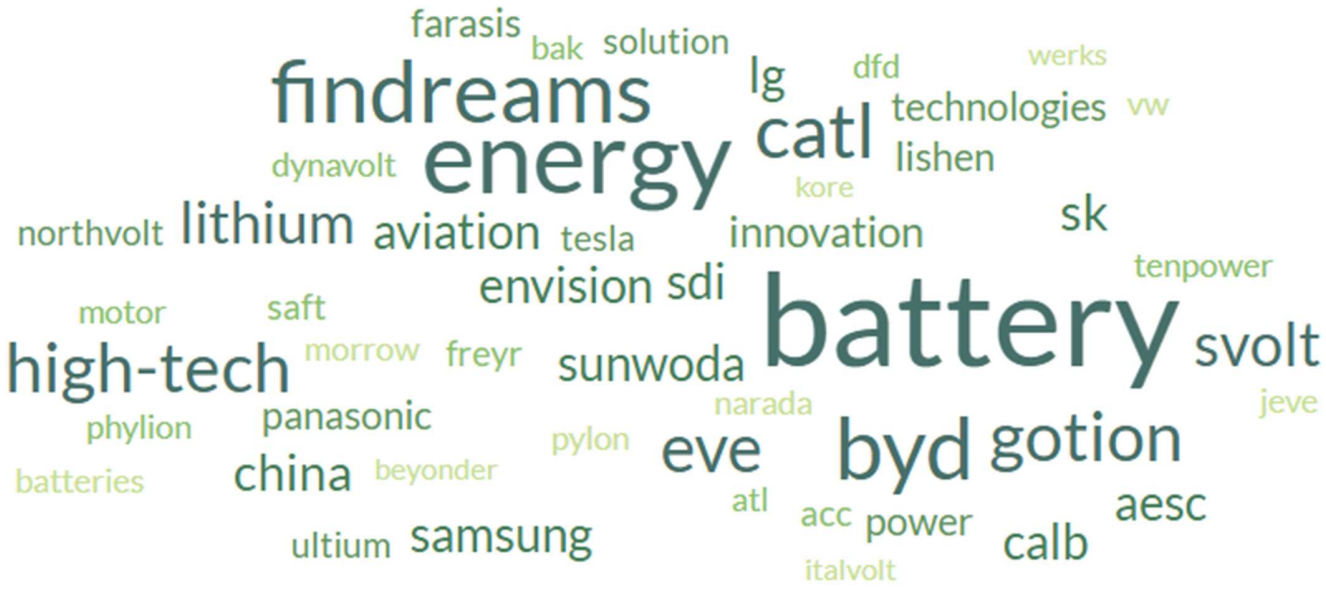

The digest focuses on key areas significant to battery value chain

Contents

Raw materials

1. MinRes Scales Back Lithium Demonstration Plant Plan

Mineral Resources (MinRes) and Livium have completed their 50:50 joint venture (LieNA JV) to commercialise the LieNA lithium processing technology. However, MinRes has decided to slow its plans for a lithium demonstration plant due to unfavourable market conditions, which currently do not support advancing to the next stage of commercialisation. Despite the scale-back, shares in both companies rose following the announcement. Industry analysts view the move as a strategic step—keeping the JV active while avoiding significant investment until market stability returns. MinRes's approach reflects caution amid volatile lithium pricing and investment risk, while positioning the partners to act quickly once the market improves. The plan leaves room for a future pivot toward full-scale pilot or commercial deployment when conditions are favourable, and stakeholders will closely monitor developments in the coming months.
https://www.miningmagazine.com/processing/news-analysis/4518248/minres-throttles-lithium-demonstration-plant-plan

2. CATL Suspends Output at Key China Lithium Mine

Contemporary Amperex Technology Co. Ltd. (CATL), the world's largest EV battery maker, has halted operations at its Jianxiawo lithium mine in Jiangxi province after its mining license expired. The company is in the process of seeking renewal, and the suspension is expected to last at least three months. This mine contributes roughly 3% of global lithium supply, and news of the shutdown sent Chinese lithium futures soaring 8% to their upper trading limit. Shares of major lithium producers such as Ganfeng, Tianqi, and Albemarle also rallied. The pause comes amid broader regulatory pressure in China aimed at curbing overcapacity in critical commodities. CATL stated it expects no material impact on its overall operations, but analysts caution that the price surge may be temporary unless global EV demand strengthens. The development is being closely watched as a potential inflection point for the currently oversupplied lithium market.

