Clagora Analytics

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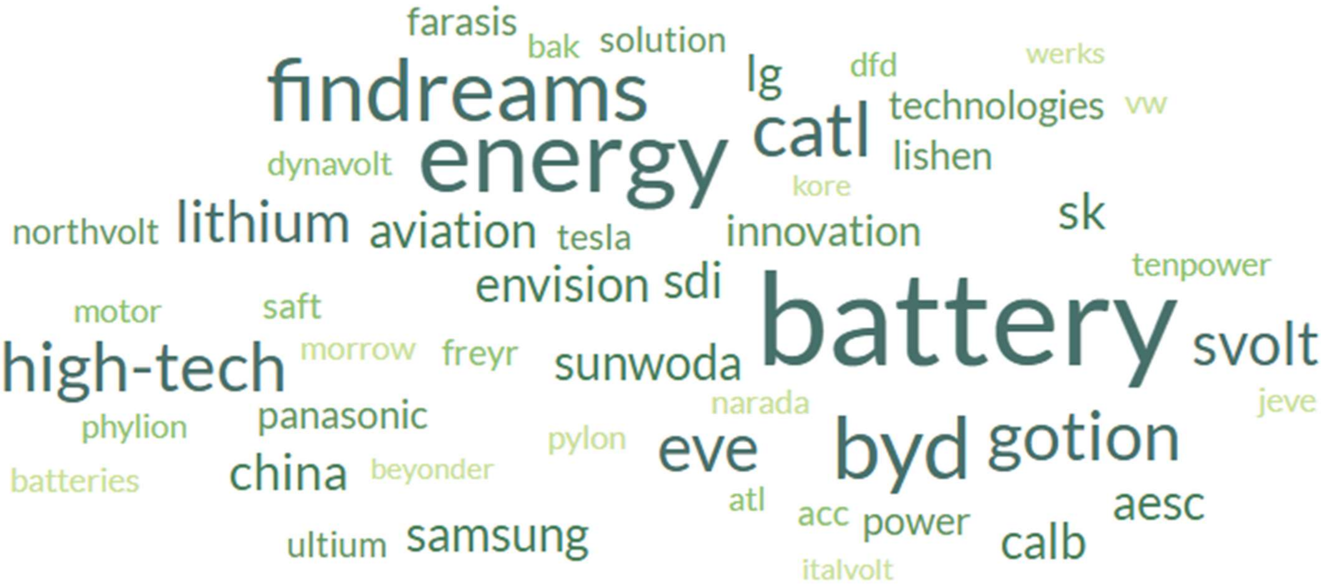

The newsletter focuses on key areas significant to battery value chain

Contents

1. **UK-Based Cornish Lithium Begins Low-Carbon Production of Refined Lithium Hydroxide**

   On October 23, Cornish Lithium began producing refined lithium hydroxide monohydrate (LHM) sourced entirely from granite in Cornwall, UK. The company repurposed a former china-clay quarry and implemented a low-carbon process for extraction and refining. This milestone strengthens the UK's efforts to establish a domestic lithium supply chain and reduce dependence on imports. The production supports the growing global demand for lithium used in electric-vehicle batteries and energy storage systems. By extracting lithium from granite instead of brine or hard-rock ores abroad, Cornish Lithium advances sustainable mineral production. The initiative aligns with national goals for cleaner energy and self-sufficiency in battery materials. It also promotes environmental responsibility in mining and refining practices. Additionally, the project is expected to boost local employment and investment in Cornwall. Overall, it represents a key step toward a greener, more resilient UK battery industry.

   https://cornishlithium.com/news/company/cornish-lithium-becomes-the-first-company-to-produce-lithium-hydroxide-mined-and-refined-in-the

2. **E3 Lithium Launches Phase 2 Drilling at Alberta Site**

   E3 Lithium Ltd. has started drilling its third lithium development well, named "Lithium #3," at its central Alberta demonstration site, marking the beginning of Phase 2 of its project. The well targets the Devonian-aged Leduc Formation reef complex to confirm the company's geological and reservoir models. This follows Phase 1, during which E3 successfully produced battery-grade lithium carbonate and validated its direct lithium extraction (DLE) technology. Drilling and testing are expected to continue into November, gathering crucial data on geology, brine composition, and well performance. Core samples and brine analysis from this phase will guide the design of E3's future commercial lithium facility. The initiative is a key step toward commercial-scale lithium production in Canada's emerging critical-minerals sector. With an estimated 21.2 million tonnes of lithium-carbonate-equivalent resources in Alberta, E3 is well positioned for growth. The project supports North America's drive for secure and sustainable battery material supply. It also highlights the region's potential to contribute significantly to global electrification efforts.

   https://www.e3lithium.ca/newsroom/news-releases/e3-lithium-commences-drilling-lithium-3-well

3. **CATL Turns to External Suppliers Amid Major Mine Closure**

   Contemporary Amperex Technology Co., Limited (CATL) has begun sourcing lithium ore from external suppliers to meet its November production needs, as its flagship Jianxiawo Mine in Jiangxi province remains closed. The mine has been shut since early August following the expiration of its mining licence, and operations have yet to resume. With an annual capacity of about 46,000 metric tons of lithium-carbonate equivalent—roughly 3% of global supply—the closure has significant implications for the global lithium market. This marks a rare move for CATL, which has typically relied on vertically integrated production. The company's pivot highlights the growing regulatory and licensing challenges facing China's lithium industry. Analysts note that the disruption has put pressure on lithium ore prices amid rising external demand. The situation underscores the vulnerability of global supply chains when a major producer halts output. CATL's procurement strategy in the coming months will be closely watched as an indicator of how manufacturers adapt to upstream instability. The company remains focused on securing stable raw material supplies to sustain its battery production capacity.

