SECTOR UPDATE

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Rechargeable Batteries (OVERWEIGHT)

Key takeaways from InterBattery 2026

- At InterBattery 2026 (Mar 11-13), investors honed in on: 1) energy storage systems (ESS) for AI data centers; and 2) solid-state batteries for physical AI applications.
- During the conference sessions, Korea's top-three cell makers said they are strategically shifting from EVs towards AI-driven markets (ESS and robots).
- Now that the event is over, we suggest adopting a prudent approach towards risk management—profit-taking may amplify near-term volatility.

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▶ AT A GLANCE

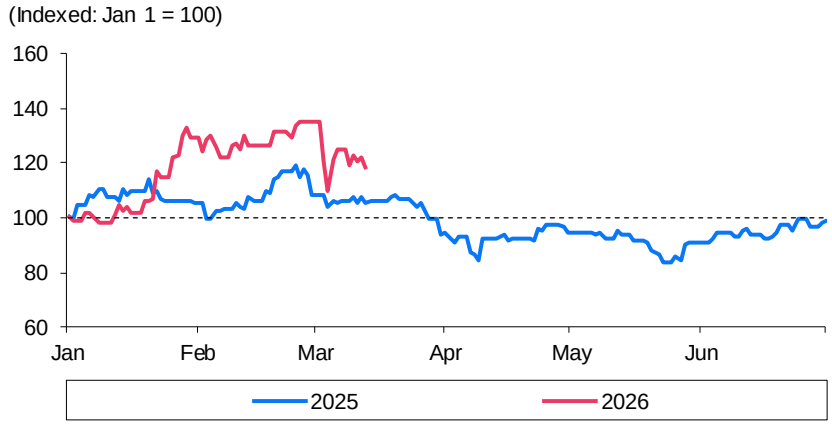
LG Energy Solution	(373220 KS, 366,000)	
Target price	KRW510,000	39.3%
BUY		
Samsung SDI	(006400 KS, 383,000)	
Target price	KRW420,000	9.7%
BUY		

InterBattery 2026 and its impact on shares

InterBattery 2026 and its impact on shares: InterBattery 2026 was held over Mar 11-13 at Coex (Seoul). It is Korea's largest battery exhibition, giving investors an opportunity to look at domestic firms' battery-related products, strategies, and technologies. Marking its 14th anniversary, the event centered on the theme 'Expansion to Everything Beyond EV', highlighting how companies are shifting focus from EVs towards emerging growth areas like ESS and AI. Historically, InterBattery has served as a catalyst for investor interest in the battery sector, often moving stock prices. Last year, despite broader market headwinds, companies tied to the 'solid-state battery' theme saw sharp share-price rallies, demonstrating the event's continued influence on market sentiment.

(Continued on the next page)

Share performance of battery value chain before/after InterBattery expo



Note: As of Mar 12 close
Source: Bloomberg, Samsung Securities

This year's exhibition unfolded against the backdrop of EV battery supply chains' weakening performance in North American in 1H26, following the US administration's elimination of EV subsidies in 2025. Investors, buoyed by recent share-price gains, are now seeking sustainable, long-term growth narratives. Three themes captured attention at the event: 1) opportunities arising from the rapid rise of humanoid robotics, which segment stole the spotlight at CES 2026; 2) North American ESS strategies driven by expanding investments in AI data centers; and 3) supply-chain diversification efforts and the growing role of recycling amid rising metal prices (metals are key raw materials). Yet, while expectations ran high ahead of the show, the April earnings season could trigger short-term volatility as investors take profit—in the short term, investors ought to carefully manage risk.

Key takeaways from Korea's top-three cell makers at InterBattery 2026

Samsung SDI emphasizing solid-state batteries for physical AI and North American ESS solutions

Samsung SDI unveils samples of SolidStack, with mass-production to begin in 2H27: Last year, Samsung SDI generated buzz by signing an MOU with Hyundai Motor Group (HMG) to co-develop robotics batteries and displaying HMG's DAL-e and MobED robots on the show floor. This year, while no robot powered by Samsung SDI cells was exhibited, the company made a clear statement by introducing a pouch-type solid-state battery specifically engineered for physical AI: SolidStack. Though technical details (*eg*, materials and specifications) were not disclosed, industry watchers believe that the firm has been building on its prior work with sulfide-based solid electrolytes, which electrolytes had already reached the A-sample stage.

To mass-produce 40V3 BBU for data centers from June: This year, Samsung SDI deliberately downplayed its EV-related offerings, shifting the focus of its booth to ESS solutions. Central to the exhibit were Uninterrupted Power Supply (UPS) and Battery Backup Unit (BBU) systems engineered for AI data centers. Having previously supplied data center BBUs in the 1865 cylindrical format, the company unveiled the 40V3: A 2170-format battery with a tab-less design that boosts power output from 120W to 200W. Mass-production is scheduled to begin in Jun 2026.