3. Tesla Secures $4.3B U.S.-Made LFP Battery Deal with LG Energy Solution

Tesla has signed a three-year, $4.3 billion agreement with South Korea's LG Energy Solution to supply lithium-iron-phosphate (LFP) batteries manufactured in the U.S. at LGES's Michigan facility. The batteries will be dedicated to Tesla's energy storage products rather than electric vehicles, reflecting a strategic push to reduce reliance on Chinese imports amid rising tariffs. The supply period runs from August 2027 to July 2030, with options for increased volumes and an extension of up to seven years. This partnership strengthens domestic supply chains, supports U.S. battery manufacturing growth, and positions LGES as a key local LFP producer. The deal follows LGES's launch of U.S. LFP production in May 2025, reinforcing its market leadership. Analysts see the move as a hedge against geopolitical risks while boosting Tesla's energy division, particularly for large-scale Megapack deployments. It also aligns with Tesla's broader industrial diversification, which includes a recent $16.5 billion semiconductor deal with Samsung.
https://teslanorth.com/2025/07/30/tesla-signs-4-3-billion-deal-with-lg-for-us-made-lfp-batteries/

4. Lyten Raises Over $200 Million to Fuel Acquisition Strategy

Lyten, the San José–based lithium-sulfur battery innovator, has secured over $200 million in new equity funding, bringing its total raised to more than $625 million, largely from existing investors. This capital boost is earmarked to accelerate the company's acquisition-driven expansion across the U.S. and Europe. In conjunction, Lyten acquired Northvolt's Battery Energy Storage System (BESS) product portfolio—including Voltpack Mobile Systems, Voltrack, and future BESS technologies—and will bring core Northvolt engineering talent onboard in Stockholm. The company plans to restart production of energy storage systems in Gdansk, Poland, immediately following completion of the Northvolt Dwa acquisition and is targeting first deliveries in the fourth quarter of 2025. These moves mark climate-aligned, capital-efficient growth as Lyten scales its global footprint and positions itself for surging demand in sectors like AI data centers, defense, drones, and grid storage.

https://lyten.com/2025/07/28/lyten-secures-more-than-200-million-in-investment-to-support-its-ongoing-acquisition-strategy/

5. Atlas Lithium's Neves Project Delivers Exceptional DFS Results

Atlas Lithium has completed a Definitive Feasibility Study (DFS) for its Neves Lithium Project in Minas Gerais, Brazil, projecting an impressive 145% internal rate of return (IRR) and a rapid 11-month payback period. The study reports an after-tax net present value (NPV) of $539 million and low production costs of $489 per tonne of lithium concentrate, placing Neves among the most competitive global projects. The Dense Media Separation (DMS) plant is already fabricated and shipped to Brazil, reducing future capital needs. Direct capital expenditure is estimated at $57.6 million, with $30 million already invested, and $40 million secured through non-dilutive pre-payment agreements. The project also benefits from a reduced corporate tax rate of 15.25% under SUDENE incentives. With full permitting in place, including Brazil's highest mining concession ("Portaria de Lavra"), Atlas is positioned for rapid, low-cost production start-up, offering strong potential for shareholder value creation.
https://www.atlas-lithium.com/news/category/news-releases/

6. LIFT Launches 2025 Drilling Program at Yellowknife Lithium Project

Li-FT Power Ltd. (LIFT) has announced the start of drilling at its Yellowknife Lithium Project (YLP) in the Northwest Territories, Canada, beginning on August 25, 2025. The program will include 10 drill holes totaling 3,445 meters, targeting the Shorty and Nite pegmatite dykes to test high-grade spodumene zones at depths between 300 and 350 meters. This initiative follows previous results that defined an inferred resource of 50.4 million tonnes at 1.00% Li_2O, positioning YLP among the largest spodumene projects in North America. The drilling aims to expand and upgrade the resource base through strategically planned holes. LIFT has completed permitting and environmental baseline work, ensuring the project is operationally ready. The company's methodical and phased exploration strategy reflects its commitment to developing YLP into a major North American lithium asset.
https://www.li-ft.com/news/lift-announces-commencement-of-drilling-at-the-yellowknife-lithium-project-nwt

EV's and Batteries

7. LG Energy Solution to Supply LFP Batteries to Tesla

LG Energy Solution (LGES) has secured a substantial three-year contract—valued at around $4.3 billion—to supply lithium iron phosphate (LFP) batteries to Tesla. The batteries will be manufactured in the U.S., notably at LGES's Michigan facility, and are intended for Tesla's growing energy storage systems segment. The deal spans from August 2027 to July 2030, with options for volume expansion and a contract extension of up to seven additional years. This move reflects Tesla's strategic effort to diversify its supply chain and reduce reliance on Chinese imports amid rising U.S. tariffs. LGES, one of the few producers of U.S.-made LFP cells, is expanding its domestic production capacity. Industry analysts view the agreement as a hedge against fluctuations in battery demand, supporting both companies' ambitions in the rapidly evolving energy storage market..

