Mirae Asset Securities Co., Ltd.

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373220 KS · EV Batteries

LG Energy Solution

Tesla resumes battery purchases

· ·	ntain) uy	Target pri W500,00 0		Upside 32.5%		Current price (1/29) W377,500	/24)
KOSPI	2,500.65	Market cap (Wbn)	88,335	Shares outstanding (mn)	234	Foreign ownership (%)	4.8

Report summary

Lower TP to W500,000

We revise down our 2024F EBITDA by 13% and significantly lower our 1H24 earnings estimates for LG Energy Solution (LGES). However, we believe earnings will bottom out in 1Q24. We recommend gradually accumulating shares from February.

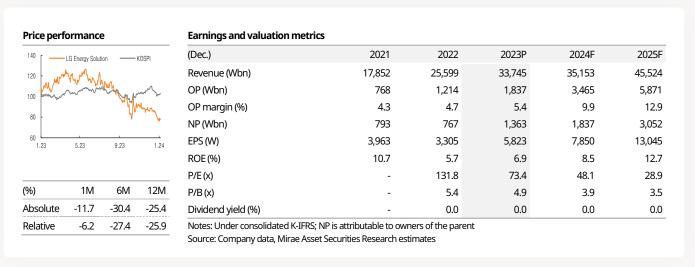
Conditions to improve markedly in 2H24; ASP to stabilize and shipments to recover from 2Q24

We forecast LGES to deliver significantly improved earnings in 2H24, with revenue of W22tr (vs. W14tr in 1H24) and operating profit of W3.1tr (vs. W406.5bn in 1H24). Our 2024 estimates factor in advanced manufacturing production credit (AMPC) recognition of W1.9tr.

1Q24 forecast: Demand to vary by customer; only Tesla-bound shipments to recover meaningfully

In 1Q24, we forecast small-sized battery shipments to jump 40% QoQ and electric vehicle (EV) battery shipments to slump 20% QoQ.

Key data



Conditions to improve markedly in 2H after bottoming out in 1Q

Lower 2024F EBITDA by 13%; business conditions bottoming out

We lower our target price on LGES to W500,000, as we revised down our 2024F EBITDA by 13%. We significantly lowered our earnings estimates for 1H24 to reflect the rapid decline in metal prices at end-2023 and resulting delays in battery orders.

That said, we expect earnings to bottom out in 1Q24. We believe expectations for overall demand and earnings have been sufficiently lowered and recommend gradually accumulating shares from February (which is likely to mark the bottom on a monthly basis).

For 2024, we forecast LGES to deliver revenue of W35tr (+4% YoY) and operating profit of W3.5tr (+60% YoY). AMPC recognition is likely to surge 186% YoY to W1.9tr. Earnings are likely to improve markedly in 2H24 after a challenging 1H24; we see revenue growing 59% HoH to W21.5tr (from W13.6tr in 1H24) and operating profit increasing sevenfold to W3.1tr (from W406.5bn in 1H24), aided by gradually improving spreads. Even without the AMPC, we believe the company would report an operating profit of W1.7tr in 2H24 (vs. a loss of W132bn in 1H24).

We expect ASP declines to accelerate in 1Q24, with overall ASP projected to fall 10% QoQ. By segment, small-sized and EV battery ASPs are likely to fall 20% and 5% QoQ, respectively. For 1Q24, we look for revenue of W6.3tr (-21% QoQ) and operating profit of W50bn (-85% QoQ).

While a sharp decrease in ASP is negative for earnings in the short term, it should help lower EV prices, bringing EVs closer to price parity with conventional vehicles. We believe EV demand will be stronger than expected in 2H24 and 2025.

Table 1. TP calculation (Wbn)

Operating Value	EBITDA	EV/EBITDA (x)	EV	Notes
Batteries	6,997	18	125,951	2024F EBITDA lowered by 13%
Small-sized	1,777			
EV	3,025			
ESS	257			
IRA tax credit (2024F)	1,938			
Net debt (2024F)			9,390	
Fair market cap			116,561	
No. of shares (000)			234,000	
TP (W)			498,124	

Source: LG Energy Solution, Mirae Asset Securities Research

Table 2. LG Energy Solution: Quarterly and annual earnings

(Wbn, %)