NCA-based SBB 1.7 and LFP-based SBB 2.0 to enter mass-production this year: The company unveiled its latest Samsung Battery Box (SBB) lineup for North America, featuring a triple-layer fire prevention system, direct-injection fire suppression, and Samsung Battery Intelligence (SBI; AI-driven safety software). NCA-based SBB 1.5 (its current offering) uses 145 Ah cells to achieve a 5.26 MWh system capacity. The new product (SBB 1.7; to be released in July) increases cell capacity to 152 Ah, raising total system capacity to 6.14 MWh to support scaled deployment in the region. Meanwhile, the firm's first LFP-based ESS (SBB 2.0) is slated for mass-production in North America from December. It should be tailored to meet client demand, with 273 Ah cells and a 5 MWh system capacity.

Samsung SDI: Key takeaways from InterBattery 2025 and 2026

Exhibition item	InterBattery 2025	InterBattery 2026
All-solid-state battery	Mass-production set for 2H27	Solid-state battery unveiled for physical AI, mass-production planned for 2H27
Robot battery	Exhibition of robots equipped with 2170 batteries in collaboration with HMC/Kia	Unveiled pouch-type all-solid-state batteries without displaying any robots
SBB solution	NCA based SBB 1.5	NCA-based SBB 1.5 and LFP-based SBB 2.0 to enter mass production in 2026
46-pi battery	Four products in lineup unveiled	No public exhibition
High-power cylindrical battery	Improves power by up to 40% thanks to tab-less design; scheduled for release in 2Q25	Tab-less design-based on 2170 cells to be broadly adopted for BBU applications
No thermal propagation technology	Completion of no-thermal propagation (No-TP) technology development	The 'No-TP' technology is highlighted as one of the core features of SBB

Source: Samsung Securities

Samsung SDI: SolidStack (all-solid-state) battery

Source: InterBattery 2026, Samsung Securities

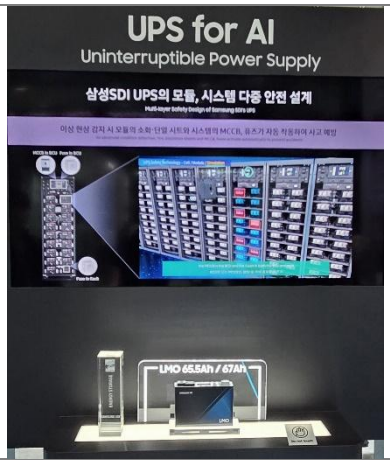
Samsung SDI: Tab-less 2170 for high power, next-gen BBU

Source: InterBattery 2026, Samsung Securities

N.A. ESS mass-production solutions: SBB 1.7 and 2.0

Source: InterBattery 2026, Samsung Securities

Samsung SDI: LMO for data center UPS



Source: InterBattery 2026, Samsung Securities

LG Energy Solution shifts focus from EVs to energy solutions for AI applications

InterBattery 2025—next-generation cylindrical cells: Battery companies tend to focus on four themes during InterBattery events: 1) next-generation products; 2) cost-effective solutions; 3) module, packaging, and battery management systems (BMS); and 4) non-EV applications. At InterBattery 2025, LG Energy Solution (LGES) focused on cylindrical batteries as global automakers began mass-adoption of these cells, and the company itself launched full-scale production. The firm unveiled its full 46-series cell lineup—4680, 4695, and 46120—along with its proprietary Cell Array Structure (CAS) for modules and packs. It also presented an updated version of its LFP ESS (introduced in 2024), and showcased products targeting mid- to low-cost EVs (LFP CTP and high-voltage mid-nickel pouch cells).

InterBattery 2026—expanding beyond EVs into broader energy applications: At InterBattery 2026, LGES pivoted its focus towards broader energy applications. The shift mirrors growing US demand for ESS batteries—fueled by 2025 IRA policy changes and explosive growth in AI data center investments—rather than for EVs. Since last year, the company has accelerated its US ESS production: 1) it started full-scale production of its dedicated ESS facility; and 2) it repurposed a portion of its EV battery facilities for ESS output. Beyond ESS, LGES has expanded its battery offerings to support emerging segments like humanoid robots and drones, aligning with growing industry interest in physical AI, which field came into sharp focus at CES 2026.

LFP ESS sales to surge in 2026: LGES's North American ESS battery sales should come in at 22.3 GWh in 2026 (vs 5.1 GWh in 2025). With its total North American battery sales (for EVs and ESS) expected to hit 34.4 GWh this year, ESS should account for 65% of its North American sales (vs 15% in 2025), marking a decisive pivot from EVs to energy storage as its primary growth driver. Given the rising preference among North American clients for US-made batteries (*ie*, orders for such batteries are increasing), LGES is poised to aggressively add capacity in North America through 2027-2028.