8. Ultion Secures Series A Funding to Scale U.S. Battery Manufacturing

Ultion Technologies, the only fully integrated U.S. producer of lithium-iron-phosphate (LFP) battery cells and energy storage systems, has closed a Series A funding round led by Torus, with participation from Nevada's Battle Born Venture. The capital injection will enable Ultion to expand its domestic production capacity more than fivefold. Based in Nevada, the company currently manufactures LFP batteries using a mostly domestic supply chain and aims to achieve fully domestic sourcing in the near term. Ultion's CEO, Dr. Johnnie Stoker, emphasized that importing batteries upsides jeopardizes American jobs and energy security—and that U.S.-made batteries can now compete on both cost and performance. Torus CEO Nate Walkingshaw praised Ultion's reliable, domestically produced batteries for offering faster lead times and supply chain flexibility. With manufacturing agility and proven cell technology, Ultion stands poised to lead the expansion of America's

energy storage ecosystem. The funding will also support job creation and vertical integration across the U.S. battery supply chain.

https://www.torus.co/news/ultion-technologies-secures-series-a-funding-to-build-critical-u-s-battery-manufa

9. $106 Million Tesla Megapack Battery Facility Goes Live in California

A new Tesla-powered battery energy storage system, the Peregrine Energy Storage Project, has officially gone live in Barrio Logan, San Diego. Developed by clean energy firm Arevon, the $106 million installation uses Tesla's Megapack technology to deliver 200 MW of capacity—enough to power 200,000 homes for two hours during peak demand. This grid-scale deployment significantly enhances local energy resiliency during extreme weather, providing controllable, dispatchable power when it's needed most. Arevon's CEO, Kevin Smith, highlighted the facility's strong safety record, noting zero incidents operating Tesla Megapacks over the years. With the launch of Peregrine, Tesla continues to solidify its Megapack platform as the global go-to solution for utility-scale energy storage, extending its reach from North America to Asia, Europe, and beyond. The timing follows Tesla's milestone of producing its 1,000th Megapack at the Shanghai Megafactory and underscores accelerating demand for reliable, scalable energy storage worldwide.

https://teslanorth.com/2025/08/02/106-million-tesla-megapack-battery-facility-goes-live-in-arizona/

10. LG Energy Solution Flags Slowing EV Battery Demand Amid U.S. Policy Headwinds

LG Energy Solution (LGES), one of the leading global EV battery suppliers, issued a caution during its Q2 2025 earnings presentation: U.S. tariffs and the impending end of federal EV purchase subsidies (set for September 30) could dampen demand for EV batteries heading into early 2026. Despite this warning, LGES reported a strong quarterly operating profit—₩492 billion (~$359 million), more than double the prior year—thanks largely to U.S. production subsidies and early-order stockpiling by customers. To offset the expected EV demand slowdown, the company plans to ramp up production of batteries for energy storage systems (ESS), aiming to expand U.S. ESS battery capacity from about 17 GWh this year to over 30 GWh by 2026. Additionally, LGES is evaluating converting certain U.S. EV battery lines to focus on ESS manufacturing. Coming off its Michigan LFP battery plant's launch in May, LGES positions itself as one of the only U.S.-based suppliers of lithium-iron-phosphate (LFP) ESS products, giving it a significant competitive advantage.

https://batteriesnews.com/lg-energy-solution-warns-of-slowing-ev-battery-demand-due-to-us-tariffs-policy-headwinds/

11. Tulip Innovation Wins Additional German Injunction Against Sunwoda

Tulip Innovation recently secured another interim injunction from the Munich District Court on 17 July 2025, targeting unauthorized use of its battery electrode and separator technology patents. This ruling marks the third injunction against Sunwoda Group in German proceedings, reinforcing Tulip's legal posture in the dispute. The court has ordered Sunwoda to cease distributing the disputed batteries and to recall and destroy any remaining units in its possession. The defendants must also supply accounting data and face potential damages assessment as a result. Tulip serves as the licensing arm for over 5,000 patents owned by LG Energy Solution and Panasonic Energy, underscoring the high stakes in this case. The latest injunction continues to uphold competitive integrity in battery manufacturing and offers licensing clarity to the industry. While enforceable immediately — contingent on security provision — the decision remains appealable, and nullity actions are currently pending. This succession of legal victories positions Tulip strongly in its mission to safeguard intellectual property in the evolving EV battery sector.