   https://www.miningweekly.com/article/catl-taps-outside-suppliers-for-lithium-ore-as-flagship-mine-stays-closed-2025-10-31

4. **Arkansas Aims to Become US Lithium Hub Amid Global Competition**

   Arkansas is striving to establish itself as the United States' leading lithium-production hub by tapping into the Smackover Formation, which holds over five million metric tons of lithium in underground brines. The state faces steep challenges, including an 80% decline in lithium prices over the past 18 months and intense competition from Chinese producers. Success depends on the commercialisation of direct lithium extraction (DLE), a technology yet to be proven at scale. Major companies such as ExxonMobil, Standard Lithium, and Chevron are already investing heavily in the region. Arkansas is leveraging its low electricity costs, skilled workforce, and supportive business environment to attract further investment. State leaders believe these advantages can offset market volatility and international competition. The initiative also supports broader US goals to build a domestic supply chain for battery materials. Governor Sarah Huckabee Sanders expressed optimism that DLE will deliver economic viability without price guarantees. If successful, Arkansas could emerge as a cornerstone of America's clean energy and critical minerals future.

https://www.miningweekly.com/article/arkansas-aims-to-become-us-lithium-hub-overcoming-chinese-competition-tech-challenges-2025-10-31

5. Century Lithium Relocates Demonstration Plant to Tonopah, Nevada

Century Lithium Corp. is relocating its Lithium Extraction Demonstration Plant to its 20-acre facility at Tonopah Airport in Nevada. The move consolidates operations, enhances logistical efficiency, and cuts costs for the company's full-scale production ambitions. At the new site, Century Lithium will expand its research and development capabilities for battery materials like lithium metal and lithium iron phosphate. The relocation supports development of the Angel Island Project in Esmeralda County, Nevada, which targets extraction of lithium from claystone deposits. The firm's process integrates hydrochloric-acid chloride leaching and direct lithium extraction (DLE) to produce battery-grade lithium carbonate—a key input for EV batteries. The Tonopah facility was previously used to handle bulk sample material from a three-year pilot plant in Amargosa Valley. From this base, Century Lithium plans to build a larger assay and metallurgical laboratory to bolster project studies and future expansion. With the plant move complete, the company is better positioned for permitting, operational support and scale-up of its lithium production. The step reflects broader momentum in North America toward domestic battery-raw-material supply chains in response to global demand. As the energy transition accelerates, the relocation signals a strategic commitment to advancing lithium production in the U.S. and meeting growing battery-industry needs.

https://www.centurylithium.com/news/century-lithium-relocating-demonstration-plant-to-tonopah-nevada

6. LG Energy Solution Advances Battery Recycling and Reuse for a Sustainable Future

LG Energy Solution is strengthening its closed-loop battery ecosystem to cover every stage from raw-material sourcing to reuse and recycling. The company has established a new U.S. joint venture facility in North Carolina capable of processing 13,500 tons of used EV batteries and manufacturing scrap annually. This plant will recover critical materials such as lithium, cobalt, and nickel from "black mass." Batteries that still retain sufficient capacity are repurposed for second-life applications, including energy storage systems built using retired EV batteries. LG Energy Solution has also earned landfill-zero certification in the U.S. and platinum-grade 100% resource-circulation certification at its Nanjing, China facility. Its strategy focuses on creating regional closed-loop systems across Korea, China, Europe, and the U.S. to locally collect, process, and reuse materials. This approach reduces waste, strengthens supply chains, and supports the circular economy. By integrating recycling and reuse, LG aims to secure raw material stability while cutting environmental impact. The initiative positions the company as a global leader in sustainable battery production and resource efficiency.

https://koreajoongangdaily.joins.com/news/2025-10-29/business/guestReports/LG-Energy-Solution-building-sustainable-future-through-battery-recycling-and-reuse/2431926

7. China Suspends Export Controls on Lithium Batteries and Materials for One Year

China has announced a one-year suspension of its newly introduced export control measures on lithium-ion batteries, related raw materials, and key manufacturing equipment. The controls, which were set to take effect on November 8, 2025, covered critical materials such as artificial graphite, cathode, and anode components. The decision follows trade discussions with the United States aimed at easing tensions and stabilizing global supply chains. This move offers temporary relief to battery manufacturers and exporters concerned about licensing delays and export restrictions. Industry experts view the suspension as a strategic pause rather than a full policy reversal. The one-year window allows companies to adapt and governments to negotiate longer-term regulatory frameworks. It also provides greater near-term certainty for international buyers and EV manufacturers dependent on Chinese supply chains. Analysts note that China's underlying goal of securing control over strategic battery materials remains unchanged. The decision highlights how trade diplomacy continues to influence global clean energy and battery markets.

https://news.metal.com/newscontent/103596836/China-Suspends-Lithium-Battery-and-Material-Export-Controls-for-One-Year-[SMM-Analysis]-

