SECTOR UPDATE

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Autos (OVERWEIGHT)

FSD is coming to Korea

- Tesla Korea said it will soon roll out 'Full Self Driving (FSD) Supervised'. Tesla has become the top-selling imported car brand since the April launch of the Model Y Juniper.
- If the FSD option can be activated, Tesla's sales volume should surge given that Korean consumers tend to be early adopters.
- Similar to Samsung Electronics in the smartphone market, Hyundai Motor (HMC) and Kia are likely to pursue a two-track strategy for autonomous driving tech, combining external collaboration with in-house development.

AT A GLANCE

Hyundai Motor (005380 KS, 271,500)		
Target price	KRW340,000	25.2%
BUY		
Kia (000270 KS, 117,400)		
Target price	KRW150,000	27.8%
BUY		

WHAT'S THE STORY?

Korea's EV penetration suddenly at 23%: Korea has crossed the EV chasm, supported by the launch of lower-cost EVs, including Kia' EV3 and Tesla's Model Y.

- **181,000 EVs sold in Korea in year to September:** Korea's EV market grew 59% y-y over January-September, pushing the EV penetration rate to 23.5%.
- **Tesla the top-selling imported car brand:** Since the Apr 2025 launch of the Model Y Juniper, Tesla's monthly sales have reached 8,000-9,000 units. Korea has become the carmaker's third-largest market. The Model Y sells 7,000-8,000 units a month, second only to Kia's Sorento.
- **Korea finalizes 2035 emissions target:** Korea's Nationally Determined Contribution (NDC) aims to reduce CO_2 emissions by 53-61% by 2035, from a 2018 baseline level of 742.3m tonnes. To cut 400m tonnes of greenhouse emissions over the next decade, the government is pushing the transport sector to increase EV/hydrogen vehicle penetration to 72.8% of the 2024 target (cumulatively 1.03m vehicles). Over 900,000 EVs/hydrogen vehicles will have to be sold annually to meet this goal.

  CO_2 emissions from new passenger cars averaged 89 g/km in 2024, compared to the 2030 target of 70 g/km. A target for 2035 has yet to be set. For every 1 g/km over the target, a KRW50,000 penalty will be imposed for each car sold, potentially costing carmakers billions of won.

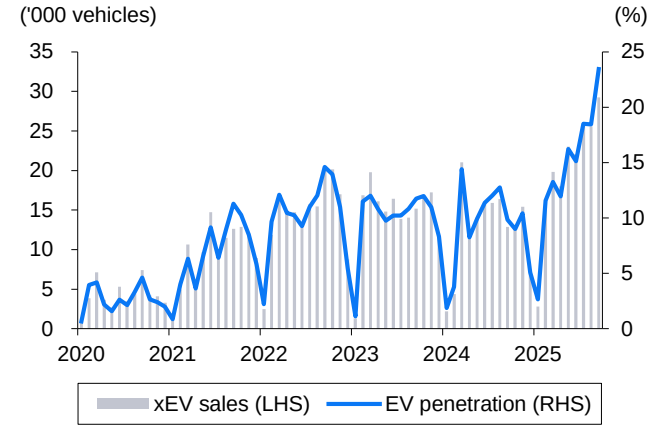
Korean market to become the eye the of autonomous driving storm? The release of FSD Supervised would turn Korea into a testbed for global autonomous driving technology. We foresee the following four major effects.

(Continued on the next page)