https://tulipinnovation.com/press-release/

12. SK Innovation Unifies Battery and Lubricants Arm in Bold Electrification Strategy

SK Innovation has approved a strategic merger between its EV battery subsidiary, SK On, and its lubricants and immersion cooling unit, SK Enmove, set to launch as a single entity on November 1, 2025. The boards of SK Innovation, SK On, and SK Enmove gave the green light on July 30, signaling a push to bolster electrification capabilities and financial resilience. The consolidation comes alongside an ambitious KRW 8 trillion capital-raising initiative, aimed at fortifying financial structure and enabling high-growth execution. Immediately, the merger is expected to deliver a KRW 1.7 trillion capital injection and increase

EBITDA by KRW 800 billion in the current year. Over the long term, SK Innovation projects that synergies will contribute an additional KRW 200 billion in EBITDA by 2030. It envisions total EBITDA reaching KRW 20 trillion and net debt remaining below KRW 20 trillion by 2030. The integration will also unlock new cross-selling opportunities—pairing SK On's battery and ESS technologies with SK Enmove's cooling and lubricant solutions—positioning the unified business to lead in global electrification markets.

13. Lucid Air Grand Touring Sets New EV Range Record Powered by Samsung SDI

Lucid Motors' Air Grand Touring, equipped with Samsung SDI's advanced 21700 cylindrical batteries, has been officially recognized by Guinness World Records for achieving the longest distance traveled by an electric vehicle on a single charge—an impressive 1,205 kilometers (749 miles) during a test drive from St. Moritz, Switzerland to Munich, Germany. This achievement surpasses the previous record by 160 kilometers, highlighting the exceptional synergy between Lucid's high-efficiency powertrain and Samsung SDI's cutting-edge battery technology. The battery pack features a silicon-based anode with a nickel-cobalt-aluminum (NCA) cathode, delivering high capacity, long lifespan, and ultra-fast charging capabilities that can add up to 400 kilometers of range in just 16 minutes. Lucid's record-setting run underscores the transformative potential of advanced battery designs to extend EV range and reinforces the strength of its long-term collaboration with Samsung SDI.

https://ir.lucidmotors.com/news-releases/news-release-details/lucid-air-grand-touring-wins-guinness-world-recordstm-title-1205

14. Lyten to Acquire All Remaining Northvolt Assets in Sweden and Germany

Lyten, the U.S.-based lithium-sulfur battery innovator, has entered into binding agreements to acquire the remainder of Northvolt's European assets—specifically the Northvolt Ett gigafactory and expansion site in Skellefteå, Sweden; Northvolt Labs in Västerås; and the Northvolt Drei project in Heide, Germany—along with all residual intellectual property. The deal encompasses approximately 16 GWh of operational battery manufacturing capacity and more than 15 GWh under construction, with infrastructure scalable beyond 100 GWh and including Europe's most advanced battery R&D center. The acquisition, valued at around $5 billion, is fully backed by equity and expected to close in the fourth quarter once regulatory approvals are secured. Lyten plans to restart operations immediately upon closing and rehire much of the previously laid-off workforce. The move accelerates Lyten's European expansion, reinforcing its mission to deliver locally made, clean battery solutions amid growing demand across energy independence, AI data centers, and national security sectors. Swedish leadership, including the Deputy Prime Minister, hails the acquisition as pivotal to Europe's battery autonomy.

https://lyten.com/2025/08/07/lyten-to-acquire-all-remaining-northvolt-assets-in-sweden-and-germany/

Salt and Electrolyte

15. Asahi Kasei to Supply Hipore™ Battery Separators to Toyota Tsusho in North America

Asahi Kasei and Toyota Tsusho have entered a strategic agreement to supply premium Hipore™ wet-process lithium-ion battery separators in North America. Starting in mid-2027, Asahi Kasei Battery Separator America (AKBSA) will produce coated Hipore™ separators at its new Charlotte, North Carolina facility for Toyota Tsusho America under a capacity rights arrangement. This ensures Toyota Tsusho a stable, preferential share of output, enhancing supply reliability amid market fluctuations while allowing Asahi Kasei to optimize production efficiency. The partnership combines Asahi Kasei's expertise in high-performance battery materials with Toyota Tsusho's extensive mobility network, supporting the growth of electric vehicle production in the region. Both companies emphasized that this alliance strengthens the North American battery supply chain, promotes sustainable mobility, and aligns with long-term electrification strategies.

https://www.asahi-kasei.com/news/2025/e250731.html

16. BASF and CATL Launch Global Framework Agreement on Cathode Active Materials

BASF and CATL have entered into a strategic framework agreement for the supply and development of cathode active materials (CAM) on a global scale. Under the partnership, BASF will become a key supplier to CATL, leveraging its extensive

global production footprint to support CATL's international battery manufacturing expansion. This collaboration builds upon their earlier 2021 strategic partnership and further solidifies their alignment in advancing innovative CAM technologies. BASF's diversified and localized production network brings resilience and efficiency to CATL's supply chain, improving responsiveness and delivery across markets. Dr. Daniel Schönfelder, President of BASF's Battery Materials division, emphasized that the agreement underlines their shared commitment to electrification and sustainable energy storage solutions. Together, the companies aim to accelerate battery performance, sustainability, and cost-effectiveness in the rapidly evolving global energy storage landscape.