Secures six clients in the humanoid robot market: During its 4Q25 earnings call, LGES revealed its progress in terms of supplying batteries for humanoid robots. The company is now regarded as a preferred partner by leading humanoid manufacturers in the US, Korea, and China, and has secured orders from six customers—some of which are already in production, while others are developing next-generation models. It is providing high-energy-density, high-power 2170 cylindrical batteries for these applications. While unconfirmed, industry analysts believe the firm is supplying batteries for the next-generation robot from Boston Dynamics (Atlas).

First Korean company to enter sodium-ion battery market: At this year's event, LGES unveiled its first sodium-ion battery prototype: A 12V module designed for ESS and vehicle starter battery packs. The firm is currently testing these batteries with EV makers and aims to begin mass-production of its first-generation sodium-ion battery in 2027. As the only Korean firm that has publicly committed to commercializing this technology, LGES is aligning its development with China's dominant sodium-ion standards—an effective strategy to scale its global footprint in this emerging field.

LG Energy Solutions: Key highlights of InterBattery 2025 and 2026

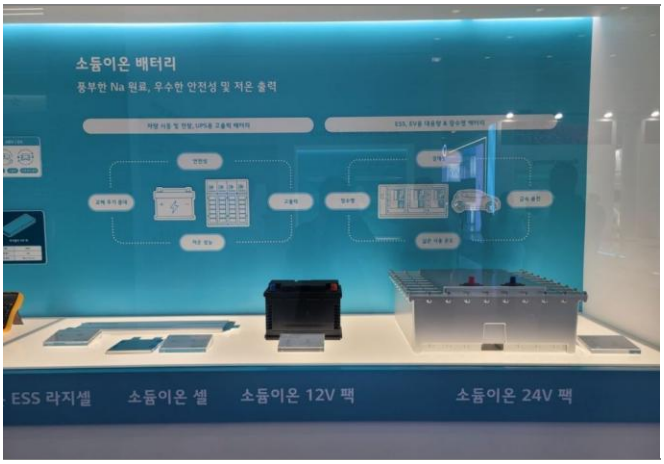
Theme	Key highlights
InterBattery 2025	
Next-generation products	• **Disclosed its 46-series cell lineup (4680, 4695, 46120)** • Aims to introduce next-generation products, including sodium-ion batteries, bipolar batteries, and dry electrode processing • Exhibited Aptera Motors' (a US-based startup) solar EV
Targeting the mid- to low-price market	• Exhibited LFP CTP (cell-to-pack) batteries and high-voltage mid-nickel (mid-Ni) pouch cells
Module/packaging/BMS	• **Showcased its CAS (cell array structure) battery module/pack solution**, lifting cylindrical battery performance and safety • Unveiled its new BMTS brand 'B.around'
Non-EV market strategy	• Exhibited LFP ESS batteries (including the grid-scale JF2 model) and small battery-integrated robots
InterBattery 2026	
Next-generation products	• First public unveiling of lithium manganese-rich (LMR) batteries and sulfide-based solid-state cells • Next-generation products including lithium-metal and bipolar batteries also revealed
Targeting the mid- to low-price market	• Sodium-ion batteries for vehicle starting and ESS applications (currently being tested by customers) displayed.
Module/packaging/BMS	• Introduction of battery longevity care solution Better.Re, and BaaS-based services: B-lifecare (battery diagnostics) and B.once
Non-EV market strategy	• **JF2 DC LINK 5.0 ESS for power grids;** UPS (pouch-type NCM/LFP) and BBU (cylindrical high-nickel) solutions for data center backup power showcased • LG's home robot LG CLOiD and Bear Robotics' autonomous robot Carti100, both powered by the LGES's high-performance cylindrical batteries, on display • Drones for blood transport and aerospace-cube satellites equipped with the company's batteries also introduced

Note: Bold indicates products and technologies that won InterBattery Awards
Source: LG Energy Solution, Samsung Securities

LGES: Korea's first ESS solution featuring LFP batteries

Source: InterBattery 2026, Samsung Securities

LGES: Korea's first ESS solution featuring LFP batteries



Source: InterBattery 2026, Samsung Securities

SK On signals strong commitment to expanding form factors

InterBattery 2025—diversifying form factor: At last year's event, SK On stressed its commitment to diversifying battery form factor. It showcased prismatic and cylindrical battery prototypes, and talked about its commercialization plan—a departure from the past, when it concentrated only on pouch-type batteries with high-nickel chemistry for the EV market. Commercialization of these products would result in the firm's diversification in terms of not only form factor but also chemistry and target market.