EV and Batteries

8. Morrow and Siemens Mobility Join Forces on Next-Gen EV Battery Tech

Norwegian firm Morrow Batteries ASA has signed a memorandum of understanding with Siemens Mobility GmbH to collaborate on advanced lithium-ion battery technologies. The partnership will focus on developing Morrow's LFP (lithium-iron-phosphate) cells and its upcoming LNMO (lithium-nickel-manganese-oxide) cells, with Siemens contributing expertise in cell testing, integration and system validation. The joint work will include sharing technical data, conducting proof-of-concept testing and setting up pilot programmes. By combining Morrow's cell innovation with Siemens Mobility's EV system know-how, the aim is to accelerate high-energy and high-power battery solutions for electrified transport. This cooperation comes at a time when the battery industry is racing to enhance performance, reduce costs, and secure supply chains. The move is expected to bolster the European battery ecosystem by leveraging Norwegian cell manufacturing and German mobility infrastructure. Both companies view the partnership as a strategic step toward scaling next-generation EV batteries and strengthening their competitive position in the global market. The collaboration will also explore opportunities for future co-development of full battery systems in commercial vehicles and rails.

https://news.morrowbatteries.com/news/siemens-mobility-and-morrow-batteries-asa-explore-lnmo-battery-applications-502380

9. BYD Fully Commissions Next-Gen Battery Plant in Taizhou

BYD has officially brought into full operation its strategic NEV power-battery manufacturing site in Taizhou, Zhejiang province. This facility features production lines dedicated to next-generation lithium-iron phosphate "blade" batteries, which the company views as central to its electric-vehicle roadmap. The plant's commissioning underscores BYD's commitment to scaling battery production for its rapidly expanding EV portfolio. By localising manufacturing in Taizhou, BYD aims to bolster supply-chain resilience and shorten lead times for its vehicles. The move is a clear signal of the company's push to capture a larger share of the global EV market amid intensifying competition. It also reflects broader industry trends toward higher-performance, cost-efficient battery chemistries. With full plant operations, BYD expects increased output of its blade batteries to support upcoming models. The Taizhou facility complements BYD's network of battery and vehicle manufacturing plants, reinforcing its vertical-integration strategy. This development is likely to exert pressure on rivals to ramp up similar advancements in battery technology and production capacity.

https://www.marklines.com/en/news/334658

10. Maersk and CATL Forge Global Partnership for Supply Chain Electrification

A.P. Moller – Maersk and Contemporary Amperex Technology Co. Limited (CATL) have entered a global strategic partnership to drive supply chain electrification and logistics decarbonisation. The agreement names Maersk as CATL's preferred logistics partner, covering ocean and air freight, warehousing, and project logistics services. Building on five years of collaboration, the partnership expands to include joint development of electrified logistics solutions across ports, inland transport, and storage facilities. CATL will provide advanced battery systems, energy management technologies, and end-of-life recycling expertise to support Maersk's net-zero targets. In return, Maersk will integrate these technologies across its logistics network to enhance operational efficiency and sustainability. The initiative aligns with Maersk's goal of achieving net-zero emissions by 2040 and CATL's mission to advance global clean-energy innovation. Together, the companies aim to create scalable solutions that reduce emissions throughout global trade routes. This partnership showcases the convergence of logistics and energy sectors in building greener, more resilient supply chains. It represents a major milestone in the transition toward sustainable global logistics infrastructure.

https://www.maersk.com/news/articles/2025/10/10/maersk-and-catl-forge-global-strategic-partnership-in-supply-chain

11. Samsung SDI, BMW, and Solid Power Unite to Validate All-Solid-State Batteries

Samsung SDI has entered a trilateral agreement with BMW Group and Solid Power to jointly validate next-generation all-solid-state battery (ASSB) technology. Under the partnership, Samsung SDI will produce battery cells incorporating Solid Power's solid-electrolyte materials, while BMW will assemble the cells into modules and test them in prototype vehicles. The solid-state design replaces liquid electrolytes with solid ones, offering higher energy density, improved safety, and longer driving ranges without increasing weight. The collaboration leverages Samsung SDI's manufacturing expertise, BMW's automotive engineering capabilities, and Solid Power's advanced materials technology. It aims to accelerate commercialisation and establish a robust global value chain for ASSBs. Samsung SDI, which built Korea's first solid-state pilot line in 2023, is advancing toward large-scale production. BMW's long-standing partnership with Samsung SDI since 2009 reinforces their mutual goal of leading next-generation battery innovation. This initiative represents a major step toward more efficient and safer batteries for electric vehicles. It also highlights growing international cooperation to drive the future of sustainable mobility.

https://www.samsungsdi.com/sdi-now/sdi-news/4565.html

12. Gushine Electronics Opens Lithium Battery Manufacturing Base in Hai Phong

Gushine Electronics has officially inaugurated its 22,000-square-metre lithium battery manufacturing facility in Hai Phong, Vietnam, marking the company's first production base outside China. The plant will produce high-performance lithium battery packs for industrial and commercial uses, equipped with advanced automation and intelligent management systems. With an expected annual output value of about USD 100 million, the facility enhances Gushine's global manufacturing capacity and supply-chain resilience. Its strategic location between Hanoi and Hai Phong Port offers strong logistical advantages for international distribution. The site is projected to create 400–500 jobs across R&D, production, and quality management. Gushine's "made-to-order" production model will allow for customized battery solutions that meet specific performance needs. The plant also serves as a regional hub for innovation and sustainable manufacturing. This milestone strengthens Vietnam's role in the global battery supply chain. Overall, the facility underscores Gushine's ambition to expand its global presence and support the growing demand for lithium-based energy solutions.

https://www.gushine.com/en/news/company-news/gushine-vietnam-lithium-battery-manufacturing-base-officially-inaugurated-powering-global-growth-strategy.html