https://www.basf.com/global/de/media/news-releases/2025/07/p-25-137

17. LiCAP and CEC Launch 300 MWh Dry Electrode Production Line in California

LiCAP Technologies, in collaboration with the California Energy Commission (CEC), has successfully developed, installed, and completed the Site Acceptance Test (SAT) of a 300 MWh roll-to-roll cathode production line (LRPL) using its proprietary Activated Dry Electrode® technology. On July 10, 2025, the facility produced its first cathode film roll measuring over 500 meters in length—a milestone transition from innovation to scalable manufacturing. The solvent-free process not only raises energy density but also significantly reduces manufacturing costs and environmental impact by eliminating toxic solvents and drying steps. The CEC-supported project highlights the power of public–private partnerships to accelerate clean energy commercialization. LiCAP expects to begin delivering customer samples from this line starting in August 2025, aimed at meeting growing demand for next-generation battery materials. The LRPL is designed to support lithium-ion, solid-state, and sodium-ion battery production. This landmark development strengthens domestic battery manufacturing capabilities, aligning with California's clean energy and emissions-reduction goals. It positions LiCAP at the forefront of sustainable electrode production in the U.S.

https://www.newswire.com/news/licap-technologies-and-california-energy-commission-celebrate-major-22610676

LFP-ESS and Start ups

18. Tariffs, Incentives & Uncertainty Lead to CT Battery Project Pullback

A proposed 325-megawatt battery storage facility in Killingly, Connecticut, has been officially withdrawn by developer Sunflower Sustainable Investments. The decision came after project consultants raised concerns that rising tariffs and changes in federal renewable energy incentives could inflate capital costs by 30% to 50%. Compounding this were shifts in offshore wind policy and widespread economic uncertainty, especially around clean energy regulation. The project had been envisioned as a "merchant" storage site—buying low-cost renewable electricity and reselling it—tied to nearby offshore wind power generation. But without long-term power purchase agreements, the investment was deemed too risky. Originally slated to cost $200 million and take just over a year to construct, the facility would have supported up to 40 construction jobs and featured prefabricated battery storage containers alongside a substation. The developer's consultant aptly summarized the rationale: "It was just … much, much too risky to warrant going forward with the investment."

https://ctmirror.org/2025/08/07/tariffs-uncertainty-killingly-battery-project/

19. Xinjiang Launches 200 MW / 800 MWh Energy Storage Power Plant

A 200-megawatt, 800-megawatt-hour independent lithium-iron-phosphate battery energy storage power plant has officially started construction in Yining, Xinjiang, at the Sulagong Industrial Park. Spearheaded by Yining Zhuo Hao New Energy Co., the project carries an investment of RMB 800 million and spans approximately 52,068 square meters, incorporating a 220 kV booster convergence station and other supporting facilities. Its completion is slated for June 2026, after which it will deliver approximately 292 million kilowatt-hours of electricity annually. The plant is also projected to generate an annual output value of RMB 102 million and contribute around RMB 15.33 million in taxes. This large-scale deployment exemplifies China's ongoing push to bolster grid resilience with independently operated energy storage. The project showcases the accelerating

momentum behind long-duration storage infrastructure in strategic locations. Moreover, it signifies increasing confidence in LFP storage as a reliable backbone for renewable energy integration in regional grids.

20. Arevon Breaks Ground on 300 MW / 1,200 MWh Nighthawk Energy Storage Project in Poway, California

Arevon Energy, Inc. has officially commenced construction on the Nighthawk Energy Storage Project in Poway, California—a $600 million utility-scale battery storage development. This innovative system will deliver 300 MW of power and 1,200 MWh of storage capacity, sufficient to power approximately 385,000 homes for up to four hours during peak demand periods. The facility connects to the Sycamore Canyon Substation at Marine Corps Air Station Miramar, supporting long-term energy and resource adequacy under a 2021 contract with PG&E. Construction is led by California-based contractor Rosendin and is expected to generate over 130 jobs at peak activity, injecting more than $30 million into the local economy—$12 million of which will support Poway's community infrastructure and services. Arevon is also prioritizing community safety and support, including a $2 million community fund and partnerships with local organizations. Utilizing advanced lithium iron phosphate (LFP) batteries—and in close cooperation with the Poway Fire Department—the project emphasizes enhanced safety and grid resilience. Overall, Nighthawk stands as a vital investment in California's clean energy transition and its push for grid reliability.

