December 12, 2022

The Vanguard of the Korean Invasion

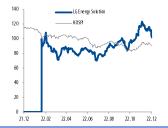
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Share price (Dec 09)			515,000
Upside (%)			31.1
Market Cap (KRW bn)			120,510
Shares outstanding ('000)		234,000	
Paid-in capital (KRW bn)/ Face value (K	(RW)		117/500
52-week high/low (KRW)		624	,000/356,000
60-day avg. daily T/O (KRW	bn)		210
Foreign ownership (%)			5.13
Major shareholders (%)	LO	Chem and 1	others 81.84
Price performance	1M	3M	6M
Absolute (%)	-14.0	5.9	21.9
Relative (%p)	-12.8	5.6	34.0

K-IFRS, consolidated

(KRW)	EPS(22F)	EPS(23F)	T/P
Previous	3,840	9,069	675,000
Revised	3,840	9,069	675,000
Consensus	3,835	7,447	651,870
Difference (%)	0.1%	21.8%	3.5%

12-month price performance



Source: FnGuide, Hyundai Motor Securities

Investment highlights

- Battery Shortage Deepens. No. 1 Non-China Battery Company Premium is valid. Continuing to improve profitability
- Cash flow is expected to improve significantly depending on AMPC benefit level. Stock Price Premium expansion is expected.
- Japanese OEM/battery industries have difficulty under IRA. Companies form Korea will continue to expand its market share in the U.S
- Profitability is expected to improve year-on-year due to reducing the proportion of less profitable Legacy projects, expanding large-scale of cylindrical battery factories, and improving ESS performance. We maintain the company as the top pick of secondary battery industry.

Major issues and earnings outlook

- The battery industry, which needs funds for large-scale investment, has become difficult to raise funds due to the recent tightening of the financial market, and because European startups that originally expected to enter the market have not reached the mass production stage, and supply shortages are visible due to delayed mass production of next-generation batteries. In addition, as the U.S. electric vehicle market is blooming due to IRA, the battery supply in the U.S. is further reduced due to restrictions on use of batteries from China.
- Lack of battery supply is making an environment in which contracts that can secure stable profitability can increase. Therefore, the trend of incremental profitability will continue
- The company is expected to keep expanding U.S. market share. In addition, as the proportion of sales of existing Legacy projects decreases and U.S.-oriented sales grow, the profitability of pouch batteries for EVs is expected to gradually improve
- We expect significant improvement in terms of net profit and cash flow if AMPC benefit details are identified
- Concerns over the recent slowdown in Tesla's sales in China are limited. Tesla is continuing its new plant ramp-up, including Giga Berlin. It is also expected that the 3Q22 Tesla Highland project will make the sales price lower visible. Cost-effectiveness is expected to improve
- 4Q22 performance will be similar to the previous quarter due to inventory adjustments by customers, but 2023 performance is expected to record 38.5 trillion won (+55.8% yoy) in sales and 314.6 billion won (+109.0% yoy) in operating profit due to large-scale capa expansion of cylindrical batteries (60GWh → 100GWh), 1st mass production of Ultium Cells in the U.S., and completion of coping with recall from GM. The margin rate is expected to improve as the proportion of unprofitable projects decreases and the proportion of cylindrical batteries increases. We prospect the performance to exceed the consensus
- The automobile-oriented demand in the entire oil market is 2,000 trillion won/year. The battery business will take much from
 this market. In addition, the use of electricity using fossil energy is also a potential battery market. The market capitalization of
 dominant businesses in the oligopolized market has sufficient possibility to rise in this energy industry scale

Share price outlook and valuation

Stock prices are being adjusted due to short-term valuation burdens and supply and demand burdens caused by soaring stock prices. The premium for the No. 1 company in the mid-to long-term is valid, and the biggest beneficiary under IRA is also valid. In the future, the determination of AMPC benefits size and improvement of profitability will be the stock price momentum.