13. SPIE Contributes to One of Europe's Largest Battery Storage Projects

SPIE has been contracted to deliver electrical engineering and installation work for one of Europe's largest battery energy storage systems (BESS) at the Mufasa Park in Vlissingen, Netherlands. The massive facility will have a storage capacity of 1,400 megawatt-hours and a power output of 350 megawatts, using 372 Tesla Megapacks. Designed to stabilise the grid, it will store excess renewable energy and supply electricity to around 200,000 households. SPIE's responsibilities include constructing high-voltage switchyards, installing transformers, and implementing advanced safety and monitoring systems. The project's dual-location setup requires complex directional drilling and long-distance cabling to connect to the national grid. Once operational, the system will significantly enhance renewable energy integration and grid reliability. This initiative highlights the growing importance of large-scale energy storage in Europe's transition to cleaner power. SPIE's involvement underscores its expertise in high-voltage and sustainable energy infrastructure. Overall, the project represents a major milestone in the continent's shift toward smarter, greener electricity systems.

https://www.spie.com/en/business-news/netherlands-spie-contributes-one-largest-battery-projects-europe

14. Gotion Abandons $2.4 Billion Michigan Battery Plant Project

Chinese battery manufacturer Gotion High-Tech has officially withdrawn its plan to build a $2.4 billion electric vehicle battery materials plant in Michigan. The project, first announced in 2022, was expected to create about 2,350 jobs but has now been halted amid growing political and community opposition. State officials confirmed that Gotion failed to make progress on the site for more than 120 days, triggering default clauses in its agreement. None of the pledged $125 million in state grants were paid, and Michigan is now seeking repayment of $23.6 million previously awarded. The plant had faced intense scrutiny over Gotion's Chinese ownership, which fueled national security and transparency concerns. Gotion has denied abandoning the project but admitted work was suspended due to controversy. The decision highlights the increasing challenges foreign-linked companies face in the U.S. clean-energy sector. It also reflects tightening oversight of state incentive programs tied to strategic industries. The collapse underscores growing geopolitical sensitivities in America's battery manufacturing landscape.

https://www.reuters.com/world/us/chinese-battery-company-abandons-plan-build-michigan-plant-state-says-2025-10-23/

15. China's Share of Global Power Battery Market Surpasses 60%

China now accounts for over 60% of the global power battery market and roughly 70% of total battery materials production, solidifying its dominance in the sector. The country's power battery output has skyrocketed from 83.4 GWh in 2020 to more than 1,000 GWh recently — a more than tenfold increase. In the first nine months of this year alone, China's cumulative installed power battery capacity rose 43% year-on-year to about 493.9 GWh. Exports also climbed 33%, reaching around 130 GWh. Chinese manufacturers are rapidly expanding abroad, investing in new factories and R&D centers across Europe, Southeast Asia, and Africa. China's control of upstream resources like lithium, cobalt, and graphite strengthens its competitive edge. The city of Yibin alone contributed over 16% of China's total battery production and 10% of global output in 2024. This scale and supply-chain integration reinforce China's leadership in the global battery industry. However, it also intensifies pressure on other regions to build independent manufacturing and sourcing capabilities. The data underscore China's pivotal role in shaping the future of the global energy storage and EV battery markets.

https://discoveryalert.com.au/news/global-ev-battery-market-dominance-2025/

16. German Battery Maker Backed by Klatten Files for Insolvency

BMZ Group, a major German lithium-ion battery manufacturer backed by investor Susanne Klatten, has filed for insolvency for its main German subsidiaries, including the parent holding company. The move follows the loss of a key customer in the stationary energy storage sector, which triggered financial strain, legal disputes, and liquidity shortages. Operating under a self-administration process approved by the court, BMZ aims to restructure its German operations by transferring assets to a newly formed entity. The company emphasized that its international subsidiaries remain unaffected and will continue business as usual. Existing shareholders have provided bridge financing to maintain operations and support ongoing customer commitments. BMZ plans to shift its focus toward industrial and commercial battery systems rather than automotive applications. The case highlights growing financial pressures on European battery suppliers amid rising competition and market volatility. Industry observers see this as a sign of potential consolidation within the sector. The restructuring outcome will likely influence confidence in Europe's battery manufacturing landscape.

https://battery-tech.net/battery-markets-news/bmz-group-files-insolvency-for-key-units-amid-restructuring/

17. PowerCo Begins Construction on Canada's Largest EV Battery Plant

PowerCo Canada has officially begun construction on its massive gigafactory in St. Thomas, Ontario, set to become the largest electric vehicle battery manufacturing facility in the country. The 350-acre site represents PowerCo's third and largest global factory and a cornerstone of its North American expansion. Construction has started on three main buildings, involving more than 32,000 m^3 of concrete and 4,850 tonnes of steel reinforcement. Once operational, the plant will produce PowerCo's advanced "Unified Cell" battery technology with an annual capacity of up to 90 GWh. The project represents a total investment of about US $7 billion, with production expected to begin in 2027. It will create around 3,000 direct jobs and thousands more across local supply chains. The facility is designed to strengthen Canada's role in the global EV battery market and boost domestic manufacturing capabilities. Local recruitment is already underway, with strong regional interest. This milestone underscores Canada's growing leadership in clean-energy and electric-mobility production.

https://news.ontario.ca/en/release/1006659/ontario-celebrates-powerco-construction-milestone-in-st-thomas

