-5,969**	**-5,762**	**-5,199**
Change in tangible assets	-12,324	-10,758	-6,000	-5,400	-4,860
Change in financial assets	-277	-167	-116	-235	-212
Other	536	44	147	-127	-127
Cash flow from financing	**5,382**	**6,286**	**-1,657**	**1,178**	**1,229**
Change in debt	4,383	7,124	-1,657	1,178	1,229
Change in equity	0	0	0	0	0
Dividends	0	0	0	0	0
Other	998	-838	0	0	-0
Change in cash	-1,170	-119	-2,732	3,736	7,807
Cash at beginning of year	5,069	3,899	3,779	1,047	4,783
Cash at end of year	3,899	3,779	1,047	4,783	12,590
Gross cash flow	**5,323**	**5,604**	**5,260**	**10,158**	**13,388**
Free cash flow	**-7,287**	**-6,402**	**-1,943**	**2,950**	**6,944**

Financial ratios

Year-end Dec 31	2024	2025	2026E	2027E	2028E
Growth (%)					
Sales	-24.1	-7.6	17.9	30.8	21.2
Operating profit	-73.4	134.0	-3.7	296.3	51.8
Net profit	-79.3	-76.1	702.5	494.0	63.3
Adjusted EPS**	nm	nm	nm	956.0	64.6
Per-share data (KRW)					
EPS (parent-based)	-4,354	-4,585	1,066	11,254	18,524
EPS (consolidated)	1,447	345	2,771	16,460	26,871
Adjusted EPS**	-4,354	-4,585	1,066	11,254	18,524
BVPS	90,240	86,391	87,457	98,711	117,235
DPS (common)	0	0	0	0	0
Valuations (x)					
P/E***	n/a	n/a	383.3	36.3	22.1
P/B***	3.9	4.3	4.7	4.1	3.5
EV/EBITDA	28.4	33.6	23.6	12.0	15.4
Ratios (%)					
ROE	-4.9	-5.2	1.2	12.1	17.2
ROA	0.6	0.1	1.0	5.3	7.5
ROIC	1.5	0.6	2.3	8.7	13.1
Payout ratio	0.0	0.0	0.0	0.0	0.0
Dividend yield (common)	0.0	0.0	0.0	0.0	0.0
Net debt to equity	37.1	63.7	65.9	50.8	26.4
Interest coverage (x)	1.0	1.6	1.4	5.4	7.9

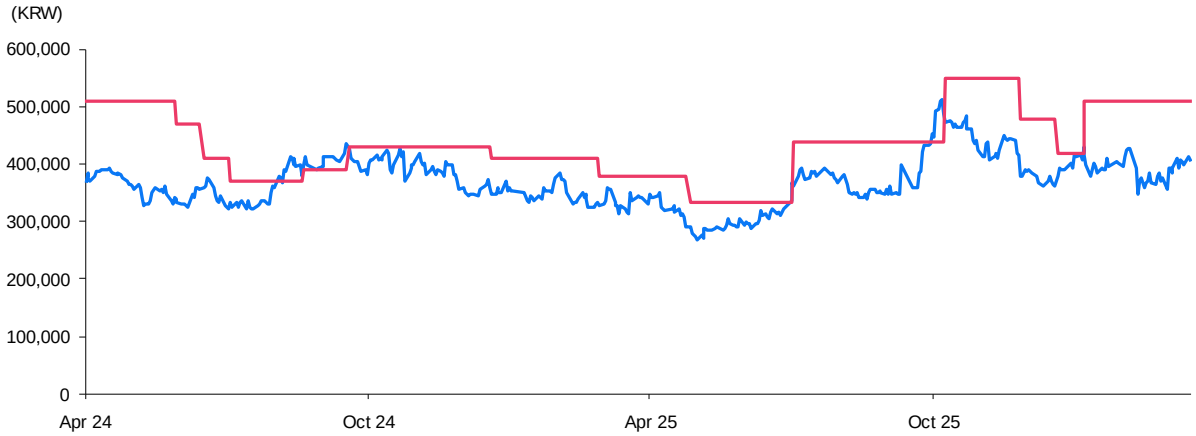
Note: *Excluding one-off items
**Fully diluted, excluding one-off items
***From companies subject to equity-method valuation

Source: Company data, Samsung Securities estimates

Compliance notice

- As of 4/7 2026, the covering analyst(s) did not own any shares, or debt instruments convertible into shares, of any company covered in this report.
- As of 4/7 2026, 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	2024/1/26	6/20	7/8	7/25	9/11	10/10	2025/1/10	3/21	5/19	7/25	10/31	12/18
Recommendation	BUY	BUY	HOLD	HOLD	HOLD	HOLD	HOLD	HOLD	HOLD	BUY	HOLD	HOLD
Target price (KRW)	510000	470000	410000	370000	390000	430000	410000	380000	335000	440000	550000	480000
Gap* (average)	-25.18	-27.55	-15.22	-3.89	5.00	-9.14	-14.77	-12.67	-10.19	-12.74	-19.50	-21.65
(max or min)**	-17.75	-23.62	-8.54	11.35	0.38	-0.70	-5.98	-5.26	9.85	16.82	-11.91	-18.65

Date	2026/1/12	1/29
Recommendation	HOLD	BUY
Target price (KRW)	420000	510000
Gap* (average)	-3.83	
(max or min)**	2.62	

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 2026.03.31

BUY(85.2%)·HOLD(14.8%)·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