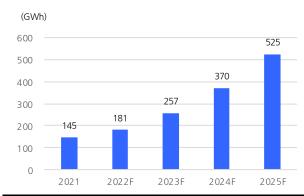
Earnings forecasts and valuations

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	Sales	0P	NP	EBITDA	EPS	Growth	P/E	P/B	EV/EBITDA	ROE	Div. yield
	(KRW bn)	(KRW bn)	(KRW bn)	(KRW bn)	(KRW)	(%)	(x)	(x)	(x)	(%)	(%)
2020	1,461	-475	-456	-360	-2,278	N/A	0.0	0.0	NA	NA	N/A
2021	17,852	768	793	2,220	3,963	RB	0.0	0.0	2.9	10.7	N/A
2022F	24,694	1,505	891	3,413	3,840	-3.1	138.3	6.3	41.0	6.4	0.0
2023F	38,461	3,146	2,122	6,014	9,069	136.2	58.6	5.7	24.1	10.2	0.0
2024F	53,520	4,681	3,120	8,243	13,331	47.0	39.8	5.0	17.9	13.3	0.0

Note: K-IFRS, consolidated

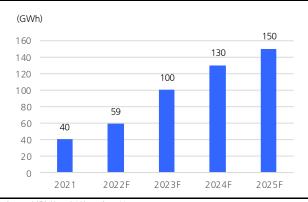


Fig 1. Prediction of Battery Capa for EVs



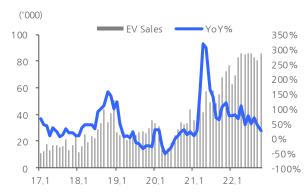
Source: LGES, Hyundai Motor Securities

Fig 2. Prediction of Cylindrical Battery Capa



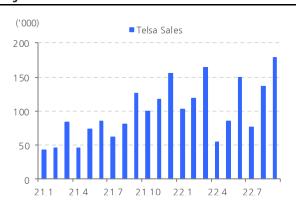
Source: LGES, Hyundai Motor Securities

Fig 3. EV Sales in U.S.



Source: Marklines, Hyundai Motor Securities

Fig 4. Tesla Sales Worldwide



Source: Marklines, Hyundai Motor Securities

Fig 5. Quarterly earnings forecasts

(I/DI// b.s.)	2021	20225	20225	1022	2022	2022	4Q22F	1Q23F	2Q23F	3Q23F	4022F
(KRW bn)		2022F	2023F	1022		3Q22					4Q23F
Sales	17,852.0	24,693.7	38,461.1	4,342.3	5,070.6	7,648.2	7,632.5	8,783.1	8,843.1	10,186.6	10,648.2
Automobile(Medium and large)	11,803.8	13,603.7	23,007.6	2,260.1	2,606.7	4,359.5	4,377.4	5,105.1	5,246.2	5,988.0	6,668.3
ESS	1,013.4	2,049.7	2,683.1	369.3	422.4	611.9	646.1	498.6	549.2	795.4	840.0
Small(Including automotive cylindrical)	5,034.4	9,040.2	12,770.4	1,712.9	2,041.5	2,676.9	2,609.1	3,179.5	3,047.8	3,403.3	3,139.9
(yoy)											
Sales	44.5%	38.3%	55.8%	2.1%	-1.2%	89.9%	71.9%	102.3%	74.4%	33.2%	39.5%
Automobile(Medium and large)	48.2%	15.2%	69.1%	-21.2%	-31.5%	73.6%	66.8%	125.9%	101.3%	37.4%	52.3%
ESS	-4.8%	102.3%	30.9%	9.7%	97.2%	174.2%	170.0%	35.0%	30.0%	30.0%	30.0%
Small(Including automotive cylindrical)	51.4%	79.6%	41.3%	63.0%	83.3%	107.0%	65.5%	85.6%	49.3%	27.1%	20.3%
Operating profit	768.5	1,505.6	3,146.4	258.9	195.6	521.9	529.2	667.1	669.2	893.4	916.7
(yoy, %)	RB	95.9%	109.0%	-24.1%	-73.0%	RB	598.7%	157.7%	242.2%	71.2%	73.2%
(OPM)	4.3%	6.1%	8.2%	6.0%	3.9%	6.8%	6.9%	7.6%	7.6%	8.8%	8.6%
Automobile(Medium and large)				40.7	13.0	209.3	249.5	270.6	314.8	419.2	533.5
ESS				-13.0	-7.3	4.8	16.2	15.0	19.2	31.8	37.8
Small(Including automotive cylindrical)				231.2	189.9	307.8	263.5	381.5	335.3	442.4	345.4
Pretax profit from cont ops		1,143.0	3,143.9	259.7	128.8	241.6	513.0	673.8	667.0	891.6	911.4
(yoy, %)			175.1%	-13.6%	-84.6%	RB	248.2%	159.5%	418.1%	269.1%	77.7%
NP from controlling interest		891.3	2,122.1	226.6	94.2	185.7	384.7	454.8	450.2	601.9	615.2
(yoy, %)			138.1%	-38.9%	-84.6%	-20.4%	814.3%	100.7%	378.2%	224.0%	59.9%