18. Panasonic Cuts Full-Year Profit Forecast Amid Auto Battery Slowdown

Panasonic Holdings has lowered its full-year operating profit forecast by 13.5%, now projecting 320 billion yen for the fiscal year ending March 2026, down from 370 billion yen previously. The revision reflects weaker performance in its energy division, which supplies automotive batteries to major electric vehicle manufacturers. Sluggish EV demand in North America, reduced U.S. tax credit benefits, and higher tariffs have all contributed to the decline. In the second quarter, the energy unit's operating profit plunged 96.4% year-on-year to just 1.2 billion yen. Panasonic also cut its North American automotive battery sales target by 13% to 40 GWh for fiscal 2025/26. While the company expects modest growth from energy storage systems for data centers, its outlook remains cautious. The downgrade highlights growing challenges across the global EV supply chain as demand softens. Panasonic's move underscores how shifting policies and slower adoption are affecting even established battery producers. The company remains focused on long-term stability through cost control and diversification.

https://www.reuters.com/world/asia-pacific/panasonic-cuts-full-year-profit-forecast-weaker-outlook-automotive-battery-2025-10-30/

19. GM to Cut EV Battery Production and 1,200 Jobs at Detroit Plant

General Motors will scale back electric vehicle and battery production at its Detroit facility, reducing operations from two shifts to one starting in January 2026. The move will eliminate around 1,200 permanent jobs and cut overall output by about half. Additionally, battery-cell production at GM's joint-venture plants in Ohio and Tennessee will be paused for approximately six months, affecting another 1,550 workers. The company cited slower-than-expected EV adoption and changing regulatory conditions, including the phase-out of federal EV tax credits, as key factors. Despite the cuts, GM reaffirmed its long-term commitment to U.S. manufacturing and electrification. The Detroit plant, which produces the Chevrolet Silverado EV and GMC Sierra EV, will continue limited operations during the transition. The restructuring underscores shifting market dynamics and cautious investment in EV expansion. Analysts view this as a sign of recalibration across the auto industry amid softening demand. The decision is expected to ripple through suppliers and local economies tied to GM's EV production network.

https://www.reuters.com/business/world-at-work/gm-cut-over-1200-jobs-ev-plant-detroit-news-reports-2025-10-29/

20. Canada Pledges Billions to Support Stellantis-Backed EV Battery Plant

The Canadian federal and Ontario provincial governments have committed around CAD 1.4 billion to back a large-scale battery manufacturing project led by Stellantis and its partner NextStar Energy in Windsor, Ontario. The total investment in the facility is estimated at over CAD 5 billion, making it one of the country's largest-ever clean-technology deals. The plant is expected to boost Canada's position in the electric-vehicle battery value chain and create thousands of jobs locally. The agreements reportedly include conditions and safeguards, though certain contract details remain redacted, sparking calls for greater transparency. The initiative aligns with Canada's strategy to develop domestic battery manufacturing and reduce reliance on imports. Officials view the facility as a catalyst for broader regional supply-chain growth around EV components and battery systems. Industry observers note that while the financial incentives are considerable, execution and long-term viability will be critical. For stakeholders in the battery sector, the deal reaffirms the importance of government support in driving manufacturing investment. The project also highlights the competitive investment environment as nations seek to attract major battery industry players.

https://www.cbc.ca/news/canada/windsor/stellantis-nextstar-contracts-federal-government-battery-ev-pdf-9.6956627

21. Gotion Launches Construction of Slovak Battery Factory with 2026 Trial Run

Gotion High-Tech has officially begun construction on its new battery manufacturing facility in Šurany, Slovakia, marking a major milestone for the company's European expansion. The first phase of the plant is planned for an annual capacity of 20 GWh, with trial production scheduled for 2026 and full-scale output slated for 2027. The site covers approximately 65 hectares and is projected to create around 1,300 new jobs in the region. The facility will focus on battery production primarily for the European market, reinforcing Gotion's global supply-chain footprint. Total investment for the Slovak site is estimated at around €1.234 billion in the initial phase. The project is made possible through a joint venture with InoBat Auto jsa, in which Gotion holds an 80 % stake. Slovak officials have characterised the plant as one of the largest investment projects in the country's automotive-battery sector. The development aligns with Europe's drive to bolster domestic battery manufacturing and reduce dependency on foreign imports. With groundwork now underway, Gotion remains on track to deliver European-made battery cells and support EV makers across the region.

https://battery-news.de/en/2025/10/31/gotion-begins-construction-of-battery-factory-in-slovakia/

Salt and Electrolyte

22. LG Energy Solution Unveils New Electrolyte Technology for Safer, High-Performance EV Batteries

LG Energy Solution has developed a new electrolyte technology aimed at improving both low-temperature performance and thermal safety in lithium-ion batteries. The breakthrough incorporates a phosphonated additive that enhances conductivity in cold conditions while increasing resistance to overheating. This innovation tackles two key challenges in electric vehicle battery design — performance in extreme climates and overall safety. The advancement also allows for lighter and more efficient thermal management systems, improving vehicle range and reliability. LG Energy Solution plans to integrate this technology into its next-generation EV battery cells in the coming years. The development supports the company's strategy to advance core materials and maintain leadership in battery innovation. It also reflects a broader industry trend toward chemical and material breakthroughs rather than solely focusing on manufacturing scale. For automakers, this could mean batteries that deliver greater range, faster charging, and enhanced durability. Overall, the new electrolyte represents a major step forward in making EV batteries more efficient and safer worldwide.