https://arevonenergy.com/news/releases/arevon-celebrates-construction-proceedings-at-its-300-megawatt-1200-megawatt-hour-nighthawk-energy-storage-project-in-california/

21. Sunterra RE Taps Sungrow for 1 GWh Battery Storage Expansion

Renewables developer Sunterra RE has partnered with Sungrow to deploy 1 gigawatt-hour (GWh) of battery energy storage systems (BESS) across three of its largest solar parks in Bulgaria, marking a significant step in its clean energy growth trajectory. This second-phase expansion more than triples Sunterra's existing 300 MWh battery capacity, signaling strong ambition in energy storage scaling. Sungrow will deliver its MV-Power Titan 2.0 system, featuring advanced lithium-iron-phosphate (LFP) batteries, comprehensive string energy conversion systems, and capable energy management software. These systems are designed to capture midday solar generation and shift power to meet peak-demand periods, enhancing grid stability and smoothing electricity prices for consumers. Emil Shopov, CEO of Sunterra RE, described the deal as "a clear commitment to Bulgaria's energy future," highlighting trust in Sungrow's expertise, global footprint, and proven technology. The installation spans across Sunterra's key solar assets, including the sizable Kaloyanovo and Galabovo parks. This strategic collaboration underscores Bulgaria's broader move towards robust, homegrown renewable energy infrastructure.

https://www.power-technology.com/news/sunterra-re-sungrow-bess/

22. Fortress Power Introduces Industry-Leading 15-Year Warranty for eForce Energy Storage System

Fortress Power has unveiled a groundbreaking 15-year limited warranty for its eForce Energy Storage System (ESS) when purchased as a complete package—including the eForce battery, Envy inverter, and Guardian Gateway. This coverage extends to whichever comes first: 15 years of service or 8,000 full discharge cycles at 80% Depth of Discharge, offering some of the most robust protection in the energy storage market. Notably, the warranty is transferable, so new homeowners retain coverage upon property sale, enhancing long-term value. Valid across the United States, Puerto Rico, and the U.S. Virgin Islands, the policy underscores Fortress Power's confidence in the reliability and durability of its modular LFP-powered systems. The eForce ESS featured in the offer boasts weather-resistant design, stackable battery modules, seamless integration via the eWay wireway, and monitoring through the Guardian mobile app. According to CEO Jing Yu, the extended warranty is about delivering peace of mind, demonstrating Fortress Power's commitment to empowering clean energy adoption with unmatched service support.

https://www.fortresspower.com/fortress-power-launches-industry-leading-15-year-warranty-for-eforce-energy-storage-system/

23. California Brings $2 Billion Eland Solar-Plus-Storage Project Online

One of the largest solar-plus-storage facilities in the U.S., Arevon Energy's Eland project near Mojave, California, has reached full operation. It pairs 758 MW of solar capacity with a 300 MW / 1,200 MWh battery storage system utilizing 172 LFP battery

units. Eland's two-phase development combines 1.36 million solar panels, delivering clean energy to over 266,000 homes and covering approximately 7% of Los Angeles's electricity needs. Los Angeles Mayor Karen Bass noted the project will elevate the city's clean energy share above 60%, marking a major milestone toward 100% clean power by 2035. The project created around 1,000 construction jobs and will distribute over $36 million in lifetime local government contributions. Under a long-term power purchase pact with the Southern California Public Power Authority, the project supports utilities like LADWP and Glendale Water & Power. Developed and engineered by Arevon with EPC leadership from SOLV Energy, Eland highlights the scalability of LFP technology in supporting grid resilience and clean-power goals.

https://electrek.co/2025/08/07/solar-storage-project-california-arevon-eland/

24. LG&E and KU Secure Regulatory Backing for Kentucky's Energy Expansion

Louisville Gas & Electric Company (LG&E) and Kentucky Utilities Company (KU), subsidiaries of PPL Corporation, have reached a stipulation agreement with key intervening stakeholders—including the Attorney General, industrial users, renewable energy advocates, and the Kentucky Coal Association—to address the state's surging energy demand. Filed with the Kentucky Public Service Commission, the agreement supports the addition of two advanced 645 MW natural gas combined-cycle units (Brown 12 by 2030 and Mill Creek 6 by 2031), along with a selective catalytic reduction facility at Ghent Unit 2 slated for 2028. The plan also extends the operating life of Mill Creek Unit 2 beyond its planned 2027 retirement, maintaining reliability until Mill Creek 6 comes online. While the battery storage add-on at Cane Run has been withdrawn for now, LG&E and KU reserve the option to revisit it in the future. This bipartisan deal helps the utilities meet rapid economic growth, including booming data center demand, while continuing to serve customers safely and affordably. The Kentucky PSC is expected to rule on the proposal by November.