Source: LGES, Hyundai Motor Securities

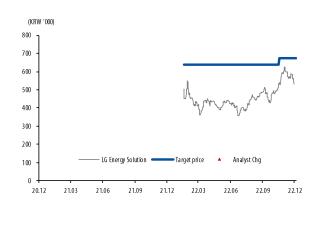
Income statement	2020	2021	20225	20225	20245	Balance sheet	2020	2021	20225	20225	20245
(KRW bn)	2020	17.052	2022F	2023F	2024F	(KRW bn)	2020	0.526		2023F	
Sales	1,461	17,852	24,694	38,461	53,520	Current assets	9,086	9,536	19,624	22,527	29,19
Change (%)	N/A	1,121.9	38.3	55.8	39.2	Cash and cash equivalents	1,493	1,283	3,342	1,756	2,54
Cost of goods sold	1,237	13,953	20,301	30,924	42,729	Short-term investment assets	624	23	3,363	2,058	1,060
of sales (%)	84.7	78.2	82.2	80.4	79.8	Accounts receivable	2,931	2,914	4,361	6,655	9,23
Gross profit	224	3,899	4,392	7,537	10,791	Inventory assets	3,043	3,896	6,784	9,905	13,74
Gross margin (%)	15.3	21.8	17.8	19.6	20.2	Other current assets	994	1,420	1,762	2,141	2,603
Change (%)	N/A	1,640.6	12.6	71.6	43.2	Non-current assets	10,856	14,228	19,793	25,056	29,62
SG&A expenses	699	3,130	2,887	4,391	6,110	Tangible assets	8,684	11,051	15,746	20,978	25,510
of sales (%)	47.8	17.5	11.7	11.4	11.4	Intangible assets	326	455	527	527	526
EBITDA	-360	2,220	3,413	6,014	8,243	Investment assets	109	481	869	900	934
EBITDA margin (%)	-24.6	12.4	13.8	15.6	15.4	Other non-current assets	1,737	2,241	2,651	2,651	2,65
Change (%)	N/A	RB	53.7	76.2	37.1	Other financial assets	0	0	0	0	(
Operating profit	-475	768	1,505	3,146	4,681	Total assets	19,942	23,764	39,417	47,583	58,822
Operating margin (%)	-32.5	4.3	6.1	8.2	8.7	Current liabilities	6,889	9,474	11,937	15,481	20,843
Change (%)	N/A	RB	96.0	109.0	48.8	Short-term debt	794	1,146	1,704	1,704	1,704
Non-operating profit	-131	21	-337	-3	-59	Accounts payable	2,592	2,178	4,182	5,835	8,475
Interest income	29	340	532	145	138	Current portion of long-term debt	329	1,057	1,506	1,506	1,506
Interest expenses	139	295	790	148	197	Other current debt	3,174	5,093	4,545	6,436	9,158
Other non-operating income	-21	-24	-79	0	0	Non-current liabilities	5,487	5,548	5,932	8,197	10,607
Subsidiaries/affiliate income	1	-12	-25	0	0	Bonds	1,944	2,046	1,626	1,626	1,626
Pretax profit from cont ops	-605	777	1,143	3,144	4,622	Long-term debt	3,077	2,663	3,390	5,390	7,390
Pretax margin (%)	-41.4	4.4	4.6	8.2	8.6	LT financial debt (incl. lease)	0	0	11	11	11
Change (%)	N/A	RB	47.1	175.1	47.0	Other non-current debt	466	839	905	1,170	1,580
Income tax	-147	77	254	786	1,155	Other financial liabilities	0	0	0	0	1,500
	-458	701	889	2,358	3,466	Total liabilities	12,376	15,022	17,869	23,677	31,450
Profit from continuing ops		229	009							21,830	
Profit from discontinuing ops	6		······	0	0	Owners of parent equity	6,879	7,966	19,707		24,949
Net profit	-452 20.0	930	889	2,358	3,466	Paid-in capital	100	100	117	117	117
Net margin (%)	-30.9	5.2	3.6	6.1	6.5	Capital surplus	7,231	7,122	17,165	17,165	17,165
Change (%)	N/A	RB	-4.4	165.2	47.0	Capital adjustment, etc.	0	0	0	0	1.07
NP from controlling interest	-456	793	891	2,122	3,120	Other accumul earnings and comp income	1	406	1,074	1,074	1,074
NP from non-controlling interest	4	137	-2	236	347	Retained earnings	-453	338	1,352	3,474	6,594
Other comprehensive income	-18	509	1,068	0	0	Non-controlling interest	686	776	1,841	2,076	2,423
Total comprehensive income	-470	1,438	1,957	2,358	3,466	Total equity	7,565	8,742	21,548	23,906	27,372
Cook flow statement						Van Cuan dal data					
Cash flow statement						Key financial data					
(KRW bn)	2020	2021	2022F	2023F	2024F	(KRW, x, %)	2020	2021			