- **Tesla's sales volume to jump:** Currently, FSD is enabled only on US-made vehicles—the Model S, Model X, and Cybertruck—because under the Korea-US FTA, up to 50,000 US-made vehicles per manufacturer per year are allowed to enter Korea without type approval. But with the US now discontinuing its IRA tax credits, we believe Tesla will seeks to address sales challenges by exporting the Model 3 and Model X to Korea. The rear-wheel drive version of the Model Y starts at KRW52.99m while the all-wheel drive version is priced at KRW63.14m. Tesla charges KRW9m for the FSD option; at the moment, it does not offer it as a monthly subscription service. Korean consumers are eager to embrace new technologies. Although the iPhone arrived in Korea in 2009, a year later than in the US market, by 2014, Korea had the world's highest smartphone penetration rate (83%).
- **Tesla's Korean value chain to benefit:** As the US tries to revive its manufacturing ecosystem, many Korean companies are finding opportunities to replace Chinese suppliers. A jump in Tesla's Korean sales volume would forge a closer relation between the EV maker and its Korean value chain.
- **Korean autonomous driving regulations to ease:** The release of 'FSD Unsupervised' may be delayed by a variety of existing regulations (*eg*, the Road Traffic Act, Motor Vehicle Management Act, and insurance rules), but a surge in Tesla sales volume could speed up deregulation in the name of consumer convenience. Additionally, Korea plans to have autonomous vehicles operate in designated pilot zones from 2026, while some 10% (KRW15.4t) of the National Growth Fund (KRW150t) is expected to be invested in future cars and mobility.
- **HMC/Kia to adopt two-track strategy for autonomous driving tech development:** Since the iPhone entered the Korean market, Samsung Electronics has partnered with Google to accelerate its expansion in the smartphone market. Similarly, HMC and Kia are likely to move more swiftly. In Korea, the pair have had 42dot develop Level 2+ autonomous driving technology, and they have begun accumulating driving data following the launch of the Pace Car in 3Q25. The automakers aim to equip all of their new vehicles with autonomous driving capabilities by 2028. Aligned with 42dot's technology development roadmap, HMC and Kia have also announced plans to purchase 50,000 Blackwell GPUs for their data center. 42dot's autonomous driving technology, like Tesla's, is vision-based and end-to-end.

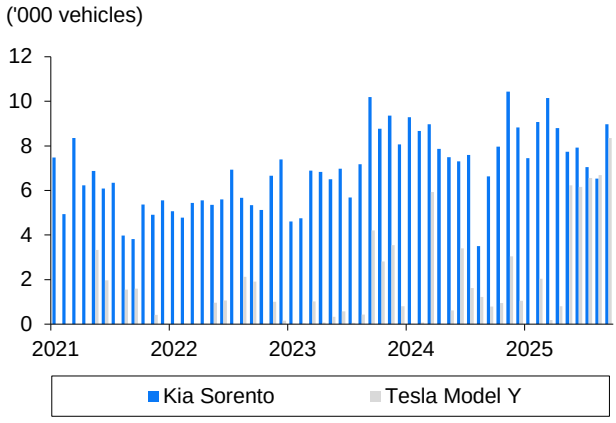
  In China, HMC worked with Momenta to launch the Elexio EV, and it plans to launch two more vehicles. Separately, it is exploring collaboration with Xpeng. Notably, Xpeng takes a similar approach to autonomous driving technology as Tesla, and along with Huawei, it is known to be the furthest ahead in autonomous driving among Chinese EV brands.

Korea: xEV sales and penetration



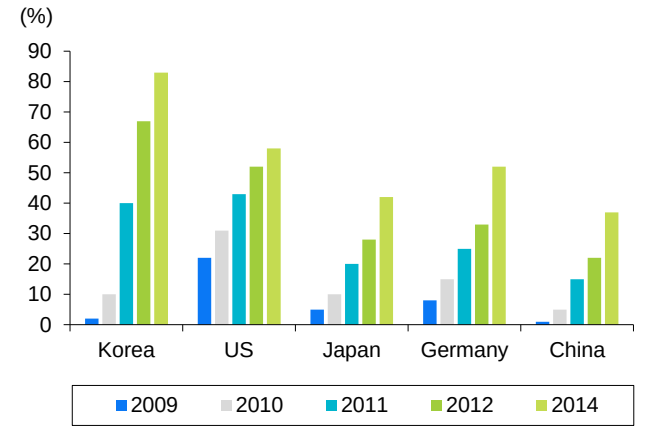
Source: KAMA, EV-Volumes, Samsung Securities