https://lge-ku.com/newsroom/press-releases/2025/07/29/lge-and-ku-reach-agreement-several-key-stakeholders-plans-meet

25. Scotland's Grid-Scale Battery Stabilizes Power with Lightning-Fast Response

A new 200 MW lithium-ion battery installation in Scotland's Highlands—part of the Blackhillock energy storage site—demonstrated its critical role just 11 days after going live. When a 1,877 MW wood-burning generator abruptly failed in northern England, the battery surged into action within milliseconds, arresting a dangerous drop in grid frequency and maintaining stability. Unlike traditional fossil-fuel generators reliant on rotor inertia, this grid-scale battery uses advanced grid-forming inverters to simulate inertia and rapidly inject power. It can even supply short-circuit current during grid faults, functioning like a synchronous generator. This breakthrough marks one of the world's first real-world deployments of battery systems providing such stability services and signals a pivotal shift toward gas-free grid operations. The National Energy System Operator (NESO) envisions making the UK capable of operating without gas-fired plants by 2025—potentially the largest fossil-free grid demonstration globally. Blackhillock's success also supports higher integration of wind and solar power while significantly reducing renewable energy curtailment and delivering long-term benefits to consumers.

https://spectrum.ieee.org/grid-scale-battery-scotland

26. Eku Energy Commissions 130 MWh of UK Battery Storage Capacity

Eku Energy, in partnership with NHOA Energy, has successfully commissioned two utility-scale battery energy storage systems (BESS) located in Basildon, Essex, and Loudwater, Buckinghamshire. Together, they add 130 MWh of storage capacity—56 MWh at Basildon and 55 MWh at Loudwater—providing crucial balancing and ancillary services across local and national grids. The Basildon site, Eku's first two-hour duration battery, aims to enhance grid flexibility near a solar PV farm and high-capacity substations. At Loudwater, the 39 MW system incorporates a low visual profile to blend with its rural setting. Both projects mark NHOA Energy's entry into the UK BESS market, with long-term operations and maintenance support secured under separate agreements. Eku CEO Daniel Burrows hailed the commissioning as a diversification of the company's UK operating portfolio and a step toward structuring innovative long-term contracts. NHOA Energy's Managing Director emphasized the value of high-performance partnerships in the clean energy transition. These live BESS installations underscore Eku Energy's growing role in enabling the UK's energy transition with safe, reliable, and cost-effective storage infrastructure.

https://www.ekuenergy.com/news/eku-energys-battery-storage-projects-in-essex-and-buckinghamshire-are-commissioned-with-bess-supplier-nhoa-energy-and-ready-to-go-live

27. SK On Accelerates Entry into North American Energy Storage Market

South Korea's battery maker SK On is expanding its footprint in the North American energy storage system (ESS) sector by signing a memorandum of understanding (MoU) with materials firm L&F. The agreement initiates discussions on the supply of lithium-iron-phosphate (LFP) cathode materials, with an aim to establish a mid-to-long-term partnership supporting growing demand across the continent. This move is part of SK On's broader strategy to diversify battery chemistry and boost localization: the company plans to adapt existing production lines in the U.S., building on its two current plants and four more under development. Once fully operational, SK On's U.S. capacity is projected to exceed 180 GWh annually—a substantial leap toward manufacturing LFP batteries domestically. "This MoU marks a significant milestone in boosting SK On's LFP battery value chain and advancing our entry into the North American ESS market," said Youngkee Shin, Head of Procurement. The agreement reinforces the company's commitment to establishing U.S.-made LFP batteries and strengthening ESS market readiness.

https://chargedevs.com/newswire/sk-on-targets-north-american-lfp-battery-market-for-energy-storage/

Technology and Regulatory

28. Lyten Presses Ahead with Lithium-Sulfur EV Battery Ambitions

U.S.-based advanced materials startup Lyten remains committed to developing lithium-sulfur (Li–S) batteries for electric vehicles, emphasizing their potential to outperform traditional lithium-ion in cost, weight, and supply chain independence. The company is currently shipping samples of its pouch-style EV battery prototype to automakers and energy storage players, produced at its pilot facility in California. Central to its technological edge is Lyten's proprietary 3D Graphene™, which allows Li–S cells to achieve nearly double the energy density of conventional packs while eliminating critical minerals like nickel, cobalt, and graphite. Despite well-known challenges in Li–S chemistry—such as mechanical degradation and polysulfide shuttling—Lyten continues to refine its formulations for commercial viability. While EV batteries remain a focus, the company is also accelerating its stationary battery energy storage system (BESS) ambitions, as demonstrated by recent acquisitions of Northvolt's European assets. Lyten's strategy underscores a dual-path innovation—advancing next-gen EV battery technology while expanding global manufacturing footholds.