https://www.marklines.com/en/news/334527

23. China's SD Lomon Expands Lithium Battery Materials Production

Chinese company SD Lomon has announced it will invest CNY 362 million (about USD 50.8 million) in a new plant located in the Deyang-Aba Ecological Economic Industrial Park in Mianzhu, Sichuan province. The facility is planned to produce 100,000 tons annually of lithium dihydrogen phosphate, a key raw material for high-compaction-density lithium iron phosphate batteries. This announcement marks the company's second lithium dihydrogen phosphate project in under four months, reflecting rapid expansion into battery-materials manufacturing. The move comes as supply shortages of lithium dihydrogen phosphate tighten amid soaring demand for LFP batteries. SD Lomon leverages its phosphate-mining and phosphorus-chemical expertise to capture this upstream segment of the battery value chain. The firm's existing lithium-iron phosphate output reached 60,000 tons annually by end of last year, with an additional 40,000 tons under construction. With lithium-ion battery demand accelerating globally, SD Lomon's investment positions it to benefit from growth in the EV and energy-storage markets. The announcement drove the company's share price higher, signalling investor confidence in its strategic pivot. For battery-industry stakeholders, this development underscores the increasing importance of securing upstream materials in the supply chain.

https://www.yicaiglobal.com/news/chinas-sd-lomon-jumps-on-plan-to-build-lithium-battery-material-plant-for-usd508-million

LFP-ESS and Start ups

24. NavPrakriti Launches Lithium-ion Battery Recycling Plant in Eastern India

NavPrakriti has commenced operations at a new lithium-ion battery recycling facility near Kolkata, marking a significant step for India's circular economy efforts. The plant, situated in Eastern India, aims to recover critical minerals from end-of-life batteries and reduce reliance on imports. It employs indigenous technology developed locally, positioning itself as a pioneer in regional battery-waste management. Initially, the facility has a mechanical pre-treatment capacity of 1,000 tonnes per month, with scalability to reach 2,000 tonnes as demand grows. It processes waste from consumer electronics, telecom infrastructure, stationary energy storage and soon EV batteries. The operation focuses on recovering materials like aluminium, copper, nickel, cobalt, manganese and lithium, and plans future expansion into battery-grade chemical recovery and second-life applications. The move aligns with government efforts to establish domestic recycling capacity and manage the estimated surge in battery waste expected by 2030 and beyond. With this infrastructure in place, India strengthens its position in the global battery-value chain and enhances sustainability in its energy-transition strategy.

https://auto.economictimes.indiatimes.com/news/auto-components/sona-comstar-suspends-joint-venture-with-chinas-jinnaite-machinery/124850680

25. ARENA Backs 'Inverter-Free' BESS Technology with AU$25M Funding

The Australian Renewable Energy Agency (ARENA) has committed AU$25 million to support Relectrify's rollout of its AC1 battery-energy-storage system (BESS), described as the world's first that generates AC power directly from battery cells without a separate inverter. The system employs a proprietary battery-management architecture that optimises thousands of individual cells and claims to deliver up to 20 % more usable energy across its lifetime. By eliminating the conventional inverter, the AC1 simplifies system design, reduces maintenance and heightens reliability for commercial and industrial applications. ARENA sees the technology as a next-step leap in energy-storage innovation, especially for large users seeking flexibility and reduced costs. Relectrify plans to deploy up to 100 MWh of AC1 systems in front-of-meter and behind-the-meter sites, enabling real-world performance data and case studies. The funding reflects Australia's ambition to lead in advanced battery technologies and underscores the importance of supporting early-stage breakthrough firms. If successful, this architecture could re-shape how grid-scale and industrial-scale battery systems are designed and reduce dependency on traditional inverters. The program also includes a knowledge-sharing component to accelerate industry uptake of the technology. For stakeholders in the battery-storage value chain, this represents both an opportunity and a benchmark for next-generation system architecture.

https://arena.gov.au/news/arena-backs-world-first-battery-storage-technology/

26. Croatia Launches Its First Grid-Scale Battery Storage and Virtual Power Plant

Croatia is advancing its clean-energy infrastructure with a new greenfield project that pairs a large-scale battery energy storage system (BESS) with a virtual power plant (VPP) platform. The initiative will support up to 60 megawatts of grid-connected storage capacity, enabling real-time supply-demand balancing and enhanced grid flexibility. The financing package includes a direct equity investment of up to €16.8 million from the European Bank for Reconstruction and Development (EBRD), supplemented by matching investment from a Croatian pension fund and a €16.5 million grant from the EU Modernisation Fund. The VPP component will aggregate and dispatch storage assets, bolstering renewable energy integration and grid-stabilisation services in the region. Located in Šibenik, the project is positioned to reduce dependence on fossil-fired capacity and support Croatia's decarbonisation goals. Its launch signals a growing trend across Europe toward coupling large-scale storage with digital control platforms. For energy-industry observers, the initiative highlights how smaller markets are leveraging storage innovation to improve resilience and flexibility. As this benchmark project progresses, it may serve as a model for similar deployments in Central and Southeast Europe.

https://support4partnership.org/en/news/croatia-first-grid-scale-battery-storage-and-virtual-power-plant

27. Saft Secures 356 MWh Battery Storage Contract in Taiwan

Saft, the French energy storage specialist, has won a major contract to deliver a 356 MWh lithium-ion battery energy storage system (BESS) in Taichung, Taiwan. The project, commissioned by Foxwell Power—a subsidiary of Foxlink Group—marks Saft's eleventh large-scale energy storage installation in the country. The system will use 108 modular "I-Shift" battery containers and is expected to be completed by 2026. Once operational, the project will bring Saft's total installed storage capacity in Taiwan to approximately 630 MWh. The BESS will provide grid-stabilisation services such as frequency regulation and renewable energy time-shifting. This initiative supports Taiwan's broader efforts to enhance energy security and integrate more renewables into its grid. For Saft, it further strengthens its presence in the Asia-Pacific market and demonstrates growing confidence in its technology. The project also highlights Taiwan's rapid adoption of large-scale battery systems as part of its clean-energy transition. Overall, the contract reinforces Saft's leadership in delivering reliable, utility-scale storage solutions worldwide.