InterBattery 2026—doubles down on prismatic batteries: At this year's event, SK On stressed its commitment to developing prismatic batteries. Central to its exhibit were pouch-integrated prismatic packaging and on-vent prismatic cells—the latter has been designed with laser-engraved venting to precisely control gas and heat release. The company also displayed ESS and pouch-type LFP batteries, whose commercial sales have not yet begun but should start soon through domestic ESS centralized contracts.

Continued emphasis on next-generation packaging solutions: SK On unveiled four advanced packaging solutions at this year's event: Pouch cell-to-pack (CTP), pouch-integrated prismatic packaging, large-surface cooling (LSC) CTP, and cell-module-pack (CMP). The pouch CTP—targeting mass-production by end-2027—is in pilot development with global automakers. The pouch-integrated prismatic packaging integrates mid-nickel pouch cells into an aluminum prismatic casing, preserving the design flexibility of pouch technology while compensating for its structural limitations through prismatic packaging. Commercialization is slated for 2028. SK On also displayed its immersion-cooled pack prototype, using immersion cooling technology that it first introduced last year.

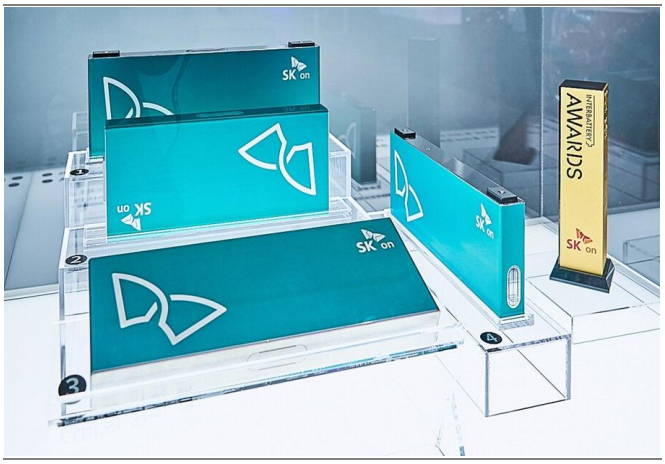
SK On: Key highlights of InterBattery 2025 and 2026

Theme	Key Highlights
InterBattery 2025	
Next-generation products	• It exhibited not only pouch-type batteries but also prismatic and cylindrical batteries—showcased all three major form factors • It unveiled: A long-life LFP battery, a cylindrical battery prototype, and bidirectional/unidirectional prismatic batteries
Targeting the mid- to low-price market	• It unveiled a high-voltage mid-nickel pouch battery
Module/packaging/BMS	• It unveiled a next-generation wireless BMS A wireless chip attached to the battery cell tab collects data, which are transmitted wirelessly to the BMS via an antenna that is embedded in the module • Exhibited S-Pack+, which incorporates CTP (cell-to-pack) technology • Showcased immersion cooling technology (currently under joint development with SK Enmove)
Non-EV market strategy	
InterBattery 2026	
Next-generation products	• **Unveiling of rectangular on-vent cell** (efficiently vents gas during thermal runaway to prevent fire from spreading) • Pouch-type high-voltage high-nickel battery cells and 46-series cylindrical cells also displayed • Models of sulfide-based all-solid-state batteries and vanadium ion batteries exhibited
Targeting the mid- to low-price market	• High-energy-density LFP battery for ESS unveiled
Module/packaging/BMS	• Four pack solutions revealed: Pouch CTP, Pouch-integrated rectangular pack, Large-surface cooling technology (LSC) CTP, and CMP (Cell-Module-Pack) • Model of immersion-cooled pack utilizing immersion cooling fluid technology displayed
Non-EV market strategy	• Logistics robot (AMR) from Hyundai Wia equipped with the company's batteries exhibited • Container-type ESS DC block integrated with a preventive and diagnostic system based on Electrochemical Impedance Spectroscopy (EIS) unveiled

Note: Bold indicates products and technologies that won InterBattery Awards

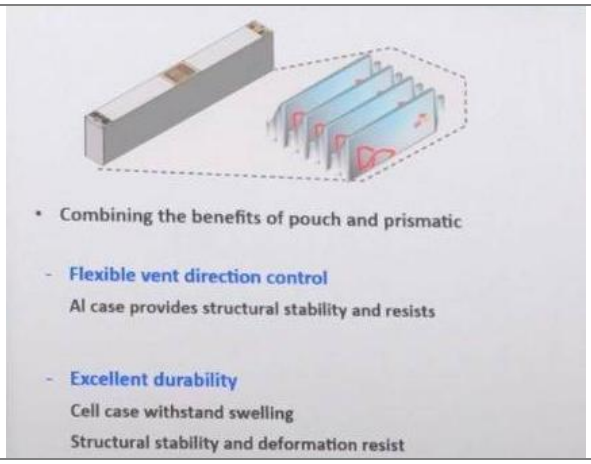
Source: SK On, Samsung Securities

SK On: Rectangular on-vent cell



Source: InterBattery 2026, Samsung Securities

SK On: Integrated prismatic pouch pack



Source: InterBattery 2026, Samsung Securities

Takeaways from CTO presentations by Korean and Japanese battery cell companies

Asia's four leading battery players' common focus areas: Non-EV expansion, safety, AI