https://cleantechnica.com/2025/08/07/us-startup-lyten-is-still-determined-to-make-a-lithium-sulfur-ev-battery-happen/

29. Cabot Corporation Introduces LITX® 95F — Advanced Conductive Carbon for Energy Storage

Cabot Corporation has launched LITX® 95F, a new conductive carbon additive designed specifically for lithium-ion batteries in energy storage systems (ESS). Engineered to improve conductivity, cycle life, and manufacturing efficiency, the material targets residential, commercial, and industrial ESS applications. Its high-structure morphology supports stable performance and capacity retention under frequent charge–discharge cycles. In pouch cell testing, LITX 95F delivered strong results with thick electrode designs, allowing battery makers to optimize formulations and lower material costs. Cabot highlights that the product directly addresses market demands for higher performance and cost efficiency in ESS. Executive Vice President Jeff Zhu emphasized its role in scaling ESS adoption by enabling more durable and effective batteries. The launch comes at a time when demand for energy storage is accelerating, driven by the need for grid flexibility, renewable integration, and reliable backup power.

https://investor.cabot-corp.com/news-releases/news-release-details/cabot-corporation-launches-new-litxr-95f-conductive-carbon

30. Korean Researchers Achieve 5× EV Battery Lifespan Boost

A team of Korean scientists, led by Professors Cho Chang-shin of POSTECH and Yoon Seong-hoon of Chung-Ang University, has developed a high-nickel, cobalt-free cathode material that extends electric vehicle battery life by more than five

times compared to current materials. Using a novel synthesis technique with organic surfactants, the team uniformly dispersed zirconium ions within cathode particles, reinforcing the structure and preventing degradation caused by c-lattice distortion. The enhanced cathode retained 98.6% of its capacity after 100 charge-discharge cycles and 94.2% after 500 cycles, demonstrating exceptional long-term stability. Published in Materials Today on July 3, the research shows that extended lifespan can be achieved without relying on expensive cobalt. This breakthrough could significantly lower battery replacement costs, support sustainable material usage, and improve the long-term reliability of electric vehicles.

31. South Korea Eases Rules to Boost Recycling of LFP Batteries and Electronics

South Korea's Ministry of Environment has launched a regulatory sandbox aimed at promoting recycling of lithium iron phosphate (LFP) batteries and electronic waste. The initiative allows temporary waivers to current laws, specifically inviting pilot projects from August 7 to September 6. The move is critical as LFP batteries—popular for being lower cost—often fail to meet the 10% nickel-content requirement imposed by existing recycling regulations. One pilot will explore methods to efficiently recycle LFP batteries to assess viability and inform potential legal reforms. Another project focuses on reclaiming minerals like copper and nickel from printed circuit boards (PCBs), tackling classification issues where chip-free boards are labeled as synthetic waste and those with chips as electronic waste. A third pilot targets rock wool, a hydroponic medium currently banned from recycling due to its "miscellaneous waste" status, despite its reuse potential. Authorities highlighted that industries helped shape the initiative, and qualified companies can now apply for these relaxed rules to advance testing. The program reflects South Korea's escalating commitment to circular economy principles and clean-technology innovation.

https://batteriesnews.com/korea-environment-ministry-eases-rules-for-lfp-battery-and-pcb-recycling/

32. ProLogium Redefines Solid-State Battery Safety with Dual Protection Design

ProLogium has addressed the misconception that solid-state batteries are inherently safe by unveiling its fourth-generation lithium-ceramic battery, which combines intrinsic non-combustibility with active risk mitigation. The design features an oxide-based all-ceramic separator and a superfluidized all-inorganic solid-state electrolyte, preventing thermal runaway during rigorous fire and high-temperature testing, including torch and Accelerating Rate Calorimetry (ARC) trials. The all-ceramic separator maintains structural integrity and blocks dendrite formation under extreme heat, while the embedded Active Safety Mechanism (ASM) in the electrolyte actively neutralizes ignition sources by stabilizing reactive oxygen and lithium. This approach effectively halts the chain of thermal reactions that can lead to fires. ProLogium emphasizes that true battery safety must be rooted in material science and active hazard control rather than relying solely on the “solid-state” label. The breakthrough sets a new safety benchmark for lithium-based batteries, turning them from potential hazards into controllable, reliable energy storage solutions.
https://prologium.com/a-hidden-hazard-in-disguise-of-a-safety-mask-prologium-debunks-the-solid-state-battery-safety-myth-with-breakthrough-dual-protection-intrinsic-non-combustibility-x-active-risk-mitigat/