https://saft.com/en/media-resources/press-release/saft-strengthens-its-apac-presence-major-bess-project-taiwan-0

28. Eos Energy Secures Strategic 228 MWh Order from Frontier Power

Eos Energy Enterprises has secured a 228 MWh order from Frontier Power Ltd. under a previously agreed 5 GWh framework, marking the first conversion of that agreement for deployment of Eos's Z3™ zinc-based storage systems. The partnership focuses on long-duration energy storage solutions designed to enhance grid reliability across multiple international markets. The Z3™ systems will integrate Eos's proprietary DawnOS™ platform, battery management system, and control analytics to validate performance in real-world grid environments. The contract also coincides with Eos achieving a final milestone payment from investor Cerberus Capital Management LP, meaning no additional preferred stock or warrants will be issued. Eos highlights its non-flammable zinc-based technology as a safe, scalable alternative to lithium-ion batteries for utility-scale applications. Frontier, meanwhile, has advanced 11 GWh of long-duration storage projects incorporating Eos technology into the second round of the UK regulator's scheme. The agreement underscores a growing demand for 8-hour-plus storage systems capable of supporting renewable integration and grid stability. Together, the companies aim to accelerate commercial deployment of long-duration storage and build a platform for future global expansion.

https://www.eose.com/eos-energy-and-frontier-power-announce-5-gwh-memorandum-of-understanding-to-advance-long-duration-energy-storage-in-the-united-kingdom/

29. India's Largest E-Bus Tender Attracts Top Players Under PM E-Drive Scheme

At least six leading electric-bus manufacturers, including Tata Motors Ltd and JBM Auto Ltd, are competing for a major procurement tender to deploy 10,900 electric buses across Delhi, Ahmedabad, Surat, Hyderabad and Bengaluru under the PM E-Drive scheme. The bid follows earlier postponements amid concerns over high bidding costs and stringent conditions. Participants must submit an earnest-money deposit exceeding ₹312 crore to qualify. Vehicles will be owned by manufacturers and paid on a per-kilometre contract by state transport agencies. India's target of transport–sector carbon neutrality by 2070 underpins the push for large-scale e-bus adoption. The current participants include Tata Motors, JBM Auto, PMI Electro Mobility Solutions Ltd, Olectra Greentech Ltd, EKA Mobility Ltd and Switch Mobility Ltd. With India's annual manufacturing capacity for e-buses at around 33,000 units, the tender poses both an opportunity and a production challenge. Successful delivery is expected within the next 2.5-3 years according to industry insiders. The event underscores that large-scale asset-intensive electrification contracts still carry significant financial and operational risk for OEMs. For companies in the EV mobility ecosystem, the outcome will be a major indicator of market direction for public-transport electrification in India.

https://www.livemint.com/news/tata-motors-jbm-auto-pmi-electro-olectra-eka-switch-mobility-e-bus-tender-pm-e-drive-carbon-neutrality-in-india-11761902860990.html

30. Global Delegates Visit Delhi's Largest Battery Energy Storage Facility

Over 60 international delegates, including ministers and senior officials from 40 countries, visited Delhi's largest battery energy storage system (BESS) located at Kilokri in South Delhi. The visit was part of the International Solar Alliance Assembly and highlighted India's growing leadership in clean energy and smart grid innovation. Developed by BSES Rajdhani Power Limited, the 20 MW facility is South Asia's largest standalone BESS. It uses lithium-iron-phosphate battery technology and delivers four hours of power daily—two during peak daytime and two during evening demand. The system provides reliable electricity to more than 100,000 residents in the area while reducing grid stress and supporting renewable energy integration. Officials showcased the project as a model for deploying battery storage in dense urban grids. The initiative aligns with India's broader goals for sustainable power and transport electrification. It also supports Delhi's aim to achieve 500 MW of rooftop solar capacity by 2027. The project demonstrates how battery storage can strengthen grid stability and accelerate global energy transition efforts.

https://energy.economictimes.indiatimes.com/news/power/international-delegates-tour-delhis-largest-battery-energy-storage-facility/125008088

31. e-STORAGE Begins Operations of 220 MWh Mannum Battery Project in South Australia

e-STORAGE, a subsidiary of Canadian Solar Inc., has achieved commercial operation of the 220 MWh Mannum Battery Energy Storage Project in South Australia. Developed in partnership with Epic Energy and Recurrent Energy, the facility strengthens the region's renewable energy infrastructure. e-STORAGE served as the engineering, procurement, and construction provider and will manage operations under a long-term service agreement. The system uses the company's proprietary SolBank battery technology, known for its high efficiency and reliability. Located adjacent to a 46 MWp solar farm, the project will store excess solar power and enhance grid stability. This installation supports South Australia's goal of reaching 100% renewable electricity by 2027. With over 1.8 GWh of battery storage projects under construction across the Asia-Pacific, e-STORAGE continues to expand its global footprint. The Mannum project marks a key milestone in Australia's transition toward clean energy. It also demonstrates the growing role of large-scale battery systems in supporting renewable integration and energy security.

https://csestorage.com/e-storage-achieves-commercial-operation-of-220-mwh-mannum-battery-energy-storage-project-in-south-australia/