During the conference sessions at InterBattery 2026, CTOs from three Korean battery cell manufacturers (LGES, SDI, and SK On) and one Japanese firm (Panasonic) shared their respective technology strategies. While all four companies acknowledged the short-term slowdown in the EV market, their response strategies varied. However, they had some common focus areas: 1) expanding beyond EVs into markets such as ESS, humanoid robots, drones, and eVTOLs; 2) enhancing safety by mitigating risks like thermal runaway; and 3) accelerating R&D through AI-driven approaches.

LGES: 'Accumulation of time' meets 'compression of time'—IP and AX as core drivers

LGES centered its presentation on the dual pillars of technology asset accumulation (dubbed 'accumulation of time') and acceleration of development speed ('compression of time'). The former refers to having more than 30 years' worth of proprietary technology and patent assets, while the latter describes an R&D acceleration system powered by AI and open innovation. Rather than merely introducing its products, the presentation framed its core message as: "Who has driven foundational innovation in the battery industry?". The company presented an exceptionally broad portfolio, including high-nickel cylindrical cells, high-voltage mid-nickel cells, LMR cells, LFP cells, ESS-integrated BMS, sodium-ion batteries, and solid-state batteries. Notably, for high-nickel technology, LGES announced that it has begun mass-production of 94% nickel cells and completed development of 95% nickel cells. For high-voltage mid-nickel cells, it highlighted its spray pyrolysis technique and gas-free electrolytes. For LMR cells, it emphasized its overwhelming patent advantage. For ESS, it underscored its competitiveness in terms of integrating LFP cells, packs, and BMS. For next-generation technologies, the firm talked about sodium-ion and 60 Ah-class solid-state battery pilot units. Overall, LGES outlined a plan to target all major battery segments by leveraging its vast patent and IP portfolio and integrating AI to dramatically accelerate R&D.

SDI: EV chasm breakthrough lies in prismatic, solid-state, & high-value non-EV batteries

Among the four companies, Samsung SDI most clearly emphasized the growing importance of premium non-EV markets. It explicitly highlighted ESS, robotics, and urban air mobility (UAM) as distinct markets with requirements fundamentally different from EVs—ESS batteries require long lifespans, high power, and safety; robotic batteries demand high energy density, high power, and ultra-safety; and UAM batteries call for ultra-lightweight and high energy density. Samsung SDI's strategic response is built on the twin pillars of prismatic (PrismStack) and solid-state (SolidStack) technologies. The company strongly emphasized the technical difficulties and high barriers to entering prismatic cell manufacturing, citing its award-winning performance at InterBattery and its leading US patent count as evidence of its domestic leadership in this area. Its application-specific technology mapping was precise: ESS batteries use LFP prismatic cells with a safety enclosure system; robotic batteries rely on solid-state batteries; and UAM batteries utilize lithium-sulfur and lithium-metal chemistries. Samsung SDI also revealed a timeline for solid-state batteries, targeting mass-production readiness by end-2027. It explained how its anode-free structure and solid electrolyte technology can be extended to lithium-sulfur systems. Additionally, it highlighted proprietary innovations such as Samsung Battery Intelligence, the Autonomous Lab, and an ESS capable of delivering high power using only lithium-ion

batteries (without supercapacitors)—it was able to develop all of these solutions by tapping its accumulated expertise in the ESS domain.

SK On: Trust over performance—3P Zero and AI digital twin

SK On has taken a distinctly different approach from its peers, which rivals emphasized energy density, patents, and next-generation products as their primary messaging. Instead, SK On anchored its presentation on the concept of 'Trust Density'—the degree to which customers truly trust a battery. This reflects the company's assessment that the battery industry can no longer be defined solely by price and energy density competition—safety and trust have become the real purchase barriers. SK On has structured its core strategy around 3P Zero (Prevent, Protect, and Predict). Prevent: The company highlighted safety technologies across four key materials and high-heat-resistant separators. Protect: It introduced an enhanced BMS, directional venting, and pouch-integrated prismatic packaging. Predict: It unveiled an AI-driven digital twin system that integrates design and manufacturing data. SK On noted that absolute safety at the cell level alone is insufficient. Recognizing that it is impossible to eliminate fire risk entirely, the company stressed its commitment to building a comprehensive, three-stage defense system—prevention, damage control, and predictive anticipation—to minimize risk across the battery's entire lifespan. While SK On mentioned non-EV applications such as data centers, ships, heavy machinery, and humanoid robots, it did not present specific product roadmaps (as Samsung SDI did). Instead, it focused on promoting a 'battery platform built on a robust safety system', signaling a strategic shift from competing purely on technical specifications to commercializing reliability and system-level safety.