	1Q23	2Q23	3Q23	4Q23P	1Q24F	2Q24F	3Q24F	4Q24F	2022	2023P	2024F
Revenue	8,747	8,774	8,224	8,001	6,314	7,277	9,235	12,327	25,598	33,745	35,153
Small-sized	2,591	2,580	2,446	1,932	2,164	2,332	2,871	3,493	8,892	9,549	10,860
EV	5,659	5,658	5,349	5,208	3,946	4,537	5,672	7,657	14,780	21,874	21,812
ESS	497	536	429	861	204	408	693	1,178	1,926	2,322	2,482
ОР	633	461	731	338	49	357	1,238	1,821	1,214	2,163	3,465
Small-sized	241	278	244	23	0	120	283	380	868	787	783
EV	292	222	324	22	-78	-121	322	594	502	860	717
ESS	0	0	-53	43	-61	8	21	59	-156	-9	27
IRA tax credit	100	111	216	250	188	350	613	788		677	1,938
OP margin	7.2	5.3	8.9	4.2	0.8	4.9	13.4	14.8	4.7	6.4	9.9
Small-sized	9.3	10.8	10.0	1.2	0.0	5.1	9.9	10.9	9.8	8.2	7.2
EV	5.2	3.9	6.1	0.4	-2.0	-2.7	5.7	7.8	3.4	3.9	3.3
ESS	0.0	0.0	-12.3	5.0	-30.0	2.0	3.0	5.0	-8.1	-0.4	1.1
EBITDA	1,149	1,016	1,308	974	894	1,212	2,115	2,722	3,055	4,447	6,944
Small-sized	378	430	418	223	264	340	526	647	1,318	1,449	1,777
EV	704	634	736	434	499	456	899	1,171	1,601	2,509	3,025
ESS	41	41	-11	84	-3	66	78	117	-47	155	257
IRA tax credit	100	111	216	250	188	350	613	788	0	677	1,938

Source: Company data, Mirae Asset Securities Research

Demand varying by customer

1Q24 forecast: Only Tesla-bound shipments to recover meaningfully

We expect the small-sized battery unit to see a meaningful recovery in shipments in 1Q24. ASP is likely to fall 20% QoQ, but volume is likely to jump 40% QoQ. We forecast the unit to post 1Q24 revenue of W2.1tr (+12% QoQ) and operating profit of W54bn (+130% QoQ).

Meanwhile, we expect shipments of EV batteries (supplied to GM, Volkswagen, etc.) to slump 20% QoQ in 1Q24 but recover gradually from 2Q24. We believe EV battery shipments will diverge depending on each customer's year-end EV sales performance and related inventory adjustment schedules. For instance, Tesla achieved its 2023 sales target of 1.8mn units, while other global OEMs mostly missed their targets.

While we project battery market conditions to improve in 2H24 after a sluggish 1H24, the pace of the demand recovery will likely differ by customer. And LGES, as an important player in Tesla's value chain, should see its earnings recover earlier than rivals.

LG Energy Solution (373220 KS)

Income statement (summarized)

(Wbn)	2022	2023F	2024F	2025F
Revenue	25,599	33,745	35,153	45,524
Cost of revenue	21,308	28,802	29,198	36,209
GP	4,291	4,943	5,955	9,315
SG&A expenses	3,077	3,106	2,490	3,444
OP (adj.)	1,214	1,837	3,465	5,871
OP	1,214	1,837	3,465	5,871
Non-operating profit	-219	314	405	308
Net financial income	39	-151	-296	-359
Net income from associates	-37	-15	32	32
Pretax profit	995	2,151	3,870	6,179
Income tax	215	408	735	1,174
Profit from continuing operations	780	1,643	3,135	5,005
Profit from discontinued operations	0	0	0	0
NP	780	1,643	3,135	5,005
Attributable to owners	767	1,363	1,837	3,052
Attributable to minority interests	13	280	1,298	1,952
Total comprehensive income	752	2,378	3,135	5,005
Attributable to owners	707	1,915	2,135	3,408
Attributable to minority interests	45	463	1,000	1,597
EBITDA	3,056	4,122	6,944	9,465
FCF	-6,790	-7,263	-2,395	-1,720
EBITDA margin (%)	11.9	12.2	19.8	20.8
OP margin (%)	4.7	5.4	9.9	12.9
Net margin (%)	3.0	4.0	5.2	6.7

Balance sheet (summarized)

(Wbn)	2022	2023F	2024F	2025F
Current assets	18,804	16,291	19,999	20,452
Cash & equivalents	5,938	2,887	2,422	772
AR & other receivables	5,209	5,963	7,835	8,773
Inventory	6,996	6,756	9,022	10,102
Other current assets	661	685	720	805
Non-current assets	19,495	29,171	35,796	42,165
Investments in associates	204	191	294	329
PP&E	15,331	24,053	30,693	37,198
Intangible assets	642	730	611	512
Total assets	38,299	45,462	55,795	62,617
Current liabilities	11,445	11,411	16,073	17,663
AP & other payables	3,842	4,207	6,482	7,258
Short-term financial liabilities	2,871	2,792	2,794	2,795
Other current liabilities	4,732	4,412	6,797	7,610
Non-current liabilities	6,261	9,189	11,725	11,952
Long-term financial liabilities	5,243	7,827	9,827	9,827
Other non-current liabilities	1,018	1,362	1,898	2,125
Total liabilities	17,706	20,599	27,798	29,615
Equity attributable to owners	18,732	20,617	22,453	25,506
Capital stock	117	117	117	117
Capital surplus	17,165	17,165	17,165	17,165
Retained earnings	1,155	2,520	4,356	7,409
Minority interests	1,862	4,246	5,544	7,496
Shareholders' equity	20,594	24,863	27,997	33,002