Technology and Regulatory

32. Nissan's All-Solid-State EV Batteries Move Closer to Reality

Nissan Motor Co. is advancing toward commercializing its all-solid-state battery (ASSB) technology, with the first electric vehicles using the batteries expected by fiscal year 2028. The company has achieved major progress in developing key materials and cell architecture that enable faster charging, longer driving range, and enhanced safety compared to conventional lithium-ion batteries. These solid-state cells replace liquid electrolytes with solid materials, eliminating risks such as overheating and improving energy density. Nissan is scaling up from prototype development to mass-production readiness through dedicated research and pilot facilities. The automaker aims to lead in next-generation battery technology as competition intensifies globally. ASSBs are seen as a breakthrough that could redefine EV performance standards rather than offer incremental improvements. Nissan's advancements demonstrate its commitment to innovation and sustainability in electric mobility. The company's progress also signals growing industry momentum toward safer, lighter, and higher-capacity batteries. If successful, this technology could mark a major milestone in the evolution of electric vehicles worldwide.
https://electrek.co/2025/10/27/nissans-all-solid-state-ev-batteries-becoming-reality/

33. Dürr and GROB Unveil Next-Gen Battery Cell Factory Concept with 70% Lower Energy Use

Engineering firms Dürr and GROB have introduced a concept factory for lithium-ion battery cell production that cuts energy consumption by up to 70% and uses about 50% less floor space compared to traditional facilities. The design prominently features dry-electrode coating technology, which removes the need for a drying process and solvent recovery, thereby saving significant energy and reducing footprint. The factory concept also incorporates high-speed Z-folder cell assembly with integrated notching, improving throughput and availability. Advanced processes such as high-pressure electrolyte filling at up to 30 bar enable faster, more precise cell manufacturing. End-to-end digitalisation, including digital twin simulation and MES/MOM integration, supports traceability and quality control across production. The collaboration, formed in 2022, aims to position both companies as leading system suppliers in Europe, North America and India. The innovations align with efforts to build more efficient, scalable and sustainable battery manufacturing infrastructure. If widely adopted, the concept could significantly lower operational costs and environmental impact for future battery-cell plants. The announcement signals a major shift in how battery-manufacturing plants might be designed and built in the EV era.
https://telematicswire.net/durr-and-grob-unveil-next-gen-battery-cell-factory-concept-with-70-lower-energy-use/

34. Summit Nanotech Reduces Water Use by 30% in Lithium Extraction

Summit Nanotech has announced a major breakthrough in sustainable lithium extraction, achieving a 30% reduction in freshwater use compared to traditional evaporation methods. Independent testing also showed the process uses about 50% less water than existing direct lithium extraction (DLE) technologies. The company's proprietary flow-sequencing system enables near closed-loop water recovery, significantly reducing external water requirements. This innovation maintains high lithium recovery rates while minimizing environmental impact in resource-sensitive regions. The technology is especially relevant for operations in areas like Chile, Argentina, and the U.S., where water scarcity is a growing concern. Summit's process also lowers operational costs and mitigates water-related risks for lithium producers. The achievement strengthens the company's position as a leader in sustainable DLE technology. It supports global efforts to decarbonize the lithium supply chain through more efficient resource management. Overall, this milestone marks a step forward in developing environmentally responsible solutions for critical battery material production.
https://www.mining.com/summit-nanotech-slashes-water-use-by-30-in-lithium-extraction/

35. China Develops Flexible 'Armor' Coating to Boost Solid-State EV Battery Durability

Chinese researchers have unveiled a new "flexible armor" coating for all-solid-state batteries (ASSBs) that dramatically enhances durability and cold-weather performance. The coating, made from silver-based compounds Ag_2S and AgF, forms a bendable solid-electrolyte interphase (SEI) layer that resists cracking under mechanical stress. This innovation allows batteries to operate reliably for over 4,500 hours and maintain stability even at temperatures as low as –30°C. Traditional solid-state batteries often degrade quickly due to brittleness and stress during charging cycles, but this coating overcomes those limitations. It preserves lithium-ion mobility while absorbing structural strain, improving both safety and longevity. Test results show consistent performance through freeze-thaw cycles and rapid charging. Although large-scale production is still in development, the technology marks a major step toward commercializing robust solid-state EV batteries. It demonstrates how material innovation is vital to advancing battery performance. Ultimately, this breakthrough could accelerate the adoption of safer, higher-density, and longer-lasting batteries for electric vehicles.
https://interestingengineering.com/energy/chinas-coating-for-solid-state-ev-batteries

36. Ampere and Stratus Materials Collaborate on Cobalt-Free Cathode Technology

Ampere, Renault Group's electric vehicle and software division, has signed a Joint Development Agreement with U.S.-based Stratus Materials to explore cobalt-free cathode technology for next-generation EVs. The partnership will focus on testing Stratus's proprietary LXMO™ cathode material at Ampere's Battery Cell Innovation Lab in Lardy, France. This advanced material aims to deliver energy densities comparable to nickel-manganese-cobalt (NMC) batteries while offering the cost, safety, and durability benefits of lithium iron phosphate (LFP) cells. The initiative represents a key step in Ampere's strategy to reduce reliance on critical minerals like cobalt and nickel. By eliminating cobalt, the technology promises to lower costs and improve the sustainability of EV battery production. Stratus's LXMO™ chemistry could enable longer-range, safer, and more affordable electric vehicles. The collaboration underscores the growing shift toward next-generation cathode innovation across the auto industry. If successful, the partnership could accelerate Renault's transition to fully sustainable and high-performance battery technologies.
https://www.finanznachrichten.de/nachrichten-2025-10/66838225-stratus-materials-inc-ampere-and-stratus-materials-sign-a-joint-development-agreement-to-explore-the-application-of-cobalt-free-cathode-technology-fo-004.htm