Panasonic: Enduring strength of cylindrical cells—next frontier is physical AI and BBU

Panasonic framed its presentation as a narrative of long-term innovation in the battery industry, highlighting the following as its core differentiators: The ease in standardizing its cylindrical cells, the inherent safety of its batteries, and flexibility in terms of adopting new technologies. The company underscored its extensive track record in EV battery sales and operational reliability, arguing that smaller cell formats make it easier to balance performance and safety. Its technological direction can be summarized as reducing metal usage, developing recyclable materials, improving energy density, and enhancing fast-charging capabilities. Panasonic aims to push beyond the current 900 Wh/L energy density threshold for next-generation lithium-ion batteries, and is already considering the longer-term development of anode-free cylindrical cells. The company also observed that the industrial center of gravity is shifting from EVs to AI, and emphasized the need for a well-balanced battery capable of operating reliably under the 24/7 demands of physical AI. On the business side, Panasonic has identified BBU for data centers as a new growth pillar, believing it is the most concrete new application in non-EV battery markets.

Insights derived from CTO presentations

The presentations by the four Asian battery cell manufacturers reveal that the industry's focus is no longer centered solely on EV demand recovering but rather on three pivotal trends. First, the primary stage of the battery industry is expanding beyond the EV market into diverse applications—including ESS, data centers, robotics, and UAM. Second, competition is evolving beyond the narrow metric of energy density. Winners will be defined by a holistic set of capabilities: Safety (thermal runaway prevention), cycle life, thermal management, system integration, and AI-driven development

capabilities. Third, while all of the companies emphasized their next-generation battery technologies, the immediate battleground lies in how effectively they can make their existing lithium-ion batteries safer, more affordable, faster-charging, and more application-specific. Panasonic and Samsung SDI concentrated on reinforcing their core form factors (cylindrical and prismatic batteries, respectively), while LGES and SK On prioritized the expansion of AI-powered R&D and battery system-level enhancements.

InterBattery 2026: Three key themes

While the InterBattery expo serves as a platform for rechargeable battery value chain companies to showcase commercially available products, it is equally a stage for the unveiling of innovative concepts and next-generation technologies as part of their preparation for future growth opportunities. Among these, we have identified three themes that captured the attention of attendees and that we believe warrant attention: 1) solid-state and other next-generation battery technologies that are linked to humanoid robotics; 2) ESS solution strategies that are tied to North American AI data centers; and 3) expansion of prismatic form factors.

Theme 1: Solid-state and next-generation battery technologies

Humanoid robot solid-state battery samples and next-generation battery technologies: Samsung SDI unveiled its solid-state battery SolidStack, which is based on sulfide chemistry and specifically designed for physical AI applications, showcasing two sample formats (pouch and prismatic). LGES displayed pilot-scale sulfide-based solid-state battery cells and modules, alongside demonstrations of bipolar batteries and sodium-ion batteries. SK On introduced its sulfide-based solid-state battery technology and outlined a clear roadmap: Polymer-oxide composite batteries for mass-production by end-2028, and lithium-metal batteries targeted for commercialization by end-2031. These revelations have heightened expectations towards solid-state batteries, which form factor is likely to deliver significantly improved energy density (vs conventional batteries'), aligning closely with the anticipated growth of the humanoid robot market.

Materials and component value chain shaping next-generation battery technology: Aligned with the strategic directions of cell manufacturers, players across the materials and equipment value chain unveiled their own solid-state and next-generation battery-related initiatives at InterBattery 2026. Posco Future M is: 1) collaborating with Factorial to develop solid-state batteries for EVs; 2) working with Sila to develop a new battery system by combining Sila's chemical vapor deposition-derived silicon anode material (CVD Si-C) technology with its cathode and anode materials technologies; and 3) advancing the development of solid electrolytes and lithium-metal anodes in partnership with Molten.

Ecopro is attempting to develop a variety of solid-state battery materials through its affiliates. Ecopro AP produces hydrogen sulfide (H_2S), which is supplied to Ecopro Innovation for the synthesis of lithium sulfide (Li_2S). Ecopro BM then uses Li_2S to manufacture solid electrolytes. Ecopro BM is also developing next-generation cathode materials for solid-state batteries, through innovations such as coating technologies designed to reduce interfacial resistance and enhance contact between the cathode material and the solid electrolyte. Ecopro Innovation is developing lithium-metal anodes for solid-state battery applications.