Tesla Model Y: Ranks second in sales among all models



Source: KAMA, EV-Volumes, Samsung Securities

Korea: Smartphone penetration



Source: OECD Digital Economy Outlook, eMarketer, Samsung Securities

Tesla Korea: Supervised FSD rollout announcement

Source: X

Korea: Autonomous driving regulations

Category	Relevant regulation	Current rule	Implication
Driver requirements	Road Traffic Act, Article 43	A driver must always be seated in the driver's seat	Full autonomous driving not permitted
Type approval	Motor Vehicle Management Act, Article 29	No regulatory framework for OTA software updates	Version upgrades not legally recognized
Communication & data	Radio Waves Act / Location Information Act	Real-time driving data transmission restricted	Limits large-scale fleet learning
Insurance system	Automobile Liability Security Act	Liability framework centered on driver negligence	Legal responsibility unclear for system-caused accidents
Traffic signal regulations	Enforcement Regulations of the Road Traffic Act	No legal definition of signal recognition by autonomous systems	Legal ambiguity when signal interpretation errors occur

Source: Road Traffic Act, Motor Vehicle Management Act, Samsung Securities

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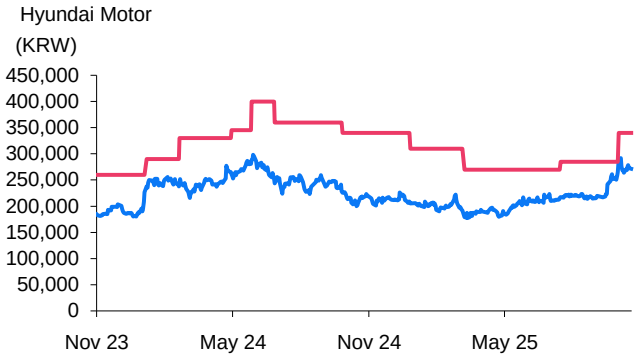
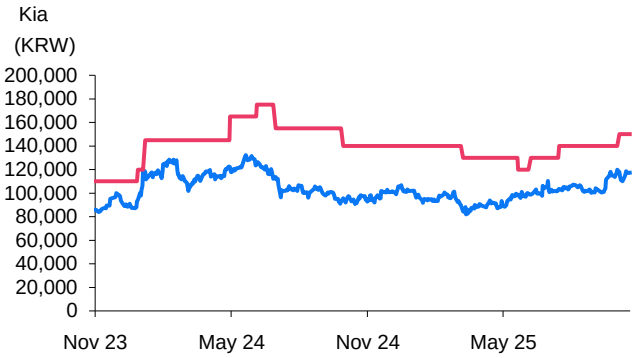
Target price changes in past two years





Rating changes over past two years (adjusted share prices)

Hyundai Motor												
Date	2023/10/26	2024/2/5	3/20	5/29	6/25	7/26	10/25	2025/1/24	4/7	8/14	10/31	
Recommendation	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	
Target price (KRW)	260000	290000	330000	345000	400000	360000	340000	310000	270000	285000	340000	
Gap* (average)	-28.49	-15.25	-26.19	-21.52	-31.63	-32.30	-37.27	-34.90	-26.06	-20.49		
(max or min)**	-12.69	-11.90	-16.06	-16.96	-25.50	-28.06	-33.38	-28.39	-17.41	-7.02		
Kia												
Date	2023/8/4	2024/1/26	2/5	5/29	7/4	7/29	10/28	2025/4/7	6/20	7/7	8/14	11/3
Recommendation	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
Target price (KRW)	110000	120000	145000	165000	175000	155000	140000	130000	120000	130000	140000	150000
Gap* (average)	-24.00	-12.23	-19.81	-24.20	-31.41	-34.54	-30.66	-30.49	-17.88	-21.50	-24.00	
(max or min)**	-9.09	-0.42	-11.38	-19.82	-27.83	-27.68	-23.79	-23.38	-15.75	-15.08	-14.36	

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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* 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%)

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