Cash flow statement (summarized)

(Wbn)	2022	2023F	2024F	2025F
Operating cash flow	-580	2,986	7,605	8,280
NP	780	1,643	3,135	5,005
Non-cash income/expenses	2,765	3,496	4,478	5,096
Depreciation	1,745	2,155	3,360	3,495
Amortization	97	130	118	99
Other	923	1,211	1,000	1,502
Chg. in working capital	-4,021	-1,620	1,024	-287
Chg. in AR & other receivables	-2,130	-213	-1,796	-856
Chg. in inventory	-3,139	528	-2,266	-1,080
Chg. in AP & other payables	1,841	55	2,275	776
Income tax	-345	-645	-735	-1,174
Cash flow from investing activities	-6,259	-10,109	-10,000	-9,928
Chg. in PP&E	-6,200	-10,182	-10,000	-10,000
Chg. in intangible assets	-79	-76	0	0
Chg. in financial assets	-26	17	0	72
Other	46	132	0	0
Cash flow from financing activities	11,415	3,894	2,002	1
Chg. in financial liabilities	1,145	2,505	2,002	1
Chg. in equity	10,059	0	0	0
Dividends	0	0	0	0
Other	211	1,389	0	0
Chg. in cash	4,655	-3,051	-464	-1,650
Beginning balance	1,283	5,938	2,887	2,422
Ending balance	5,938	2,887	2,422	772
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Source: Company data, Mirae Asset Securities Research estimates

Key valuation metrics/ratios

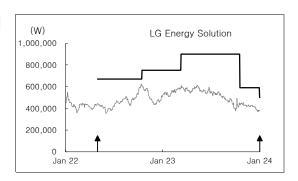
ney valuation metrics/ratios				
	2022	2023F	2024F	2025F
P/E (x)	131.8	73.4	48.1	28.9
P/CF(x)	28.5	19.5	11.6	8.7
P/B (x)	5.4	4.9	3.9	3.5
EV/EBITDA (x)	34.7	27.2	15.0	11.4
EPS (W)	3,305	5,823	7,850	13,045
CFPS (W)	15,270	21,958	32,532	43,166
BPS (W)	80,052	88,105	95,954	108,999
DPS (W)	0	0	0	0
Dividend payout ratio (%)	0.0	0.0	0.0	0.0
Dividend yield (%)	0.0	0.0	0.0	0.0
Revenue growth (%)	43.4	31.8	4.2	29.5
EBITDA growth (%)	37.7	34.9	68.5	36.3
OP growth (%)	57.9	51.3	88.7	69.4
EPS growth (%)	-16.6	76.2	34.8	66.2
AR turnover (x)	6.7	6.7	5.6	6.0
Inventory turnover (x)	4.7	4.9	4.5	4.8
AP turnover (x)	7.1	7.2	5.5	5.3
ROA (%)	2.5	3.9	6.2	8.5
ROE (%)	5.7	6.9	8.5	12.7
ROIC (%)	5.3	4.8	8.2	11.5
Debt-to-equity ratio (%)	86.0	82.9	99.3	89.7
Current ratio (%)	164.3	142.8	124.4	115.8
Net debt-to-equity ratio (%)	10.5	31.1	36.4	35.9
Interest coverage ratio (x)	10.7	5.8	7.9	13.2

Appendix 1

Important disclosures and disclaimers

Two-year rating and TP history

Company	Date	Rating	TP (W)
LG Energy Solution (373220)	01/30/24	Buy	500,000
	11/17/23	Buy	590,000
	04/10/23	Buy	900,000
	11/14/22	Buy	750,000
	05/31/22	Buv	670,000



Stock rating	s	Sector ratings	Sector ratings				
Buy	Expected 12-month performance: +20% or greater	Overweight	Expected to outperform the market over 12 months				
Trading Buy	Expected 12-month performance: +10% to +20%	Neutral	Expected to perform in line with the market over 12 months				
Hold	Expected 12-month performance: -10% to +10%	Underweight	Expected to underperform the market over 12 months				
Sell	Expected 12-month performance: -10% or worse						

Rating and TP history: Share price (—), TP (—), Not Rated (■), Buy (▲), Trading Buy (■), Hold (•), Sell (♦)

- * Our investment rating is a guide to the expected return of the stock over the next 12 months.
- * Outside of the official ratings of Mirae Asset Securities Co., Ltd., analysts may call trading opportunities should technical or short-term material developments arise.
- * The TP was determined by the research analyst through valuation methods discussed in this report, in part based on estimates of future earnings.
- *TP achievement may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

Ratings distribution and investment banking services

	Buy	Trading Buy	Hold	Sell
Ratings distribution	88.55%	6.63%	4.22%	0.6%
Investment banking services	84.62%	15.38%	0%	0%

^{*} Based on recommendations in the last 12-months (as of December 31, 2023)

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