Meanwhile, LG Chem announced a roadmap to develop a solid-state binder specifically for solid-state batteries by 2029. Innox showcased high-elasticity films and high-strength pads engineered to lift the stability of next-generation batteries, signaling its preparation to capture new market opportunities.

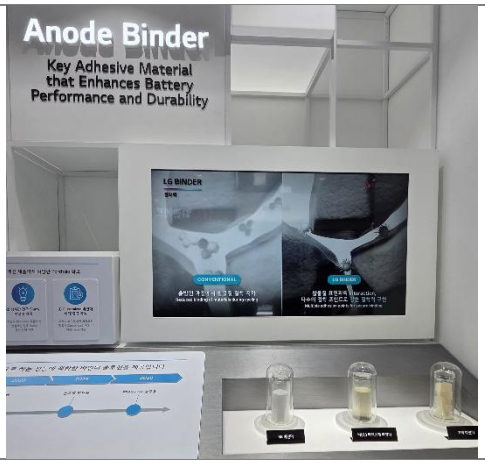
Posco Future M: Working with Factorial to develop all-solid-state batteries

Source: InterBattery 2026, Samsung Securities

Ecopro: Material readiness for all-solid-state batteries

Source: InterBattery 2026, Samsung Securities

LG Chem: Solid binder for all-solid-state batteries



Source: InterBattery 2026, Samsung Securities

Innox: High-elasticity film and high-stiffness pads for next-generation batteries

Source: InterBattery 2026, Samsung Securities

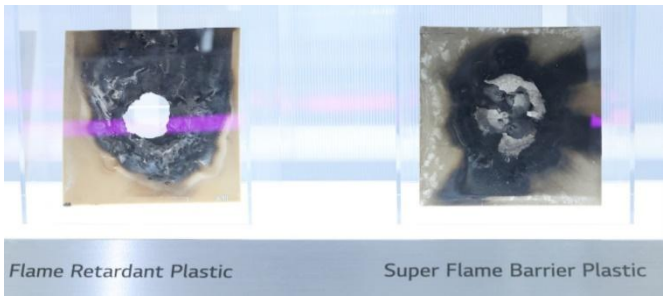
Theme 2: ESS solutions for AI data centers

Expansion of LFP-based ESS: Among the three major Korean battery makers, LGES was the first to launch LFP-based ESS products. At InterBattery 2026, it showcased its UPS applications using LFP chemistry (alongside its award-winning JF2 DC Link 5.0 system, which also uses LFP chemistry). Samsung SDI—historically focused on NCA-based ESS—has begun large-scale production of LFP-based ESS in North America, and for UPS applications, it is responding with LMO cells optimized for higher power output. In data centers, BBU systems typically use cylindrical cells due to the nature of their structure—LGES and Samsung SDI are responding with 18650 and 2170 formats. Notably, Samsung SDI should begin shipments in earnest of its new 2170 cell with a tab-less design in 2026,

significantly improving power output. With growing investments in North American data centers, demand should surge for high-power cylindrical BBU cells and LFP-based UPS and grid-scale ESS solutions.

ESS safety solutions across value chain: SK On unveiled a pack-level ESS solution using its proprietary 'immersion cooling' technology (SK On Move), highlighting its potential for broader ESS applications. It also introduced the industry's first containerized ESS DC block integrating electrochemical impedance spectroscopy (EIS[1])-based predictive diagnostics. LG Chem presented 'Nexula', an aerogel-based thermal insulation material, combined with its 'super flame barrier' (SFB), creating a dual-layer safety system to impede thermal runaway. FDC developed and successfully mass-produced Korea's first deflagration panel—a safety device that rapidly vents flammable gases during explosions inside ESS enclosures, minimizing structural damage and secondary hazards. This product received an award at the 2026 InterBattery Awards and is already being exported to North America.

LG Chem: Solid film binder (SFB)



Source: InterBattery 2026, Samsung Securities

FDC: Flame-retardant separator

Source: InterBattery 2026, Samsung Securities

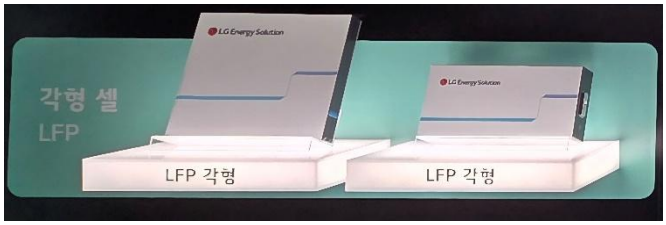
[1] EIS is a technology that analyzes internal resistance and reaction characteristics of a battery using AC signals, and is known to complement subtle defects that conventional BMS systems may easily overlook.