Operating cash flow	395	979	637	3,240	5,919	EPS (based on net profit)	-2,259	4,649	3,830	10,076	14,813
Net profit	-452	930	889	2,358	3,466	EPS (based on parent net profit)	-2,278	3,963	3,840	9,069	13,331
Depreciation on tangible assets	111	1,379	1,813	2,767	3,462	BPS (based on total equity)	37,827	43,712	92,086	102,162	116,975
Amortization on intangible assets	5	73	94	100	100	BPS (based on owners of parent equity)	34,398	39,831	84,220	93,289	106,620
FX-related profit	0	0	0	0	0	DPS	0	0	0	0	0
Dec (inc) in working capital	178	-2,407	-2,826	-1,986	-1,110	P/E (based on net profit)	0.0	0.0	138.6	52.7	35.8
Others	553	1,004	667	1	1	P/E (based on parent net profit)	0.0	0.0	138.3	58.6	39.8
Investing cash flow	-885	-2,178	-9,615	-6,826	-7,136	P/B (based on total equity)	0.0	0.0	5.8	5.2	4.5
Dec (inc) in investment assets	-108	-357	-300	-31	-34	P/B (based on owners of parent equity)	0.0	0.0	6.3	5.7	5.0
Decrease in tangible assets	4	59	8	0	0	EV/EBITDA (reported)	-13.2	2.9	41.0	24.1	17.9
Increase in tangible assets (capex)	-260	-3,463	-6,127	-8,000	-8,000	Dividend yield	N/A	N/A	0.0	0.0	0.0
Others	-521	1,583	-3,196	1,205	898	Growth (%)					
Financing cash flow	-203	883	10,838	2,000	2,000	EPS (based on net profit)	N/A	RB	-17.6	163.1	47.0
Increase (decrease) in debt	3,077	-414	738	2,000	2,000	EPS (based on parent net profit)	N/A	RB	-3.1	136.2	47.0
Increase (decrease) in bond	1,944	102	-420	0	0	Profitability (%)	.1//1	110	J.1.	150.2	
Increase in capital	7,331	-109	10,059	0	0	ROE (based on net profit)	-6.0	11.4	5.9	10.4	13.5
Dividend	1,551 0	-109	-37	0	0	ROE (based on parent net profit)	-6.6	10.7	6.4	10.4	13.3
						· · · · · · · · · · · · · · · · · · ·					
Others	-12,555	1,304	498	0	0	ROA	-2.3	4.3	2.8	5.4	6.5
	-14	106	200	0	0	Stability (%)					
Other cash flow			2			T . I D I 1994 / 1					
Increase (decrease) in cash	-707	-210	2,060	-1,586	784	Total liabilities/equity	163.6	171.8	82.9	99.0	114.9
		-210 1,493 1,283	2,060 1,283 3,342	-1,586 3,342 1,756	784 1,756 2,540	Total liabilities/equity Net debt/equity Interest coverage	163.6 53.8 NA	171.8 64.1 11.5	82.9 7.1 14.4	99.0 26.8 21.3	114.9 31.5 23.7

Note: K-IFRS, consolidated

Investment rating and target price history

Date	Rating	TD	Differe	nce (%)
		TP	Average	High/Low
2022.01.28	BUY	640,000	-34.41	-14.38
2022.07.28	AFTER 6M	640,000	-26.76	-17.34
2022.10.27	BUY	675,000	-14.49	-7.56
2022.12.09	BUY	675,000		

Two-year price chart



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Hyundai Motor Securities offers three sector investment ratings based on six-month forward fundamentals and share price outlook.

- OVERWEIGHT: Sector-wide fundamentals and share prices are expected to turn up.
- NEUTRAL: No meaningful fundamental improvement is expected.
- UNDERWEIGHT: Sector-wide fundamentals and share prices are expected to turn down.

Hyundai Motor Securities offers three company investment ratings based on the relative return expected in the following six months, based on the closing price on the date of rating declaration.

- BUY: Excess return of +15p or more
- MARKETPERFORM (M.PERFORM): Excess return of between -15p and +15p
- SELL: Excess return of -15p or less

Stock ratings distribution (2021.10.01-2022.09.30)

210 th 1 th								
Rating	Count	% of rating category						
BUY	168	90.8						
MARKETPERFORM	17	9.2						
SELL	0	0						

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