Theme 3: Expansion of prismatic form factors

Growing adoption of prismatic cells: Historically, Samsung SDI dominated the prismatic cell segment in Korea. However, recent trends show the broader adoption of prismatic cells by major domestic players. LGES, which traditionally focused on pouch cells, introduced two new LFP prismatic cell variants for grid-scale ESS: One with top terminals and another with side terminals. SK On unveiled the concept of a 'pouch-integrated prismatic cell', combining the design flexibility of pouch cells with the structural advantages of prismatic cells. Built using mid-nickel pouch cells, this design allows customizable gas venting and flexible tab placement. SK On aims to begin commercial production of the cell by end-2028. Rumplier, a startup and a winner at the 2026 InterBattery Awards, has developed its own LFP-based prismatic battery and was the first company to secure Korea's KC certification—the battery is highly likely to be mass produced.

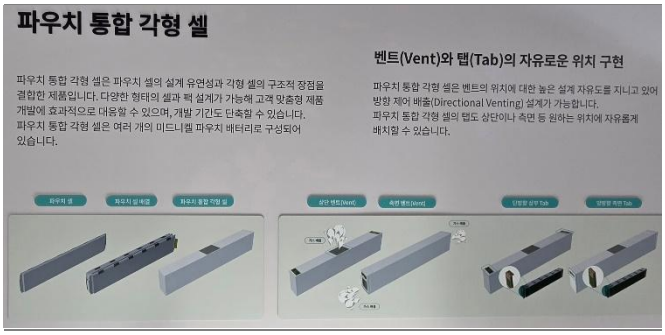
As such, prismatic cells are preferred in grid-scale ESS (as well as in EVs) for their standardized design and superiority (in terms of controlling internal pressure). This trend should strengthen the competitive position of traditional prismatic casing and component suppliers.

LG Energy Solution: Prismatic LFP cells



Source: InterBattery 2026, Samsung Securities

SK On: Integrated pouch-to-prismatic cell solution



Source: InterBattery 2026, Samsung Securities

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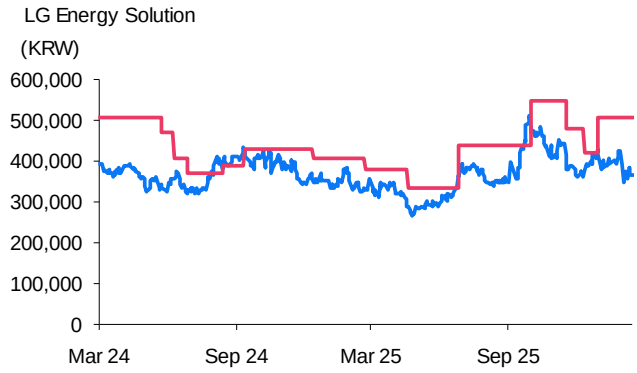
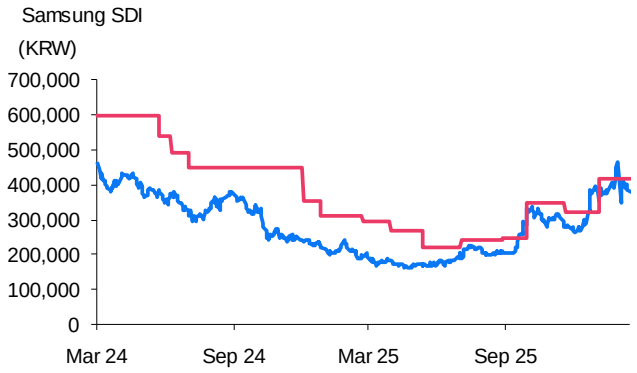
Target price changes in past two years





Rating changes over past two years (adjusted share prices)

LG Energy Solution												
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											
Samsung SDI												
Date	2024/1/30	6/20	7/8	7/30	2025/1/2	1/24	3/21	4/28	6/11	8/1	9/26	10/28
Recommendation	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
Target price (KRW)	597210	538468	489517	450355	352452	313291	293710	270000	220000	240000	250000	350000
Gap* (average)	-32.48	-32.88	-28.53	-31.99	-33.69	-32.91	-37.37	-37.02	-18.49	-12.36	-5.25	-11.76
(max or min)**	-20.33	-29.27	-22.10	-15.76	-30.69	-22.81	-30.50	-32.00	-6.36	-6.25	17.20	-3.57
Date	12/19	2026/2/3										
Recommendation	BUY	BUY										
Target price (KRW)	320000	420000										
Gap* (average)	-2.27											
(max or min)**	23.91											

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 2025.12.31

BUY (85.8%)·HOLD (14.2%)·SELL (0%)

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